

RTI Project Number  
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# **Fire Fighter Fatality Investigation and Prevention Program Evaluation**

## **Volume II: Appendices**

**October 2006**

Prepared for

**Centers for Disease Control and Prevention**  
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\*RTI International is a trade name of Research Triangle Institute.

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**A**

**Fire Department  
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# Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation

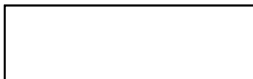
## Fire Department Survey



Conducted by: RTI International



Sponsored by: National Institute for Occupational Safety and Health (NIOSH) and the  
Centers for Disease Control and Prevention (CDC)



Dear Fire Chief,

The Fire Department Survey is being conducted for the National Institute for Occupational Safety and Health (NIOSH). In 1998, Congress funded NIOSH to create the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP). Through the FFFIPP, NIOSH studies the events that lead to firefighter deaths and makes recommendations to help prevent firefighter deaths and serious injuries.

This survey is part of an evaluation that NIOSH is conducting to learn about the usefulness of the Fire Fighter Fatality Investigation and Prevention Program. The FFFIPP Evaluation will supply information to improve the value of the program. In addition to this survey, the evaluation also includes focus groups with firefighters. These focus groups are organized separately from this survey and will involve individual firefighters from across the country.

Your fire department has been selected as one of approximately 3,000 fire departments from across the country to take part in the survey. The Fire Department Survey should be answered by either the fire chief, the chief safety officer and/or a training officer for your fire department. Questions in the survey ask about department policies and procedures that may potentially have an impact on firefighter safety. The survey should take about 25 minutes to finish. After completing the survey, please send it back to us in the enclosed envelope. There is no cost to your fire department for the postage.

RTI International, a non-profit research organization, is conducting the FFFIPP Evaluation for NIOSH. The answers we get from your fire department will be used to further develop and improve the Fire Fighter Fatality Investigation and Prevention Program. Being a part of this study is voluntary, but your answers are important to us. Please be assured that the answers you provide will be kept private. The results from this survey will be reported in aggregate form so that specific answers cannot be connected to you or your fire department.

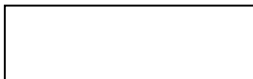
If you have any questions about this survey or about the FFFIPP Evaluation in general, please feel free to call me toll-free at 1-800-334-8571, x7722. If you have a question about your rights as a study participant, you can call RTI's Office of Research Protection toll-free at 1-866-214-2043.

Thank you very much for helping with this important study.

Sincerely,



Kristina Peterson, Ph.D.  
Project Director, FFFIPP Evaluation



## Instructions

- Use a No. 2 pencil or black pen only
- Make heavy dark marks inside the boxes
- Erase cleanly any answer you wish to change
- If asked to “specify” or “explain” on the survey, please write your response in the space provided.
- If asked to “MARK ALL THAT APPLY,” please mark all of the appropriate answers to these questions
- If any question does not apply to you or you are not sure what it means, just leave it blank
- Make no other marks or comments on the survey pages, since they interfere with the automatic reading

**This kind of mark will work:  
(Correct Mark)**



**These kinds of marks will NOT work:  
(Incorrect Marks)**



## SECTION 1. TRAINING AND SAFETY

The following questions ask about your department's policies and procedures for training and safety. It is important to get accurate data on what fire departments are currently doing so that NIOSH can improve the FFFIPP program. Please answer the survey questions as honestly and to the best of your ability as possible. Your answers will be kept private, and will in no way be connected to you or your fire department.

1. Does your department have a Safety Officer?

- No [ → SKIP TO QUESTION 2 ]
- Yes

1a. What kind of a position does your Safety Officer have within your department?

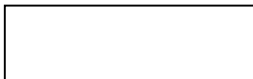
- Full-time paid position
- Part-time paid position
- Volunteer position
- Other (Please specify: \_\_\_\_\_)

1b. Has your Safety Officer been certified by the Fire Department Safety Officers Association (FDSOA) or some other organization?

- No, not certified
- Yes, certified by FDSOA
- Yes, certified by some other organization (Please specify: \_\_\_\_\_)

2. Does your department have a Training Officer?

- No
- Yes



3. Some fire departments use Standard Operating Procedures (SOP) or Standard Operating Guidelines (SOG) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.

- Incident Command Systems
- Maintenance of SCBAs
- Motor vehicle safety
- Participation in a personal physical fitness program
- Participation in regular health screenings for cardiovascular disease (CVD)
- Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)
- Use of Personal Alert Safety System (PASS) devices
- Use of personal protective equipment and protective clothing
- Use of radio communications
- Other (Please specify: \_\_\_\_\_)
- Does not apply. Our fire department does not use SOPs/SOGs.

4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? Please place an "X" in the appropriate box for each topic below.

	No Training	Optional Training	Required Training
a. Fighting structure fires	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Driving safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Incident Command systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Rapid Intervention Teams (RITs)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Use of personal protective equipment and /or protective clothing	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g. Use of radio communication devices	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

5. Who provides training to your firefighters? MARK ALL THAT APPLY.

- Our department's Training Officer
- Other officers within our department
- State fire training agency
- United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD
- Conferences or regional meetings
- Other (Please specify: \_\_\_\_\_)



6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.

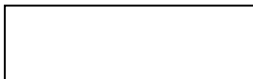
- Roadside incidents/Motor Vehicle Accidents (MVA)
- Scuba diving
- Swift water rescue
- Wildland fire fighting
- HAZMAT
- Other (Please specify: \_\_\_\_\_)

**SECTION 2. HEALTH AND SAFETY INFORMATION**

The following questions ask about your department's policies and procedures for obtaining health and safety information.

7. There are many sources of health and safety information used by fire departments. Please indicate which of the following organizations your department has used to gain health and safety information. Please mark "X" in the box to indicate which mode (e.g., email, magazine, training, etc.) your department has used to get information from each organization.

	<b>Websites/ email messages</b>	<b>Magazines/ newsletters</b>	<b>Conferences/ meetings</b>	<b>Training/ courses</b>	<b>Not Applicable, I do not use information from this organization</b>
National Institute for Occupational Safety and Health (NIOSH)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Occupational Safety & Health Administration (OSHA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal Emergency Management Agency (FEMA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
United States Fire Administration (USFA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International Association of Fire Chiefs (IAFC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
International Association of Firefighters (IAFF)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Volunteer Fire Council (NVFC)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
National Fire Protection Association (NFPA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fire Department Safety Officers Association (FDSOA)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (Please specify: _____ _____)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?

- Not at all familiar
- Not very familiar
- Somewhat familiar
- Very familiar

9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?

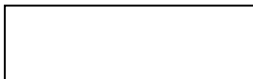
- Not at all familiar
- Not very familiar
- Somewhat familiar
- Very familiar

10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.

- NIOSH mailings
- National conference presentations
- State-level conference presentations
- Other firefighters or departments
- At seminars or other training opportunities (not conferences)
- Trade publications (such as Firehouse and Fire Engineering)
- NIOSH website
- Links from other websites (such as NFPA and Firehouse)
- Media reports - newspaper, television, radio
- Other (Please specify: \_\_\_\_\_)
- Does not apply. We have not received information about NIOSH recommendations. [→ SKIP TO QUESTION 12]

11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.

- Made changes to training program
- Developed new SOPs/SOGs
- Made changes to SOPs/SOGs
- Justified current budget/staffing
- Made new budget/staffing requests
- Justified grant applications
- Does not apply. We have not used NIOSH recommendations. [→ SKIP TO QUESTION 12]



11a. Please describe the changes you made:

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11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.

- Traffic hazards
- Personal protective equipment and clothing
- SCBA
- PASS systems
- Incident Command systems
- Radio communications
- Physical fitness and cardiovascular disease (CVD)
- Building code compliance (e.g., warning against the use of wooden trusses)
- Other (Please specify: \_\_\_\_\_)
- Does not apply. We have not used NIOSH recommendations for training purposes. [→ SKIP TO QUESTION 12]

### SECTION 3. FITNESS AND WELL-BEING

The following questions ask about your department's policies and procedures for encouraging firefighter fitness and general well-being.

12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?

- No
- Yes, it's required
- Yes, it's optional (Please explain: \_\_\_\_\_)

13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?

- One time, when they first join the department
- Less frequently than once a year
- One time a year
- More than one time a year
- Does not apply. Firefighters are not required to receive CVD screenings





## SECTION 4. DRIVING SAFETY

The following questions ask about your department's policies and procedures for encouraging firefighter fitness and general well-being.

14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.
- No
  - Yes, they receive training required by the department
  - Yes, they receive training required by the state
  - Yes, they receive optional training
15. How often do drivers of your fire department vehicles receive "refresher" driver training to continue being allowed to drive the vehicles?
- Two or more times a year
  - Once every year
  - Less frequently than once a year
  - Does not apply. Firefighters are not required to receive continuing driver training.
16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?
- No
  - Yes
17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?
- Strongly disagree
  - Disagree
  - Neither agree nor disagree
  - Agree
  - Strongly agree
18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?
- Never
  - Some of the time
  - About half the time
  - Most of the time
  - Always



## SECTION 5. STRUCTURE FIRES

The following questions ask about your department's experience with as well as policies and procedures for dealing with structure fires.

19. Approximately how many emergency calls did your department respond to in the past 12 months?

Total number of emergency calls

--	--	--	--	--	--	--

20. Of the emergency calls your department responded to in the past 12 months, about how many of these were structure fires?

Total number of structure fires

--	--	--	--	--	--	--

21. How often is Incident Command established when responding to structure fires?

- Never
- Rarely
- About half the time
- Most of the time
- Always [→ SKIP TO QUESTION 23]

22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.

- Fires are not usually big enough to require an Incident Commander
- Not enough firefighters available at the scene of the fire
- Other (Please specify: \_\_\_\_\_)
- Does not apply. My department always assigns an Incident Commander for structure fires.

23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.

- Conduct an initial assessment before the other firefighters begin entering the building
- Develop and coordinate the fire attack strategy
- Develop and initiate a risk management plan
- Document all assessments, plans and events related to the fire
- Ensure that at least four (4) firefighters are on the scene before entering the building
- Establish a collapse zone around the building
- Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)
- Identify and implement a communication strategy
- Monitor location of all firefighters at the scene
- Other (Please specify: \_\_\_\_\_)

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24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?

- Never
- Some of the time
- About half the time
- Most of the time
- Always [→ SKIP TO QUESTION 26]

25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.

- Fires are not big enough to require an Incident Commander
- Not enough firefighters are available at the scene of the fire
- Other (Please specify: \_\_\_\_\_)
- Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.

26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?

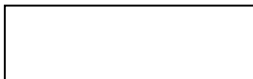
- Never [→ SKIP TO QUESTION 28]
- Some of the time
- About half the time
- Most of the time
- Always [→ SKIP TO QUESTION 29]

27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.

- When the building has more than one story/floor
- When there are enough firefighters on hand at the scene of the fire
- Whenever firefighters enter a burning building
- Other (Please specify: \_\_\_\_\_)

28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.

- The structure fire may not be large enough to need an RIT/RIC
- We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC
- We don't have enough firefighters available at the scene of the fire
- We don't have enough training or trained personnel at the scene to establish an RIT/RIC
- We have never established an RIT/RIC
- We use other fire departments in the area for RITs/RICs
- We use other safety practices and so we don't need them
- Other (Please specify: \_\_\_\_\_)



29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?

- No
- Yes

30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?

- Never
- Some of the time
- About half the time
- Most of the time
- Always [→ SKIP TO QUESTION 32]

31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.

- They don't have a PASS device to use
- Situation doesn't require them
- Firefighters think the devices do not always work reliably
- Firefighters don't think they need them
- Devices go off while firefighters are resting

32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?

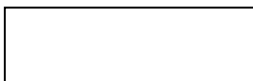
- No [→SKIP TO QUESTION 37]
- Yes

33. Do your firefighters ever have to share facepieces for SCBAs?

- No [→ SKIP TO QUESTION 34]
- Yes

33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.

- Didn't know it was recommended
- Firefighters don't like using the equipment
- Have never needed them (e.g., we don't do interior attacks)
- They cost too much, there is not enough money in the budget
- We don't have enough equipment for all of our firefighters
- Shared systems work fine for our needs
- Other (Please specify: \_\_\_\_\_)



34. About how often do you think your firefighters use SCBAs while fighting structure fires?

- Never
- Some of the time
- About half the time
- Most of the time
- Always [→ SKIP TO QUESTION 36]

35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.

- Situation doesn't require them
- Firefighters do not trust that the SCBAs will work reliably
- Firefighters don't think they need them
- Firefighters don't like sharing facepieces with others
- Firefighters are concerned that the SCBA may be or become contaminated
- Wearing SCBAs makes it more difficult to work
- Firefighters don't have SCBAs to use

36. How often is routine maintenance performed on your SCBAs?

- After every time they are used
- Once a month or more
- Several times a year
- Once a year
- Less than once a year
- Never. Maintenance has not been done on our SCBAs.
- Does not apply. My department does not have SCBAs.

37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs--with the label shown below--are available (or on order) for use by firefighters within your department at this time?

Number available now:

--	--	--

[→ SKIP TO QUESTION 38]

Number on order:

--	--	--

[→ SKIP TO QUESTION 38]

- Does not apply. My department does not have CBRN SCBAs.



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37a. What are the reasons why your fire department does not have CBRN SCBAs?  
MARK ALL THAT APPLY.

- CBRN SCBA devices are not needed in our department
- We didn't know they were available
- We don't have adequate technical information to purchase them
- We don't have adequate funding to purchase them
- Other (Please specify: \_\_\_\_\_)

38. Does your fire department have Automated External Defibrillators (AEDs)?

- No [→ SKIP TO QUESTION 39]
- Yes

38a. At your fire department, where do you have AEDs?

- At the fire station(s)
- On the emergency vehicles (or apparatus)
- Both at the fire station(s) and on the vehicles (or apparatus)

39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?

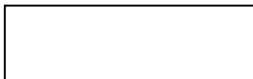
- After every time they are used
- Once a month or more
- Several times a year
- Once a year
- Less frequently than once a year
- Never. Maintenance on our AEDs has not been done.

40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?

- Never
- Some of the time
- About half the time
- Most of the time
- Always

41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?

- Never
- Some of the time
- About half the time
- Most of the time
- Always



42. How would you rate your department's budget in the following areas?

	<b>Not adequate</b>	<b>Adequate</b>	<b>More than adequate</b>
a. Equipment	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Training	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Personnel	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SECTION 6. EDUCATIONAL MATERIAL

The following questions ask about your policies and procedures for providing educational material to firefighters and others within your department. In addition, there are a number of questions asking about familiarity and satisfaction with the educational materials provided by NIOSH and the FFFIPP.

43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.

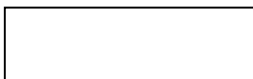
- Never [→SKIP TO QUESTION 53]
- One or two times per year
- Several times per year
- Once a month or more

44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.

- By mail
- On the Internet
- From colleagues in other departments
- At conferences or other meetings

45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?

- No
- Yes



46. Which parts of the NIOSH reports do you usually read? MARK ALL THAT APPLY.

- Summary
- Investigation Results
- Discussion
- Recommendation

47. Overall, how would you rate the amount of detail in the NIOSH reports?

- Too little detail
- About the right amount of detail
- Too much detail

48. Which parts of the NIOSH reports do you think should be changed in length?

	<b>Eliminate entirely</b>	<b>Make shorter</b>	<b>Don't change the length</b>	<b>Make longer</b>
a. Summary	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Investigation results	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Discussion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Recommendation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

49. Do you have any other suggestions for how the NIOSH reports could be improved?

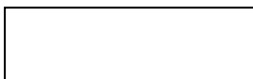
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50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?

- No [→ SKIP TO QUESTION 51]
- Yes





50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.

- Regular staff meetings
- Training sessions
- Provide copies of NIOSH reports to firefighters
- Provide copies of NIOSH report summaries to firefighters
- Provide summaries prepared by department to firefighters
- Postings on bulletin boards
- Post report on the department website
- Send message to firefighters by email
- Other (Please specify: \_\_\_\_\_)

51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?

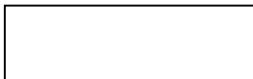
- No
- Yes

52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
a. Recommendations are practical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Recommendations are easy to understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Recommendations are specific and concrete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.

- Pocket guide to chemical hazards
- Respirator maintenance program guide
- CDs of firefighter program materials
- Alerts
- Hazard IDs
- Workplace Solutions
- Other (Please specify: \_\_\_\_\_)
- None. I have not seen any NIOSH materials. [→ SKIP TO QUESTION 54]



53a. How satisfied or dissatisfied are you with these NIOSH materials?

- Very dissatisfied
- Dissatisfied
- Neither satisfied nor dissatisfied
- Satisfied
- Very satisfied

54. Have you ever visited the NIOSH website at [www.cdc.gov/niosh/firehome.html](http://www.cdc.gov/niosh/firehome.html)?

- No
- Yes, in the last year
- Yes, longer than one year ago

55. In which of these ways would you most prefer to receive information about NIOSH recommendations? MARK YOUR THREE (3) FAVORITES.

- Cable television programming
- CD/DVD
- Conference presentations or meetings
- Email
- Fire Fighter Fatality Investigation Reports
- NIOSH Website
- One-page Fact Sheets
- Pocket Guides
- Posters
- Summary Reports
- Training session/class
- Other (Please specify: \_\_\_\_\_)

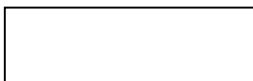
56. What could NIOSH do to improve the way the recommendations are communicated to fire departments?

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**SECTION 7. YOUR DEPARTMENT INFORMATION**

The following questions ask about your department. These questions will help us understand your survey responses as they relate to the size of your department.

57. How many career and volunteer firefighters currently work at your fire department?  
(Please count only those who are involved in fire suppression)

Full-time (*career*) uniformed firefighters

Part-time (*career*) uniformed firefighters

Part-time (*on-call or volunteer*) firefighters

58. How many fire stations do you currently have in your fire department?

Number of fire stations:

59. What type of jurisdiction does your fire department serve?

- Rural (population density is **less** than 825 persons per square mile)
- Urban (population density is **more** than 825 persons per square mile)

60. What is the size of the population your fire department serves?

- Small (protecting a population of less than 5,000)
- Medium (protecting a population of 5,000 to 49,999)
- Large (protecting a population of 50,000 or more)

61. During the past 5 years, has your department experienced a firefighter fatality?

- No
- Yes, due to a cardiovascular event (e.g., heart attack, heart disease, stroke, etc.)
- Yes, due to a vehicle accident while responding to or returning from a call
- Yes, due to a traumatic injury or accident on the fire ground
- Yes, due to some other reason (please specify: \_\_\_\_\_)

62. Who completed this survey?

- Fire Chief
- Safety officer
- Training officer
- Other (Please specify: \_\_\_\_\_)

**Thank you for taking the time to answer this survey.  
Please return this survey to RTI in the provided envelope.**

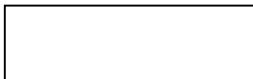


Exhibit A-2. Lead Letter



Fire Chief  
[NAME OF FIRE DEPARTMENT]  
[MAILING STREET ADDRESS]  
[CITY], [STATE] [ZIP]

February 2006

Dear Fire Chief:

In 1998, the U.S. Congress directed the National Institute for Occupational Safety and Health (NIOSH) to investigate firefighter deaths and serious injuries. In response, NIOSH started the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP). NIOSH uses the FFFIPP to study the events that lead to firefighter deaths. NIOSH then issues recommendations to help reduce firefighter deaths and serious injuries.

NIOSH is asking for your help to evaluate this program. Your fire department was chosen at random as one of about 3,000 fire departments from across the country to take part in the study. Some departments have also been chosen deliberately. These departments have been selected based on their size and whether they have had a FFFIPP investigation.

NIOSH and the Centers for Disease Control and Prevention (CDC) have asked RTI International to conduct this important research. RTI is a non-profit research organization based in North Carolina.

In a few days, you will receive the Fire Department Survey by mail. It should take about 25 minutes to finish the survey. Please send your completed survey back to RTI in the return envelope provided with the survey.

The answers we get from you will be used to improve the Fire Fighter Fatality Investigation and Prevention Program. Your response is voluntary, but your answers are important to us. Your answers will be kept private and will not be connected to you or your fire department in our reports.

As a token of our thanks for taking part in the Fire Department Survey, we will send you the FFFIPP CD-ROM. The CD contains all FFFIPP reports to date and the NIOSH Pocket Guide to Chemical Hazards.

We are enclosing a brochure to give you more information about this important research. If you have any more questions about the FFFIPP Evaluation you can call Kristina Peterson, RTI Project Director. Her toll-free number is 1-800-334-8571, x7722. If you have a question about your rights as a study participant, you can call RTI's Office of Research Protection toll -free at 1-866-214-2043. You can also call Dr. Michael J. Colligan with the NIOSH Human Subjects Review Board (HSRB) at (513) 533-8222.

If you need help as a result of thinking about these issues, you may contact the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).

Supported by:

International Association of  
Fire Chiefs (IAFC)

Fire Department Safety  
Officers Association  
(FDSOA)

National Volunteer Fire  
Council (NVFC)

NIOSH has more information about the Fire Fighter Fatality Investigation and Prevention Program on the Internet. You can visit <http://www.cdc.gov/niosh/firehome.html>.

We are dedicated to helping reduce firefighter deaths and serious injuries. Thank you very much for your help.

Sincerely,



**John Howard, M.D.**

Director

National Institute for Occupational

Safety and Health

Centers for Disease Control and

Prevention

Enclosure: FFFIPP Evaluation Brochure



# QUESTIONS AND ANSWERS ABOUT THE FFFIPP EVALUATION

Your fire department has been chosen to take part in the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation. In this brochure, we answer many of the questions you may have about the evaluation.

## What is the FFFIPP?

The Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) is conducted by the National Institute for Occupational Safety and Health (NIOSH). This program examines fire fighter deaths and serious injuries. NIOSH then provides recommendations that may prevent similar deaths and injuries from happening again.

The goals of the program are to: 1. Learn about the events that lead to fire fighter deaths; 2. Think of ideas to keep deaths and injuries from occurring again, and 3. Share these strategies with the fire service.

## What Is the FFFIPP Evaluation?

The FFFIPP Evaluation will supply information to improve the value of the program. The information will come from this survey and from focus groups of active firefighters.

The Fire Department Survey will be sent to fire department chiefs. It will ask about the training and safety procedures at the fire department. It will also ask how the FFFIPP reports are used by the department.

## How Will This Evaluation Help My Department?

Taking part in this study gives NIOSH the chance to learn what information is useful to your fire department. NIOSH will use that knowledge in the Fire Fighter Fatality

Investigation and Prevention Program to better meet your needs.

## Who is Doing this Evaluation?

This study is being done by the National Institute for Occupational Safety and Health. NIOSH is part of the Centers for Disease Control and Prevention (CDC) in the U.S. Department of Health and Human Services. NIOSH provides research, products and services to prevent work-related illness, injuries, and death. NIOSH and CDC have asked RTI International (RTI) to conduct the study.

## What Is RTI?

RTI is a non-profit research organization located in Research Triangle Park, NC. RTI is committed to improving the human condition through research. RTI is closely associated with Duke University, the University of North Carolina at Chapel Hill, and North Carolina State University. RTI does research for government and industrial clients.

## How Did You Select My Fire Department?

Most fire departments were selected from a list of all fire departments in the country. Some departments were chosen at random. Other fire departments were chosen on purpose based on their size and whether they have had a FFFIPP investigation. About 3,000 fire departments will be asked to answer the Fire Department Survey.

## What Does the Evaluation Involve?

The Fire Department Survey will be sent by mail to the fire chief of the department. The fire chief or another informed person will answer this survey. The finished survey will be mailed back to RTI in an envelope that will be included with the survey.

## Are There Any Risks?

There are no risks in taking part in the study.

## What Will My Department Get For Participating In The Survey?

To show our thanks to you for taking part in the Fire Department Survey, we will send your department the FFFIPP CD-ROM and the Pocket Guide to Chemical Hazards. The CD-ROM includes all of the FFFIPP reports that have been published.

## How Long Will It Take?

The Fire Department Survey takes about 25 minutes to complete.

## How are Surveys Mailed Back to RTI International?

All surveys will be sent back to RTI in envelopes that will be given to you. There is no cost to the fire department. Mailing instructions and envelopes will be included with the surveys.

## Am I Required to Participate?

No, your participation is voluntary. You are an important part in this research study, so we hope you participate. You have the chance to give information to NIOSH about the Fire Fighter Fatality Investigation and Prevention Program. What you tell us will represent thousands of fire departments in the United States.

## What About Confidentiality?

No identifying facts about you, your fire department, or your co-workers will be seen by anyone outside of the research team. We do not use names in our results. The answers we

collect from you will be combined with answers from other fire departments.

### Where Do I Get More Information?

Information about FFFIPP is available online at: <http://www.cdc.gov/niosh/firehome.html>.

If you have other questions about this evaluation, you can call Dr. Kristina Peterson at RTI. Her toll-free number is 1-800-334-8571, x7722. For questions about how to send back your surveys, you can call Giselle Santiago, also at RTI. Her toll-free number is 1-800-334-8571, x7702.

If you have a question about your rights as a study participant, you can also call RTI's Office of Research Protection toll-free at 1-866-214-2043. You may also contact Dr. Michael J. Colligan with the NIOSH Human Subjects Review Board (HSRB) at (513) 533-8222.

If you need help as a result of thinking about these issues, you may contact the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).

## QUESTIONS AND ANSWERS ABOUT THE

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### Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation



Conducted by:  
*RTI International*

Sponsored by:  
*National Institute for Occupational Safety and  
Health (NIOSH) and Centers for Disease Control  
and Prevention (CDC)*



## **Exhibit A-4. Announcement**

### **ANNOUNCEMENT: Fire Department Survey**

#### **NIOSH Launches National Survey of U.S. Fire Departments**

This Spring, the National Institute for Occupational Safety and Health (NIOSH) is conducting a survey to help evaluate its Fire Fighter Fatality Investigation and Prevention Program (FFFIPP). The purpose of the evaluation is to understand how effective the program has been and what can be improved to meet the needs of the fire service.

FFFIPP is an important firefighter safety program conducted by NIOSH. In 1998, Congress funded NIOSH to create FFFIPP to study the events that lead to firefighter deaths and make recommendations to help prevent death or serious injury. The evaluation will focus on the effects of the safety recommendations and information products which are periodically distributed by NIOSH to the nation's 30,000 fire departments.

The information for this evaluation will come from a survey of fire department officers (the Fire Department Survey). In addition to this survey, the evaluation also includes focus groups with fire fighters; these focus groups are organized separately from the survey and will involve individual fire fighters from across the country. NIOSH has contracted with RTI International (a non-profit research organization) to conduct the evaluation of the FFFIPP.

#### **Fire Department Survey**

The Fire Department Survey is being mailed this Spring to 3,000 fire department chiefs across the country. Included among these fire departments will be the 215 fire departments that have had a previous firefighter fatality investigation (as of December 31, 2003) and the nation's 10 largest fire departments. Additional fire departments will be randomly selected to be representative the fire service nationally.

The chiefs of the fire departments selected to participate in the survey will first receive a letter from NIOSH that explains the purpose of the survey and requests their cooperation. About a week later, the chiefs will receive a copy of the questionnaire in the mail along with a cover letter from NIOSH and a postage-paid return envelope for returning the completed questionnaire. As a token of appreciation for participating in the survey, the selected fire departments are also receiving a CD-ROM that contains all FFFIPP Reports and the NIOSH Pocket Guide to Chemical Hazards.

Being a part of this study is voluntary, but all answers are important to ensure the accuracy of the evaluation. All responses to the Fire Department Survey will be kept confidential and will only be reported in aggregate form so that specific answers can not be connected to any particular fire department. The survey is estimated to take approximately 25 minutes to finish.

#### **How can I help?**

If your department is selected for the Fire Department Survey, the FDSOA strongly encourages your participation in this study. This information collected will be valuable in helping to improve the impact of the FFFIPP and the information products that they produce. Ultimately this information may help to save the lives of your fellow firefighters.



**Exhibit A-5. Cover Letter**



February 2006

Dear Fire Chief:

Supported by:

International  
Association of  
Fire Chiefs  
(IAFC)

Fire Department  
Safety Officers  
Association  
(FDSOA)

National  
Volunteer Fire  
Council (NVFC)

A few days ago, you received a letter about the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation. As the letter explained, your fire department was one of 3,000 fire departments across the country chosen to take part in this study. The FFFIPP Evaluation is sponsored by the National Institute for Occupational Safety and Health (NIOSH) and the Centers for Disease Control and Prevention (CDC). NIOSH and CDC have asked RTI International to conduct this research. RTI is a non-profit organization based in North Carolina.

This survey will provide information to help develop and improve the Fire Fighter Fatality Investigation and Prevention Program. The purpose is to help NIOSH better meet your needs.

Enclosed with this letter is the Fire Department Survey. The survey will take about 25 minutes of your time. You may need to consult with other firefighters in your department to complete the survey. Your response is voluntary, but your answers are important in helping us to improve the FFFIPP program. Your answers will be kept private and will not be connected to you or your fire department in our reports.

After you have finished your survey, please mail it back to RTI in the enclosed envelope. You can drop this envelope into any U.S. post office box or office. There is no charge to you to mail back the survey. We are sending you the FFFIPP CD-ROM as a way of saying thanks for your help.

If you have any questions about the FFFIPP Evaluation, you can call Dr. Kristina Peterson, RTI Project Director. Her toll-free number is 1-800-334-8571, x7722. If you have a question about your rights as a study participant, you can call RTI's Office of Research Protection toll-free at 1-866-214-2043. You may also call Dr. Michael J. Colligan with the NIOSH Human Subjects Review Board (HSRB) at (513) 533-8222. If you need help as a result of thinking about these issues, you may contact the National Suicide Prevention Lifeline at 1-800-273-TALK (8255). NIOSH has more information about the Fire Fighter Fatality Investigation and Prevention Program on the Internet. You can visit <http://www.cdc.gov/niosh/firehome.html>.

We are dedicated to helping reduce firefighter deaths and serious injuries. Thank you very much for your help.

Sincerely,

A handwritten signature in black ink that reads "J. Howard".

**John Howard, M.D.**  
Director  
National Institute for Occupational  
Safety and Health  
Centers for Disease Control and  
Prevention

Enclosures: Fire Department Survey  
Business reply envelope, addressed to RTI International  
FFFIPP CD-ROM



Exhibit A-6. Showcard

**IMPORTANT: Do not discard this sheet.**  
**Please refer to this sheet when answering questions 43-56 of the survey.**

Below are a few examples of NIOSH reports on firefighter safety issues.



**Death in the line of duty...**  
**Volunteer Assistant Chief is Struck and Killed at Road Construction Site - Minnesota**

**SUMMARY**

On October 27, 2003, a 49-year-old male volunteer Assistant Chief (the victim) was fatally struck by a privately owned vehicle (POV) at a road construction site. At approximately 10:00 a.m., the victim and six other volunteer fire fighters responded in three fire apparatus to a road construction site. Two of the three fire apparatus returned to the department. The victim and two other fire fighters remained with the brush truck representative of the construction company. Upon leaving, the crew stopped to clear a barricade at the entrance to the construction site. Shortly thereafter, a civilian in the turn necessary to detour around the construction site and struck the victim with the brush truck. The victim was dragged about 60 ft and then trapped beneath the truck at the scene.

NIOSH concludes that, to minimize the risk of similar occurrences, fire departments should:

- ensure that fire apparatus are positioned to protect fire fighters.



**Career Fire Fighter Dies Searching For Fire in A Restaurant/Lounge - Missouri**


**SUMMARY**

On February 18, 2004, a 40-year-old male career fire fighter (the victim) was fatally injured in a commercial restaurant/lounge structure fire. The victim, providing mutual aid, had been searching for the seat of the fire with two volunteer fire fighters from another department, when one of these fire fighters lost the fire with two volunteer fire fighters from another department, when one of these fire fighters immediately abandoned the nozzle position and retreated out of the chest door. The backup fire fighter also retreated out of the building when his partner left. In the black smoke and zero visibility, the fire fighters were unaware that the victim was still inside the structure. Soon after, the Incident Commander (IC) ordered an emergency evacuation because of an imminent roof collapse, and an air horn signal was sounded. Personnel accounting indicated that a missing fire fighter (the victim) was still inside the building when the roof partially collapsed. After several search attempts, the victim was found in a face-down position with his mask and a thermal imaging camera cable entangled in a chair. His facemask was dislodged and not over his mouth. He was pronounced dead on scene.

NIOSH investigators concluded that, to minimize the risk of similar occurrences, fire departments should:

- conduct pre-incident planning and inspections to facilitate development of a safe fire ground strategy.
- review, revise where appropriate, implement and enforce written standard operating guidelines (SOGs) that specifically address incident command (IC) duties, emergency evacuation procedures, personnel accountability, rapid intervention team (RIT) and mutual aid operations on the fireground.
- ensure that the IC maintains the role of directing fireground operations for all fire fighters, incident or until the command role is formally passed to another qualified fire fighter.
- ensure that the IC conducts a risk-versus-gain analysis and communicates that analysis to all fire fighters, and continuously assesses risk versus gain throughout the incident.
- ensure that all fire fighters are equipped with personal emergency escape respiratory devices (PESDs).

Esta página en Español



December 2001

WORKPLACE Safety and Health

NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

**HAZARD ID**

HID14 -

## Fire Fighter Deaths from Tanker Truck Rollovers

Description of HAZARD

Mobile water supply vehicles, known as tankers or tenders, are widely used to transport water to areas beyond a water supply system or where the water supply is inadequate. Incidents involving motor vehicles account for approximately 20% of U.S. fire fighter deaths each year; cases involving tankers are the most prevalent of these motor vehicle incidents. During 1977-1999, 73 deaths occurred in 63 crashes involving tankers. Of those deaths, 54 occurred in 49 crashes in which tankers rolled over (no collision), and 8 occurred in 6 crashes in which the tankers left the road (no collision). The other cases involved collision with another vehicle (10 deaths in 7 crashes) and collision with stationary object(s) (1 death) (NFPA 2000).

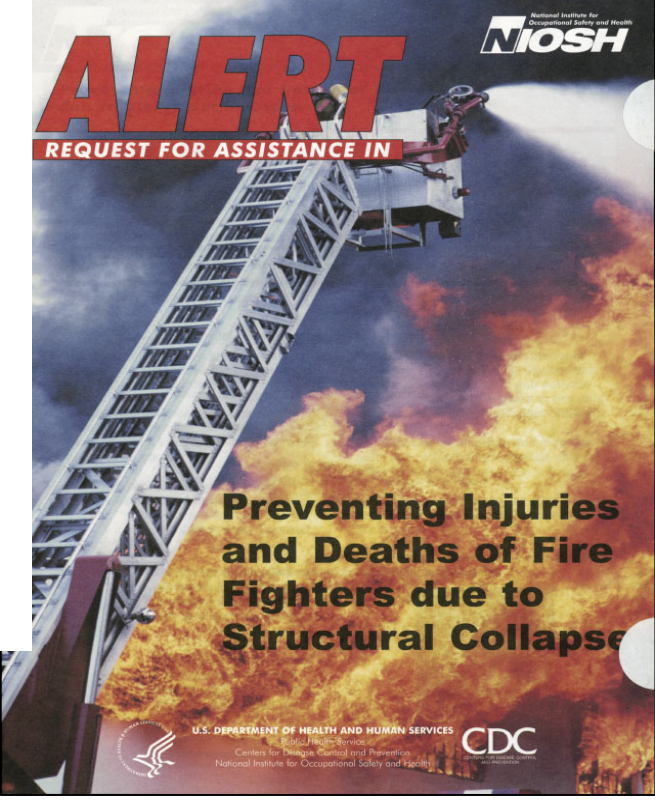
Tanker drivers may not be fully aware that tanker trucks are more difficult to control than passenger vehicles. A tanker truck requires a much greater distance to stop. Tankers weigh substantially more, and their air brake systems take more time to activate than the hydraulic/mechanical brake systems on smaller passenger cars. The effect is influenced by the amount of water the tanker is hauling and whether the tanker is baffled.

**CASE STUDIES**

Under the Fire Fighter Fatality Investigation and Prevention Program, NIOSH investigated two separate incidents involving fire fighters who were killed in tanker truck rollovers during 1999 and 2000 [NIOSH 2000a, b]. Both incidents involved volunteer fire departments providing mutual aid with water tanker trucks.

**Case 1**

On October 28, 1999, a Captain and a fire fighter (the driver) responded to a mutual-aid call in a full, elliptical-shaped, 1,800-gallon water tanker truck equipped with baffles [NIOSH 2000a]. The tanker was traveling west, and as it approached a curve, the driver lost control. The vehicle drifted toward the shoulder of the road as the driver tried to correct the direction of travel. Just past the curve, the tanker veered off the road into a corn field. The tanker rolled onto the passenger side and continued to roll over several times (Figure 1). The



**ALERT**  
**REQUEST FOR ASSISTANCE IN**  
**Preventing Injuries and Deaths of Fire Fighters due to Structural Collapse**

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
 Center for Disease Control and Prevention  
 National Institute for Occupational Safety and Health

**CDC**

Exhibit A-7. First Reminder Letter



Fire Chief  
[NAME OF FIRE DEPARTMENT]  
[MAILING STREET ADDRESS]  
[CITY], [STATE] [ZIP]

March 2006

Dear Fire Chief:

A couple of weeks ago, your fire department received the Fire Department Survey in the mail. The survey asks you for information to help us evaluate the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP). The FFFIPP program was started by the National Institute for Occupational Safety and Health (NIOSH) to help prevent firefighter deaths and severe injuries. The FFFIPP Evaluation will help NIOSH assess the impact of the FFFIPP. It will also help NIOSH improve the program to better meet your needs.

If your survey has been completed and sent back to RTI, please accept my sincere thanks. As one of the 3,000 fire departments chosen to answer the Fire Department Survey, your response is very important.

If your survey has not been completed and returned, please do so as soon as possible. Your answers are very important to NIOSH and the Centers for Disease Control and Prevention (CDC). Please mail your completed survey back to RTI in the envelope provided with the survey. NIOSH and CDC have asked RTI International to conduct this research. RTI is a non-profit organization based in North Carolina. There is no charge to your fire department to mail back the survey.

If you did not receive your survey, or if it was misplaced, please call Giselle Santiago toll-free at 1-800-334-8571, x7702. We will get another one in the mail to you today. If you have any other questions about the FFFIPP Evaluation, you can call Dr. Kristina Peterson, RTI Project Director. Her toll-free number is 1-800-334-8571, x7722. If you have a question about your rights as a study participant, you can call RTI's Office of Research Protection toll-free at 1-866-214-2043. You may also call Dr. Michael J. Colligan with the NIOSH Human Subjects Review Board (HSRB) at (513) 533 – 8222.

NIOSH has more information about the Fire Fighter Fatality Investigation and Prevention Program on the Internet. You can visit <http://www.cdc.gov/niosh/firehome.html>. We are dedicated to helping reduce firefighter deaths and serious injuries. Thank you very much for your help.

Sincerely,

**John Howard, M.D.**  
Director  
National Institute for Occupational  
Safety and Health  
Centers for Disease Control and  
Prevention



Supported by:

International  
Association of  
Fire Chiefs  
(IAFC)

Fire Department  
Safety Officers  
Association  
(FDSOA)

National  
Volunteer Fire  
Council  
(NVFC)

Exhibit A-8. Second Reminder Letter



March 2006

Dear Fire Chief:

A few weeks ago, we sent you the Fire Department Survey. This questionnaire can be answered by you or someone knowledgeable about training and safety practices in your fire department. The survey is part of the national evaluation of the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP). FFFIPP is operated by the National Institute for Occupational Safety and Health (NIOSH) to help prevent firefighter deaths and severe injuries.

Supported by:

International  
Association of Fire  
Chiefs (IAFC)

Fire Department  
Safety Officers  
Association  
(FDSOA)

National Volunteer  
Fire Council  
(NVFC)

To the best of our knowledge, the survey has not yet been returned. Enclosed, you will find a new copy of the Fire Department Survey. If you have not done so already, please complete the survey and send it back to RTI in the enclosed envelope.

The responses of other fire departments who have already responded to this study have been very helpful. The results of this research are intended to help NIOSH and the Centers for Disease Control and Prevention (CDC) monitor and improve the Fire Fighter Fatality Investigation and Prevention Program.

Your fire department's participation is very important. Taking part in this study gives NIOSH the chance to learn what information is useful to your fire department. It will tell NIOSH what can be done to make the FFFIPP program more useful to your department. NIOSH would like to meet your needs in the best way possible.

If you have any questions about what you need to do to complete the survey, please call Giselle Santiago toll-free at 1-800-334-8571, x7702. If you have any other questions about the FFFIPP Evaluation, you can call Dr. Kristina Peterson, RTI Project Director. Her toll-free number is 1-800-334-8571, x7722. If you have a question about your rights as a study participant, you can call RTI's Office of Research Protection toll-free at 1-866-214-2043. You may also call Dr. Michael J. Colligan with the NIOSH Human Subjects Review Board (HSRB) at (513) 533-8222.

NIOSH has more information about the Fire Fighter Fatality Investigation and Prevention Program on the Internet. You can visit <http://www.cdc.gov/niosh/firehome.html>.

We are dedicated to helping reduce firefighter death and serious injuries. Thank you very much for your help.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Howard".

**John Howard, M.D.**  
Director  
National Institute for Occupational  
Safety and Health  
Centers for Disease Control and  
Prevention

Enclosures: Fire Department Survey  
Business reply envelope, addressed to RTI International



***B***

**Post-Data Collection  
Methodology and  
Analysis Tables**

## **B.1 POST-DATA COLLECTION METHODOLOGY**

### **B.1.1 Building the Analysis File**

All questionnaire data from responding fire departments were pooled into one analysis file. This file included the sample weights, sample design information, and any variables needed for proper estimation of variance. A codebook of this analysis file was created that displayed weighted and unweighted frequencies and percentages for all variables. The codebook provides information on item nonresponse and sample sizes.

### **B.1.2 Methodology Used to Create the Sample Weights and Estimates**

One final, nonresponse-adjusted sample weight was created for each responding fire department. This weight consists of a product of two factors: the base weight and the nonresponse adjustment. These are defined as follows:

1. The **base weight** is the inverse, unconditional probability of selecting the fire department into the sample. This weight accounts for the clustering and stratification used in the sample design. Note that if all selected fire departments respond to the survey, then the sum of the base weight will equal the total number of fire departments on the sample frame, and no nonresponse adjustment would be necessary.
2. The **nonresponse adjustment** is an adjustment imposed on the sampling weight of fire department respondents to account for those departments that did not respond to the survey. In general, this adjustment was greater than "1" so that each respondent fire department will account for itself as well as some portion of the nonrespondents in the final estimate.

There are numerous ways of constructing a nonresponse adjustment. We used a response propensity model-based approach described recently in Folsom and Singh (2000). The Folsom and Singh modeling approach is based on a simple generalization of constrained models first suggested by Deville and Sarndal (1992). These models allow the user to impose predetermined constraints on the resulting model-based nonresponse adjustment to minimize the effect that the weight adjustment has on variance. The variance reduction property of the adjustments is another distinct advantage of this approach.

The modeling approach has been used in recent years to generate nonresponse adjustments because (1) it has been proven to be a cost-efficient approach for creating nonresponse adjustments and (2) potential bias reduction can be achieved over the commonly used weighting class approach. This increases bias reduction because the adjustment uses more statistically significant main effects and lower-order interactions than a weighting class approach. Also, if the resulting response propensity model contains all main effect and interaction terms for a set of categorical variables, the modeling approach to deriving the weighting adjustments is numerically equivalent to the weighting class approach. Consequently, the modeling approach is a generalization of the weighting class approach.

For the FFFIPP survey response propensity model, we considered those variables that we suspect will be significant predictors of response propensity. The statistical significance of these variables was tested during the model-building process. The statistical significance of lower-order interactions of these variables was also considered.

To illustrate, we will let:

$i$  = indice for fire department

$\rho_i$  = unconditional probability of selecting the fire department into the Fire Department sample

$\alpha_i$  = nonresponse adjustment

The base weight for fire department  $i$  will equal  $\rho_i^{-1}$  and the final weight will equal:

$$w_i = \rho_i^{-1} \cdot \alpha_i.$$

The survey weights for the Fire Department Survey are summarized in Exhibit B-1.

After the data were collected, we produced estimates of population percentages. In summary, these were computed as follows. We will let:

$\delta_i$  = a 0/1 indicator identifying those fire departments that belong to some subgroup of interest.

$x_i$  = response to a particular questionnaire item. Because most of the items on the Fire Department Survey are categorical, this will equal "1" if fire department  $i$  gives a particular response on a question and "0" otherwise.



**Exhibit B-1. Fire Department Survey: Summary of Sample Weights**

Characteristic	Respondent Sample	Minimum Weight	Maximum Weight	Unequal Weighting Effect
<b>Total</b>	<b>1,622</b>	<b>1</b>	<b>61</b>	<b>1.458</b>
<b>High-priority strata</b>				
<b>Total</b>	262	1	6	1.255
<b>Strata</b>				
Previous FFFIPP investigation involving a traumatic injury fatality	83	1	2	1.057
Previous FFFIPP investigation involving a cardiovascular infarction fatality	58	1	2	1.023
Traumatic injury fire fighter fatality without investigation	64	1	4	1.152
Cardiovascular disease fire fighter fatality without investigation	57	2	6	1.074
10 largest fire departments <sup>a</sup>	0	—	—	—
<b>Remainder strata</b>				
<b>Total</b>	1,360	1	61	1.264
<b>Census region</b>				
Northeast	266	1	61	1.151
South	433	2	41	1.297
Midwest	453	1	41	1.203
West	208	1	55	1.456
<b>Rural/urban</b>				
Rural	823	1	32	1.072
Urban	412	1	36	1.648
Unknown	125	2	61	1.048
<b>Size (defined by population protected)</b>				
Large (at least 50,000 persons)	211	1	9	1.183
Medium (5,000–49,999 persons)	471	3	61	1.123
Small (0–4,999 persons)	678	1	55	1.060
<b>Department type</b>				
All career	271	1	21	1.389
All volunteer	404	2	61	1.247
Combination	685	1	39	1.025

<sup>a</sup>Eight of the 10 largest fire departments are counted in the other high priority strata.



The estimates of means (e.g., percentages) were computed as:

$$\frac{\sum_{i \in \text{Respondents}} w_i \delta_i x_i}{\sum_{i \in \text{Respondents}} w_i \delta_i}$$

### B.1.3 Eligibility and Response Rates

Ineligibility was determined using questions on the survey that specifically addressed the eligibility issues. The eligibility rate of those cases of unknown eligibility was assumed to be the same as those for which the eligibility was known. The cases of unknown eligibility were defined as fire departments from which we did not receive a response and that we were unable to contact to inquire about their eligibility. Known eligibility status was defined by the responses that we received from the survey and/or the information we received through ad hoc inquiries with the fire department about their eligibility. The eligibility rates were defined using the following formula:

$$\text{EligibilityRate} = \frac{KE + e(UK)}{KE + KI + UK} ,$$

where

KE = Known Eligible

KI = Known Ineligible

UK = Unknown Eligibility

$$e = \frac{KE}{KE + KI}$$

The response rates for the survey were calculated based on the recommendations of the American Association for Public Opinion Research (AAPOR) published in its *Standard Definitions: Final Dispositions of Case Codes and Outcome Rates for Surveys*. As with the eligibility rate, this formula assumes that a proportion of the cases with unknown eligibility are eligible. The response rate was only calculated for those that were deemed either as known eligible or unknown eligibility. This being a mail survey, we did not have any “noncontacts.” The formula for the response rate was defined as follows:

$$RR4 = \frac{(I + P)}{(I + P) + (R + NC + O) + e(UK)} ,$$

where

I = Complete Interview

P = Partial Interview

R = Refusal

NC = Noncontact

O = Other Nonresponse

UK = Unknown Eligibility

$$e = \frac{KE}{KE + KI}$$

#### B.1.4 Editing of Questionnaire Data

All of the questionnaire data from responding fire departments have been edited to ensure every variable has a value for every record on the analysis file. This editing ensures a basic level of consistency between responses on each record when appropriate—for example, the data were edited to reflect the skip patterns present in the questionnaire. Variables resulting from questions that were skipped or intentionally missed were coded with a negative numeric value indicating the reason for item nonresponse. The following special codes were used:

Code	Definition
-5	Bad Data
-6	Multiple Response
-8	Blank (no answer)
-9	Legitimate Skip

#### B.1.5 Estimation and Variance Estimation

All estimates produced in the final analysis tables were generated with the final, nonresponse-adjusted sample weight. Variances were computed using RTI International's SUDAAN software to properly account for the complex design features of the study, such as stratification and unequal weighting.

Unless otherwise noted, all estimates displayed in analysis tables were computed assuming that any item missing data was missing at random. Thus, percentages were computed only among the records that responded to the corresponding row item in the tables.

### B.1.6 Computing Confidence Intervals

Asymmetric confidence intervals are displayed for all percent estimates. These tend to have better coverage properties for percent estimates, particularly for small percentages. These were computed as follows:

Suppose  $f(p) = \log(p) - \log(1-p)$  where  $p$  is the percent estimate.

Then the standard error estimate of  $f(p)$  is  $s[f(p)] \approx \frac{s(p)}{p(1-p)}$

Suppose

$$L_f = f(p) - t_{\alpha/2} s[f(p)]$$

$$U_f = f(p) + t_{\alpha/2} s[f(p)]$$

Then the confidence interval for  $p$  will be:

$$\left( \frac{\exp(L_f)}{1 + \exp(L_f)}, \frac{\exp(U_f)}{1 + \exp(U_f)} \right)$$

### B.1.7 Suppression Rule

The suppression rule that was used for all tables is the following:

If any estimate was less than .1 then a \*\* appears in the table and we included a footnote indicating "\*\*\*Estimate rounds to zero."

Any estimate with a relative standard error (i.e.,  $\frac{s(\theta)}{\theta}$ ) that is greater than .50 or that has a sample size of 30 or less was considered imprecise. In the tables, we displayed a superscripted "+" and a footnote indicating "+Low precision" was displayed. Suppressed estimates were still displayed.

### B.1.8 Testing the Significance of Differences

To test the significance of differences in the tables, we used the standard t-test as follows:

Let  $T = \frac{\theta_1 - \theta_2}{s(\theta_1 - \theta_2)}$  where  $s(\theta_1 - \theta_2)$  is the design-based standard

error of the difference  $\theta_1 - \theta_2$ . Then the significance probability associated with a 2-sided test is equal to:

$$\phi = 2 \cdot [1 - P_{t,df}(t < |T|)]$$

If  $0 \leq \phi \leq .05$  then the difference is deemed significant at the 95% confidence level.

## **B.2 ANALYSIS TABLES**

Tables were generated for the following by-groups. These by-groups defined the columns of the tables:

- Exhibit B-2 By Census Region  
(Northeast, South, Midwest, West)
- Exhibit B-3 By Jurisdiction Type  
(Rural, Urban, Unknown)
- Exhibit B-4 By Jurisdiction Size  
(Large: at least 50,000 persons; Medium: 5,000–50,000 persons; Small: 0–5,000 persons)
- Exhibit B-5 By Department Type  
(All Career, All Volunteer, Combination)
- Exhibit B-6 By Fatality and FFFIPP Investigation  
(Fatality with Investigation, Fatality without Investigation, No Fatality)
- Exhibit B-7 By Type of Fatality  
(Traumatic or Both, Cardiovascular, No Fatality)

Separate tables were generated for column percent estimates (labeled “a” in each set), the confidence interval associated with the percent estimates (labeled “b” in each set), and the total number of fire departments that responded (labeled “c” in each set).

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>1. Does your department have a Safety Officer?</b>	70.3 29.7	72.9 <sup>[3]</sup> 27.1 <sup>[3]</sup>	73.3 <sup>[3]</sup> 26.7 <sup>[3]</sup>	63.6 <sup>[1,2,4]</sup> 36.4 <sup>[1,2,4]</sup>	73.5 <sup>[3]</sup> 26.5 <sup>[3]</sup>
<b>2. Does your department have a Training Officer?</b>					
Yes	88.5	87.0 <sup>[2]</sup>	92.4 <sup>[1,3,4]</sup>	87.6 <sup>[2]</sup>	82.9 <sup>[2]</sup>
No	11.5	13.0 <sup>[2]</sup>	7.6 <sup>[1,3,4]</sup>	12.4 <sup>[2]</sup>	17.1 <sup>[2]</sup>
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>					
Yes					
No					
Incident Command Systems	83.7	87.3 <sup>[3]</sup>	85.7 <sup>[3]</sup>	78.9 <sup>[1,2]</sup>	83.4
Maintenance of SCBAs	69.7	77.9 <sup>[2,3,4]</sup>	66.3 <sup>[1]</sup>	68.7 <sup>[1]</sup>	66.7 <sup>[1]</sup>
Motor vehicle safety	78.8	84.8 <sup>[3]</sup>	80.2 <sup>[3]</sup>	70.9 <sup>[1,2,4]</sup>	83.4 <sup>[3]</sup>
Participation in a personal physical fitness program	11.0	9.8 <sup>[4]</sup>	10.9 <sup>[4]</sup>	7.5 <sup>[4]</sup>	21.9 <sup>[1,2,3]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	16.8	27.5 <sup>[2,3]</sup>	9.3 <sup>[1,3,4]</sup>	15.5 <sup>[1,2]</sup>	21.0 <sup>[2]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	40.4	48.3 <sup>[2,3]</sup>	35.6 <sup>[1,4]</sup>	33.9 <sup>[1,4]</sup>	55.0 <sup>[2,3]</sup>
Use of Personal Alert Safety System (PASS) devices	75.4	83.5 <sup>[2,3]</sup>	70.9 <sup>[1]</sup>	74.6 <sup>[1]</sup>	74.9
Use of personal protective equipment and protective clothing	89.1	94.7 <sup>[2,3,4]</sup>	89.5 <sup>[1]</sup>	85.2 <sup>[1]</sup>	87.8 <sup>[1]</sup>
Use of radio communications	84.8	91.8 <sup>[2,3]</sup>	85.5 <sup>[1,3]</sup>	78.1 <sup>[1,2,4]</sup>	86.6 <sup>[3]</sup>
Other	8.7	12.2 <sup>[2,3]</sup>	6.7 <sup>[1]</sup>	7.2 <sup>[1]</sup>	11.7
Does not apply. Our fire department does not use SOPs/SOGs.	5.0	1.0 <sup>[2,3,4,+]</sup>	4.6 <sup>[1]</sup>	7.9 <sup>[1]</sup>	6.1 <sup>[1]</sup>

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>					
<b>4a. Fighting structure fires</b>					
No Training	1.1	0.5 <sup>[+]</sup>	1.5	0.6 <sup>[+]</sup>	2.6
Optional Training	16.7	15.2 <sup>[3]</sup>	13.2 <sup>[3]</sup>	23.3 <sup>[1,2,4]</sup>	13.1 <sup>[3]</sup>
Required Training	82.8	84.9 <sup>[3]</sup>	85.9 <sup>[3]</sup>	76.9 <sup>[1,2,4]</sup>	85.3 <sup>[3]</sup>
<b>4b. Driving safety</b>					
No Training	3.9	1.0 <sup>[3,4,+]</sup>	2.4 <sup>[3]</sup>	6.6 <sup>[1,2]</sup>	6.9 <sup>[1]</sup>
Optional Training	18.6	19.7 <sup>[4]</sup>	16.1 <sup>[3]</sup>	23.7 <sup>[2,4]</sup>	10.9 <sup>[1,3]</sup>
Required Training	77.7	79.4 <sup>[3]</sup>	81.7 <sup>[3]</sup>	70.0 <sup>[1,2,4]</sup>	82.3 <sup>[3]</sup>
<b>4c. Incident Command systems</b>					
No Training	2.9	1.2 <sup>[3,+]</sup>	3.3	4.2 <sup>[1]</sup>	1.5 <sup>[+]</sup>
Optional Training	27.4	29.6	24.9	31.4 <sup>[4]</sup>	20.5 <sup>[3]</sup>
Required Training	69.9	69.1	71.8	65.0 <sup>[4]</sup>	78.0 <sup>[3]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>					
No Training	6.6	4.0 <sup>[4]</sup>	7.1	5.1 <sup>[4]</sup>	13.2 <sup>[1,3]</sup>
Optional Training	33.6	32.9 <sup>[4]</sup>	31.9 <sup>[3]</sup>	40.2 <sup>[2,4]</sup>	23.3 <sup>[1,3]</sup>
Required Training	60.3	63.1 <sup>[3]</sup>	61.3	55.0 <sup>[1,4]</sup>	65.0 <sup>[3]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>					
No Training	28.5	20.7 <sup>[2,3]</sup>	31.1 <sup>[1,4]</sup>	35.4 <sup>[1,4]</sup>	19.8 <sup>[2,3]</sup>
Optional Training	36.2	52.9 <sup>[2,3,4]</sup>	32.1 <sup>[1,4]</sup>	34.2 <sup>[1,4]</sup>	21.3 <sup>[1,2,3]</sup>
Required Training	35.5	26.9 <sup>[2,4]</sup>	36.8 <sup>[1,4]</sup>	30.6 <sup>[4]</sup>	58.9 <sup>[1,2,3]</sup>

(continued)

Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>4f. Use of personal protective equipment and/or protective clothing</b>					
No Training	1.5	0.6 <sup>[+]</sup>	1.9	1.4	1.9 <sup>[+]</sup>
Optional Training	9.9	6.9 <sup>[3]</sup>	9.6	14.4 <sup>[1,4]</sup>	4.8 <sup>[3]</sup>
Required Training	88.9	93.1 <sup>[3]</sup>	88.7	84.2 <sup>[1,4]</sup>	93.3 <sup>[3]</sup>
<b>4g. Use of radio communication devices</b>					
No Training	2.7	2.0	2.7	3.5	1.9 <sup>[+]</sup>
Optional Training	21.4	21.0 <sup>[4]</sup>	21.3 <sup>[4]</sup>	26.1 <sup>[4]</sup>	11.0 <sup>[1,2,3]</sup>
Required Training	76.2	77.1 <sup>[4]</sup>	76.7 <sup>[4]</sup>	70.4 <sup>[4]</sup>	87.1 <sup>[1,2,3]</sup>
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>					
Our department's Training Officer	84.9	81.7	87.7	84.8	83.0
Other officers within our department	82.8	88.5 <sup>[2]</sup>	75.4 <sup>[1,3,4]</sup>	84.3 <sup>[2]</sup>	88.9 <sup>[2]</sup>
State fire training agency	77.4	89.6 <sup>[2,3,4]</sup>	76.5 <sup>[1,4]</sup>	75.2 <sup>[1,4]</sup>	63.8 <sup>[1,2,3]</sup>
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	20.9	26.2 <sup>[3]</sup>	22.3 <sup>[3]</sup>	14.0 <sup>[1,2,4]</sup>	24.7 <sup>[3]</sup>
Conferences or regional meetings	51.7	55.2 <sup>[2]</sup>	43.4 <sup>[1,3,4]</sup>	55.3 <sup>[2]</sup>	59.3 <sup>[2]</sup>
Other	25.2	30.0 <sup>[3]</sup>	25.6 <sup>[3]</sup>	17.3 <sup>[1,2,4]</sup>	34.4 <sup>[3]</sup>
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>					
Roadside incidents/Motor Vehicle Accidents (MVA)	55.3	67.3 <sup>[2,3]</sup>	48.8 <sup>[1,4]</sup>	50.0 <sup>[1,4]</sup>	64.6 <sup>[2,3]</sup>
Scuba diving	7.5	7.6 <sup>[4]</sup>	7.8 <sup>[4]</sup>	9.0 <sup>[4]</sup>	2.7 <sup>[1,2,3]</sup>
Swift water rescue	11.2	13.3 <sup>[3]</sup>	11.0	8.0 <sup>[1,4]</sup>	15.8 <sup>[3]</sup>
Wildland fire fighting	47.0	32.3 <sup>[2,4]</sup>	49.8 <sup>[1,3,4]</sup>	38.6 <sup>[2,4]</sup>	85.0 <sup>[1,2,3]</sup>
HAZMAT	66.7	75.2 <sup>[2,3]</sup>	63.4 <sup>[1]</sup>	61.5 <sup>[1,4]</sup>	72.7 <sup>[3]</sup>
Other	31.2	42.4 <sup>[2,3,4]</sup>	29.4 <sup>[1]</sup>	25.1 <sup>[1]</sup>	30.7 <sup>[1]</sup>

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>					
Not at all familiar	8.3	2.9 [2,3,4]	9.1 [1]	10.0 [1]	11.7 [1]
Not very familiar	24.3	19.1 [3]	23.5	29.0 [1]	24.3
Somewhat familiar	58.1	63.1 [3,4]	59.8	54.8 [1]	52.9 [1]
Very familiar	9.3	14.9 [2,3]	7.5 [1]	6.3 [1]	11.1
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>					
Not at all familiar	20.8	14.1 [3,4]	19.2	25.3 [1]	25.8 [1]
Not very familiar	33.5	32.6	37.2 [4]	34.0 [4]	24.0 [2,3]
Somewhat familiar	37.9	43.8 [3]	36.9	35.2 [1]	36.7
Very familiar	7.8	9.5	6.7 [4]	5.5 [4]	13.4 [2,3]
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>					
NIOSH mailings	67.8	71.0	67.3	66.8	65.6
National conference presentations	3.6	2.7 [4]	4.3	2.5 [4]	6.2 [1,3]
State-level conference presentations	11.5	11.1	11.0	11.3	13.5
Other firefighters or departments	22.9	28.4 [2,3]	20.8 [1]	20.0 [1]	25.6
At seminars or other training opportunities (not conferences)	16.4	23.1 [2,3]	13.8 [1]	13.6 [1]	18.1
Trade publications (such as Firehouse and Fire Engineering)	47.2	49.6	46.5	44.3	51.4
NIOSH website	24.3	29.1 [2,3]	21.8 [1,4]	20.2 [1,4]	32.0 [2,3]
Links from other websites (such as NFPA and Firehouse)	28.2	34.6 [2,3]	26.3 [1]	23.7 [1,4]	33.1 [3]
Media reports—newspaper, television, radio	14.9	22.2 [2,3]	11.6 [1]	13.0 [1]	15.3
Other	1.1	1.1 [+]	1.6	0.6 [+]	1.4 [+]
Does not apply. We have not received information about NIOSH recommendations.	11.1	5.0 [2,3,4]	13.2 [1]	11.5 [1]	15.4 [1]

(continued)



Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>					
Made changes to training program	40.2	46.5 [2,3]	37.5 [1]	36.2 [1,4]	45.7 [3]
Developed new SOPs/SOGs	26.3	31.3 [2,3]	23.4 [1]	23.4 [1]	32.1
Made changes to SOPs/SOGs	34.9	42.7 [2,3]	30.5 [1]	33.1 [1]	37.3
Justified current budget/staffing	5.0	6.0	3.3	5.7	6.4
Made new budget/staffing requests	5.5	6.2	5.4	3.7 [4]	8.7 [3]
Justified grant applications	15.5	21.1 [2,3]	13.9 [1]	13.5 [1]	15.0
Does not apply. We have not used NIOSH recommendations.	30.1	26.6	32.7	31.8	25.0
<i>Legitimately Skipped Question</i>	11.7	5.3 [2,3,4]	14.0 [1]	12.2 [1]	15.8 [1]
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>					
Traffic hazards	29.3	31.9	29.4	25.8	32.9
Personal protective equipment and clothing	41.6	51.1 [2,3,4]	37.3 [1]	40.6 [1]	39.0 [1]
SCBA	40.1	48.8 [2,3]	34.0 [1]	40.2 [1]	40.7
PASS systems	32.6	41.4 [2,3]	28.1 [1]	31.9 [1]	31.6
Incident Command systems	32.1	37.5	30.7	30.2	31.1
Radio communications	23.0	24.9	21.7	21.6	27.2
Physical fitness and cardiovascular disease (CVD)	8.5	8.2	8.0	8.2	11.3
Building code compliance (e.g., warning against the use of wooden trusses)	6.9	9.6 [2]	4.9 [1]	6.6	8.3
Other	2.3	2.2	3.1	1.5	2.3
Does not apply. We have not used NIOSH recommendations for training purposes.	1.9	3.0 [4]	1.9	1.7	0.6 [1,+]
<i>Legitimately Skipped Question</i>	41.9	32.2 [2,3]	46.4 [1]	43.7 [1]	42.1

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>					
Yes, it's required	78.5	81.6 <sup>[4]</sup>	78.8 <sup>[4]</sup>	83.6 <sup>[4]</sup>	59.3 <sup>[1,2,3]</sup>
No Yes, it's optional	7.0	1.5 <sup>[2,3,4]</sup>	8.5 <sup>[1,3,4]</sup>	4.1 <sup>[1,2,4]</sup>	19.7 <sup>[1,2,3]</sup>
	14.5	16.9	12.7 <sup>[4]</sup>	12.3 <sup>[4]</sup>	21.0 <sup>[2,3]</sup>
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>					
One time, when they first join the department	14.5	18.2 <sup>[2]</sup>	9.1 <sup>[1,3,4]</sup>	17.2 <sup>[2]</sup>	16.2 <sup>[2]</sup>
Less frequently than once a year	7.1	6.4 <sup>[3]</sup>	3.3 <sup>[3,4]</sup>	11.4 <sup>[1,2]</sup>	8.1 <sup>[2]</sup>
One time a year	17.1	30.9 <sup>[2,3,4]</sup>	11.1 <sup>[1,4]</sup>	13.1 <sup>[1]</sup>	18.9 <sup>[1,2]</sup>
More than one time a year	0.3	** <sup>[2]</sup>	0.4 <sup>[1]</sup>	0.3 <sup>[+]</sup>	0.4 <sup>[+]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	60.9	44.6 <sup>[2,3,4]</sup>	76.1 <sup>[1,3,4]</sup>	57.9 <sup>[1,2]</sup>	56.4 <sup>[1,2]</sup>
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>					
Yes, they receive training required by the department	6.4	1.2 <sup>[2,3,4,+]</sup>	3.7 <sup>[1,3]</sup>	12.8 <sup>[1,2,4]</sup>	7.2 <sup>[1,3]</sup>
No Yes, they receive training required by the state	84.0	93.1 <sup>[2,3,4]</sup>	86.5 <sup>[1,3]</sup>	75.8 <sup>[1,2]</sup>	81.3 <sup>[1]</sup>
Yes, they receive optional training	25.7	18.3 <sup>[2,4]</sup>	30.1 <sup>[1,3]</sup>	22.7 <sup>[2,4]</sup>	34.3 <sup>[1,3]</sup>
	13.8	12.3	13.5	14.5	15.1
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>					
Two or more times a year	14.2	14.8	17.4 <sup>[3]</sup>	9.6 <sup>[2]</sup>	15.5
Once every year	40.3	37.9	40.5	42.7	38.7
Less frequently than once a year	24.8	26.9	25.3	21.8	26.5
Does not apply. Firefighters are not required to receive continuing driver training.	20.7	20.5	16.8 <sup>[3]</sup>	25.8 <sup>[2]</sup>	19.3

(continued)

Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>					
Yes	84.2	85.6 <sup>[3,4]</sup>	87.3 <sup>[3]</sup>	76.7 <sup>[1,2,4]</sup>	92.0 <sup>[1,3]</sup>
No	15.8	14.4 <sup>[3,4]</sup>	12.7 <sup>[3]</sup>	23.3 <sup>[1,2,4]</sup>	8.0 <sup>[1,3]</sup>
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>					
Strongly disagree	6.9	5.4	7.2	9.1 <sup>[4]</sup>	3.4 <sup>[3]</sup>
Disagree	18.0	20.2 <sup>[4]</sup>	16.6	20.3 <sup>[4]</sup>	12.5 <sup>[1,3]</sup>
Neither agree nor disagree	30.8	31.4	30.1	31.5	30.3
Agree	32.1	32.7	33.9	28.2	35.7
Strongly agree	12.2	10.4 <sup>[4]</sup>	12.2	10.9 <sup>[4]</sup>	18.1 <sup>[1,3]</sup>
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>					
Never	5.4	4.5 <sup>[3]</sup>	3.2 <sup>[3]</sup>	8.7 <sup>[1,2]</sup>	4.8
Some of the time	22.7	27.2 <sup>[4]</sup>	22.0 <sup>[4]</sup>	27.8 <sup>[4]</sup>	4.8 <sup>[1,2,3]</sup>
About half the time	17.0	19.6 <sup>[4]</sup>	16.2	18.2 <sup>[4]</sup>	11.4 <sup>[1,3]</sup>
Most of the time	38.4	36.6	41.6 <sup>[3]</sup>	33.0 <sup>[2,4]</sup>	46.0 <sup>[3]</sup>
Always	16.5	12.0 <sup>[4]</sup>	16.9 <sup>[4]</sup>	12.3 <sup>[4]</sup>	33.2 <sup>[1,2,3]</sup>
<b>21. How often is Incident Command established when responding to structure fires?</b>					
Rarely	2.3	1.4 <sup>[+]</sup>	3.0	1.6	4.0
Never	6.8	3.3 <sup>[3]</sup>	6.7	10.0 <sup>[1]</sup>	5.4
About half the time	6.7	4.3 <sup>[3]</sup>	6.2	8.6 <sup>[1]</sup>	7.7
Most of the time	27.6	24.5 <sup>[3,4]</sup>	29.0 <sup>[4]</sup>	34.4 <sup>[1,4]</sup>	13.3 <sup>[1,2,3]</sup>
Always	56.6	66.6 <sup>[2,3]</sup>	55.1 <sup>[1,3,4]</sup>	45.5 <sup>[1,2,4]</sup>	69.7 <sup>[2,3]</sup>

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>					
Fires are not usually big enough to require an Incident Commander	22.5	15.9 <sup>[2,3]</sup>	24.6 <sup>[1]</sup>	27.5 <sup>[1,4]</sup>	16.6 <sup>[3]</sup>
Not enough firefighters available at the scene of the fire	21.2	13.6 <sup>[2,3]</sup>	21.7 <sup>[1]</sup>	27.1 <sup>[1]</sup>	18.9
Does not apply. My department always assigns an Incident Commander for structure fires.	6.2	7.3	4.5 <sup>[3]</sup>	8.3 <sup>[2]</sup>	3.8
Other	3.6	4.4	3.0	4.0	3.5
<i>Legitimately Skipped Question</i>	56.6	66.6 <sup>[2,3]</sup>	54.9 <sup>[1,3,4]</sup>	45.7 <sup>[1,2,4]</sup>	70.1 <sup>[2,3]</sup>
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>					
Conduct an initial assessment before the other firefighters begin entering the building	91.0	93.7	89.6	91.9	87.7
Develop and coordinate the fire attack strategy	93.1	94.7	92.4	93.3	91.5
Develop and initiate a risk management plan	52.3	58.9 <sup>[3]</sup>	52.8	47.0 <sup>[1]</sup>	52.1
Document all assessments, plans and events related to the fire	38.8	42.2	34.6 <sup>[4]</sup>	36.3 <sup>[4]</sup>	49.8 <sup>[2,3]</sup>
Ensure that at least four (4) firefighters are on the scene before entering the building	68.6	63.2 <sup>[3]</sup>	66.1 <sup>[3]</sup>	74.2 <sup>[1,2]</sup>	71.0
Establish a collapse zone around the building	49.1	55.6 <sup>[2]</sup>	45.1 <sup>[1]</sup>	48.4	49.9
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	48.5	62.8 <sup>[2,3]</sup>	41.3 <sup>[1,4]</sup>	40.8 <sup>[1,4]</sup>	60.6 <sup>[2,3]</sup>
Identify and implement a communication strategy	64.7	66.8	62.5	65.2	65.9
Monitor location of all firefighters at the scene	76.2	63.0 <sup>[2,3,4]</sup>	82.8 <sup>[1]</sup>	78.3 <sup>[1]</sup>	77.4 <sup>[1]</sup>
Other	9.1	10.3	6.7 <sup>[4]</sup>	8.6	14.5 <sup>[2]</sup>

(continued)

Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>					
Some of the time	13.3	8.0 <sup>[3]</sup>	12.6 <sup>[3]</sup>	18.5 <sup>[1,2]</sup>	11.9
NeverAbout half the time	26.5	21.0 <sup>[3]</sup>	27.7	28.9 <sup>[1]</sup>	27.1
Most of the time	8.1	6.4	8.8	8.9	7.2
Always	29.8	32.7	29.7	26.7	32.3
	22.3	31.9 <sup>[2,3,4]</sup>	21.1 <sup>[1]</sup>	17.0 <sup>[1]</sup>	21.4 <sup>[1]</sup>
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>					
Fires are not big enough to require an Incident Safety Officer	32.3	23.7 <sup>[2,3,4]</sup>	33.7 <sup>[1]</sup>	33.7 <sup>[1]</sup>	39.5 <sup>[1]</sup>
Not enough firefighters are available at the scene of the fire	51.7	42.7 <sup>[3]</sup>	50.9 <sup>[3]</sup>	58.8 <sup>[1,2]</sup>	52.2
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	13.1	13.8	13.6	9.3 <sup>[4]</sup>	19.6 <sup>[3]</sup>
Other	2.1	3.1	2.1	1.4	1.7 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	22.6	33.3 <sup>[2,3,4]</sup>	21.1 <sup>[1]</sup>	17.2 <sup>[1]</sup>	21.6 <sup>[1]</sup>
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>					
Some of the time	29.4	12.1 <sup>[2,3]</sup>	35.7 <sup>[1,4]</sup>	39.1 <sup>[1,4]</sup>	19.5 <sup>[2,3]</sup>
NeverAbout half the time	21.8	21.3	20.7	23.5	21.4
Most of the time	6.5	5.1	6.7	7.5	5.5
Always	22.5	24.0	22.1	18.6 <sup>[4]</sup>	30.5 <sup>[3]</sup>
	19.9	37.5 <sup>[2,3,4]</sup>	14.7 <sup>[1,4]</sup>	11.3 <sup>[1,4]</sup>	23.2 <sup>[1,2,3]</sup>

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>					
When the building has more than one story/floor	9.3	9.3	10.0	9.1	8.3
When there are enough firefighters on and at the scene of the fire	32.3	23.4 <sup>[2,3,4]</sup>	36.0 <sup>[1]</sup>	32.8 <sup>[1]</sup>	36.7 <sup>[1]</sup>
Whenever firefighters enter a burning building	26.4	28.6	25.0 <sup>[4]</sup>	22.3 <sup>[4]</sup>	35.9 <sup>[2,3]</sup>
Other	4.9	8.4 <sup>[2]</sup>	2.6 <sup>[1]</sup>	5.1	4.6
<i>Legitimately Skipped Question</i>	49.3	49.8	50.5	50.5	42.2
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>					
The structure fire may not be large enough to need an RIT/RIC	34.9	27.5 <sup>[3]</sup>	34.1 <sup>[3]</sup>	41.5 <sup>[1,2]</sup>	34.8
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	8.8	4.8 <sup>[2,3]</sup>	10.0 <sup>[1]</sup>	11.6 <sup>[1]</sup>	6.3
We don't have enough firefighters available at the scene of the fire	53.5	33.0 <sup>[2,3,4]</sup>	59.4 <sup>[1]</sup>	63.5 <sup>[1,4]</sup>	50.9 <sup>[1,3]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	20.7	17.0 <sup>[3]</sup>	17.1 <sup>[3]</sup>	28.1 <sup>[1,2,4]</sup>	19.3 <sup>[3]</sup>
We have never established an RIT/RIC	17.7	11.2 <sup>[2,3]</sup>	18.8 <sup>[1,3,4]</sup>	25.7 <sup>[1,2,4]</sup>	7.2 <sup>[2,3]</sup>
We use other fire departments in the area for RITs/RICs	29.2	43.3 <sup>[2,3,4]</sup>	22.6 <sup>[1,3]</sup>	31.2 <sup>[1,2,4]</sup>	17.7 <sup>[1,3]</sup>
We use other safety practices and so we don't need them	4.2	2.1 <sup>[2]</sup>	5.8 <sup>[1]</sup>	4.7	2.5 <sup>[+]</sup>
Other	4.1	2.7 <sup>[4]</sup>	3.1 <sup>[4]</sup>	3.7 <sup>[4]</sup>	9.8 <sup>[1,2,3]</sup>
<i>Legitimately Skipped Question</i>	20.3	38.0 <sup>[2,3,4]</sup>	15.0 <sup>[1,4]</sup>	11.7 <sup>[1,4]</sup>	23.2 <sup>[1,2,3]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>					
Yes	78.8	86.7 <sup>[2,3]</sup>	72.7 <sup>[1,4]</sup>	78.1 <sup>[1]</sup>	82.8 <sup>[2]</sup>
No	21.2	13.3 <sup>[2,3]</sup>	27.3 <sup>[1,4]</sup>	21.9 <sup>[1]</sup>	17.2 <sup>[2]</sup>

(continued)

Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>					
Never	6.3	0.4 <sup>[2,3,4,+]</sup>	9.6 <sup>[1,3]</sup>	5.1 <sup>[1,2]</sup>	10.4 <sup>[1]</sup>
Some of the time	3.9	1.9 <sup>[3,+]</sup>	4.0 <sup>[4]</sup>	6.7 <sup>[1,4]</sup>	0.8 <sup>[2,3,+]</sup>
About half the time	1.8	0.8 <sup>[3,+]</sup>	1.9	3.0 <sup>[1]</sup>	0.7 <sup>[+]</sup>
Most of the time	12.8	7.3 <sup>[2,3]</sup>	13.8 <sup>[1]</sup>	17.2 <sup>[1,4]</sup>	9.4 <sup>[3]</sup>
Always	75.2	89.6 <sup>[2,3,4]</sup>	70.8 <sup>[1]</sup>	68.0 <sup>[1,4]</sup>	78.7 <sup>[1,3]</sup>
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>					
They don't have a PASS device to use	13.1	6.2 <sup>[2,3]</sup>	17.3 <sup>[1]</sup>	13.9 <sup>[1]</sup>	12.2
Situation doesn't require them	9.5	3.9 <sup>[2,3]</sup>	10.0 <sup>[1]</sup>	14.5 <sup>[1,4]</sup>	6.2 <sup>[3]</sup>
Firefighters think the devices do not always work reliably	0.3	0.4 <sup>[+]</sup>	**	0.8 <sup>[+]</sup>	**
Firefighters don't think they need them	4.6	4.1	4.1	5.7	3.9
Devices go off while firefighters are resting	3.7	2.3 <sup>[3]</sup>	2.4 <sup>[3]</sup>	6.8 <sup>[1,2,4]</sup>	1.8 <sup>[3,+]</sup>
<i>Legitimately Skipped Question</i>	75.5	89.5 <sup>[2,3,4]</sup>	71.0 <sup>[1]</sup>	68.7 <sup>[1,4]</sup>	79.3 <sup>[1,3]</sup>
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>					
Yes	99.2	99.5	100.0 <sup>[4]</sup>	99.8 <sup>[4]</sup>	95.4 <sup>[2,3]</sup>
No	0.8	0.5 <sup>[+]</sup>	** <sup>[4,+]</sup>	0.2 <sup>[4,+]</sup>	4.6 <sup>[2,3]</sup>
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>					
No					
Yes	49.7	43.9 <sup>[2]</sup>	56.8 <sup>[1,4]</sup>	51.3 <sup>[4]</sup>	36.5 <sup>[2,3]</sup>
No	49.5	55.5 <sup>[2]</sup>	43.1 <sup>[1,4]</sup>	48.4 <sup>[4]</sup>	58.7 <sup>[2,3]</sup>
<i>Legitimately Skipped Question</i>	0.8	0.6 <sup>[+]</sup>	** <sup>[4,+]</sup>	0.2 <sup>[4,+]</sup>	4.7 <sup>[2,3]</sup>

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>					
Didn't know it was recommended	4.8	3.0	6.3	4.7	3.7 <sup>[+]</sup>
Firefighters don't like using the equipment	0.3	**	**	0.6 <sup>[+]</sup>	0.8 <sup>[+]</sup>
Have never needed them (e.g., we don't do interior attacks)	0.7	0.4 <sup>[+]</sup>	1.1 <sup>[+]</sup>	0.3 <sup>[+]</sup>	0.8 <sup>[+]</sup>
They cost too much, there is not enough money in the budget	31.8	25.4 <sup>[2]</sup>	37.8 <sup>[1,4]</sup>	32.6	24.4 <sup>[2]</sup>
We don't have enough equipment for all of our firefighters	24.6	15.7 <sup>[2,3]</sup>	26.2 <sup>[1]</sup>	30.0 <sup>[1]</sup>	22.1
Shared systems work fine for our needs	23.4	20.2	26.3 <sup>[4]</sup>	25.0	17.4 <sup>[2]</sup>
Other	5.0	7.2	4.8	4.3	3.3 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	50.3	56.3 <sup>[2]</sup>	43.3 <sup>[1,4]</sup>	48.6 <sup>[4]</sup>	63.3 <sup>[2,3]</sup>
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>					
Never	1.1	** <sup>[2]</sup>	1.6 <sup>[1]</sup>	0.7 <sup>[+]</sup>	2.8 <sup>[+]</sup>
Some of the time	4.7	0.9 <sup>[2,3,+]</sup>	6.1 <sup>[1]</sup>	6.4 <sup>[1]</sup>	3.8
About half the time	2.7	** <sup>[2,3]</sup>	2.6 <sup>[1]</sup>	5.4 <sup>[1,4]</sup>	0.9 <sup>[3,+]</sup>
Most of the time	24.5	22.4	25.6	27.3 <sup>[4]</sup>	18.5 <sup>[3]</sup>
Always	66.1	76.2 <sup>[2,3]</sup>	64.1 <sup>[1]</sup>	59.9 <sup>[1]</sup>	69.3
<i>Legitimately Skipped Question</i>	0.8	0.6 <sup>[+]</sup>	** <sup>[4,+]</sup>	0.2 <sup>[4,+]</sup>	4.6 <sup>[2,3]</sup>

(continued)



Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>					
Situation doesn't require them	25.9	17.9 <sup>[2,3]</sup>	27.9 <sup>[1]</sup>	31.8 <sup>[1,4]</sup>	19.9 <sup>[3]</sup>
Firefighters do not trust that the SCBAs will work reliably	**	**	**	0.3 <sup>[+]</sup>	
Firefighters don't think they need them	10.3	8.4	11.4	12.2 <sup>[4]</sup>	6.5 <sup>[3]</sup>
Firefighters don't like sharing facepieces with others	1.0	** <sup>[3]</sup>	0.9 <sup>[+]</sup>	1.4 <sup>[1]**</sup>	1.5 <sup>[+]</sup>
Firefighters are concerned that the SCBA may be or become contaminated	**	**	0.2 <sup>[+]</sup>	**	**
Wearing SCBAs makes it more difficult to work	5.9	3.6 <sup>[3]</sup>	6.4	8.0 <sup>[1,4]</sup>	3.6 <sup>[3]</sup>
Firefighters don't have SCBAs to use	3.9	2.2 <sup>[3]</sup>	3.4	5.8 <sup>[1]</sup>	3.8 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	67.8	77.6 <sup>[2,3]</sup>	64.9 <sup>[1]</sup>	61.2 <sup>[1,4]</sup>	74.1 <sup>[3]</sup>
<b>36. How often is routine maintenance performed on your SCBAs?</b>					
After every time they are used	43.0	42.6	43.7	46.1 <sup>[4]</sup>	34.4 <sup>[3]</sup>
Once a month or more	19.0	28.4 <sup>[2,3,4]</sup>	17.8 <sup>[1]</sup>	16.6 <sup>[1]</sup>	12.2 <sup>[1]</sup>
Several times a year	15.0	11.8	14.4	17.3	16.8
Once a year	16.4	15.2	19.1 <sup>[3]</sup>	12.4 <sup>[2]</sup>	20.5
Less than once a year	4.3	1.3 <sup>[3,4,+]</sup>	4.2	5.3 <sup>[1]</sup>	6.8 <sup>[1]</sup>
Never. Maintenance has not been done on our SCBAs.	1.4	** <sup>[3]</sup>	0.8 <sup>[+]</sup>	1.9 <sup>[1]</sup>	3.8 <sup>[+]</sup>
Does not apply. My department does not have SCBAs.	**	**	**	**	**
<i>Legitimately Skipped Question</i>	1.0	0.7 <sup>[+]</sup>	** <sup>[4,+]</sup>	0.3 <sup>[4,+]</sup>	5.5 <sup>[2,3]</sup>
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>					
Greater than zero	17.5	19.5	16.9	18.0	14.9
	82.5	80.5	83.1	82.0	85.1

(continued)

Zero

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>					
CBRN SCBA devices are not needed in our department	20.9	18.1	20.2	23.0	22.9
We didn't know they were available	15.1	13.7	14.7	15.9	16.3
We don't have adequate technical information to purchase them	19.7	18.8	15.3 <sup>[3,4]</sup>	22.7 <sup>[2]</sup>	25.6 <sup>[2]</sup>
We don't have adequate funding to purchase them	60.3	57.5	63.3	59.1	59.8
<i>Legitimately Skipped Question</i>	4.9	4.3	4.8	3.6 <sup>[4]</sup>	9.2 <sup>[3]</sup>
	18.3	20.3	17.7	18.9	14.9
<b>38a. Does your fire department have Automated External Defibrillators (AEDs)?</b>					
Yes	77.4	78.2	74.4	79.2	80.0
No	22.6	21.8	25.6	20.8	20.0
<b>38a. At your fire department, where do you have AEDs?</b>					
No					
At the fire station(s)	2.8	3.3	3.1	2.4	2.2 <sup>[+]</sup>
On the emergency vehicles (or apparatus)	62.0	59.7	61.6	64.9	59.7
Both at the fire station(s) and on the vehicles (or apparatus)	10.4	12.4	8.1 <sup>[4]</sup>	9.5	15.4 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	24.9	24.6	27.3	23.2	22.7
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>					
After every time they are used	13.9	14.6	14.9	12.0	14.3
Once a month or more	25.4	24.6	22.0	28.8	28.4
Several times a year	20.6	20.4	19.1	19.9	26.5
Once a year	22.3	23.1	24.8	21.1	17.1
Less frequently than once a year	7.4	5.3	7.3	9.4	6.9
Never. Maintenance on our AEDs has not been done.	10.4	12.0	11.9	8.8	6.8

(continued)

Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>					
Some of the time	1.6	2.9	0.7 <sup>[+]</sup>	2.0	1.3 <sup>[+]</sup>
About half the time	4.7	7.6 <sup>[2]</sup>	1.5 <sup>[1,3]</sup>	6.3 <sup>[2]</sup>	4.2
Never	2.6	1.2 <sup>[+]</sup>	3.2	2.9	3.0
Most of the time	20.6	22.1	17.7 <sup>[3]</sup>	24.3 <sup>[2]</sup>	17.0
Always	70.4	66.2 <sup>[2]</sup>	76.9 <sup>[1,3]</sup>	64.6 <sup>[2,4]</sup>	74.6 <sup>[3]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>					
Some of the time	18.0	15.0	17.8	20.3	18.3
About half the time	64.5	68.5	63.6	63.2	63.2
Never	10.3	10.4	9.8	10.4	11.0
Most of the time	5.4	3.5	7.0	4.7	6.0
Always	1.8	2.5	1.9	1.4	1.6 <sup>[+]</sup>

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>42. How would you rate your department's budget in the following areas?</b>					
<b>42a. Equipment</b>					
Not adequate	48.6	40.3 <sup>[2,3,4]</sup>	49.0 <sup>[1]</sup>	53.3 <sup>[1]</sup>	50.8 <sup>[1]</sup>
Adequate	45.7	51.9 <sup>[3]</sup>	45.0	42.2 <sup>[1]</sup>	45.0
More than adequate	5.7	7.9	6.0	4.5	4.2
<b>42b. Training</b>					
Not adequate	39.1	27.2 <sup>[2,3,4]</sup>	39.0 <sup>[1]</sup>	44.9 <sup>[1]</sup>	46.5 <sup>[1]</sup>
Adequate	55.6	64.6 <sup>[2,3,4]</sup>	55.4 <sup>[1]</sup>	51.3 <sup>[1]</sup>	51.2 <sup>[1]</sup>
More than adequate	5.2	8.2 <sup>[3,4]</sup>	5.6 <sup>[4]</sup>	3.9 <sup>[1]</sup>	2.3 <sup>[1,2]</sup>
<b>42c. Personnel</b>					
Not adequate	51.5	44.2 <sup>[2,4]</sup>	54.7 <sup>[1,4]</sup>	47.7 <sup>[4]</sup>	64.5 <sup>[1,2,3]</sup>
Adequate	44.3	51.3 <sup>[2,4]</sup>	40.1 <sup>[1,3]</sup>	48.3 <sup>[2,4]</sup>	33.9 <sup>[1,3]</sup>
More than adequate	4.2	4.5	5.2 <sup>[4]</sup>	4.0	1.6 <sup>[2,+]</sup>
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>					
	26.8	21.6 <sup>[2,3]</sup>	30.2 <sup>[1,4]</sup>	29.0 <sup>[1]</sup>	21.3 <sup>[2]</sup>
One or two times per year	34.3	31.3	34.9	38.2 <sup>[4]</sup>	28.7 <sup>[3]</sup>
Never	33.2	40.9 <sup>[2,3]</sup>	29.3 <sup>[1,4]</sup>	28.5 <sup>[1,4]</sup>	41.4 <sup>[2,3]</sup>
Several times per year					
Once a month or more	5.7	6.2	5.6	4.3	8.6

(continued)

Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>					
By mail	56.0	58.7	52.6	57.1	57.7
On the Internet	24.7	27.7	22.4 <sup>[4]</sup>	21.7 <sup>[4]</sup>	32.7 <sup>[2,3]</sup>
From colleagues in other departments	10.0	12.6 <sup>[3]</sup>	11.8 <sup>[3]</sup>	6.0 <sup>[1,2]</sup>	9.8
At conferences or other meetings	6.9	6.4	7.0	6.2	9.5
<i>Legitimately Skipped Question</i>	26.8	21.6 <sup>[2,3]</sup>	30.0 <sup>[1]</sup>	29.1 <sup>[1]</sup>	21.6
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>					
No	53.3	57.7	49.8 <sup>[4]</sup>	50.7 <sup>[4]</sup>	61.6 <sup>[2,3]</sup>
Yes	20.0	20.5	20.5	20.3	17.3
<i>Legitimately Skipped Question</i>	26.6	21.8 <sup>[2,3]</sup>	29.8 <sup>[1,4]</sup>	29.0 <sup>[1]</sup>	21.0 <sup>[2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>					
Yes	60.7	64.1	58.5	59.2	64.0
No	12.1	14.0	10.9	11.2	13.9
<i>Legitimately Skipped Question</i>	27.3	21.9 <sup>[2,3]</sup>	30.6 <sup>[1]</sup>	29.6 <sup>[1]</sup>	22.1

No

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>					
Regular staff meetings	23.5	24.1 <sup>[4]</sup>	24.1 <sup>[4]</sup>	25.7 <sup>[4]</sup>	15.5 <sup>[1,2,3]</sup>
Training sessions	44.2	44.0	47.1 <sup>[3]</sup>	39.3 <sup>[2]</sup>	48.6
Provide copies of NIOSH reports to firefighters	16.2	17.4	13.0	17.8	18.6
Provide copies of NIOSH report summaries to firefighters	6.2	7.0	5.3	6.0	7.7
Provide summaries prepared by department to firefighters	1.8	1.9	2.3	0.8 <sup>[+]</sup>	2.6
Postings on bulletin boards	38.5	52.2 <sup>[2,3,4]</sup>	32.2 <sup>[1]</sup>	37.4 <sup>[1]</sup>	33.9 <sup>[1]</sup>
Post report on the department website	1.1	1.8	0.9	0.6 <sup>[+]</sup>	2.0
Send message to firefighters by email	5.3	3.0 <sup>[4]</sup>	4.9 <sup>[4]</sup>	3.5 <sup>[4]</sup>	15.3 <sup>[1,2,3]</sup>
Other	1.3	0.7 <sup>[+]</sup>	1.6	1.0	1.9
<i>Legitimately Skipped Question</i>	39.1	36.1	41.1	40.3	35.8
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>					
Yes	34.2	40.8 <sup>[2,3]</sup>	32.4 <sup>[1]</sup>	32.5 <sup>[1]</sup>	31.6
No	38.4	37.4	36.6 <sup>[4]</sup>	37.5	46.9 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	27.4	21.9 <sup>[2,3]</sup>	31.0 <sup>[1,4]</sup>	30.0 <sup>[1]</sup>	21.6 <sup>[2]</sup>

(continued)

Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>					
<b>52a. Recommendations are practical</b>					
Strongly Disagree	0.5	** [+]	0.7 [+]	0.1 [+]	1.6 [+]
Disagree	3.6	4.7	3.0	2.9	4.5
Neither Agree nor Disagree	18.7	15.0 [3,4]	17.0	21.2 [1]	24.1 [1]
Agree	45.6	52.5 [3]	44.6	41.9 [1]	44.7
Strongly Agree	3.7	5.9	3.1	3.3	2.2 [+]
<i>Legitimately Skipped Question</i>	28.0	21.9 [2,3]	31.6 [1]	30.5 [1]	23.0
<b>52b. Recommendations are easy to understand</b>					
Strongly Disagree	0.4	** [+]	0.7 [+]	**	1.4 [+]
Disagree	1.7	1.8	1.8	1.8	1.1 [+]
Neither Agree nor Disagree	19.8	18.4	17.8	21.8	23.1
Agree	45.4	50.3 [3]	44.3	41.6 [1]	48.7
Strongly Agree	4.6	7.7 [2,4]	3.6 [1]	4.3	2.6 [1,+]
<i>Legitimately Skipped Question</i>	28.1	21.9 [2,3]	31.8 [1]	30.6 [1]	23.1
<b>52c. Recommendations are specific and concrete</b>					
Strongly Disagree	0.4	0.2 [+]	0.8 [+]	** [+]	0.8 [+]
Disagree	3.2	3.1	2.6	3.6	4.1
Neither Agree nor Disagree	26.6	27.0	23.8	28.9	27.9
Agree	37.9	42.8 [3]	37.1	33.7 [1]	41.4
Strongly Agree	3.8	5.0	4.2	3.1	2.7 [+]
<i>Legitimately Skipped Question</i>	28.0	22.0 [2,3]	31.6 [1]	30.6 [1]	23.1

(continued)

**Exhibit B-2a. Results from the Fire Department Survey, Percent Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>					
Pocket guide to chemical hazards	57.4	66.8 <sup>[2,3]</sup>	52.3 <sup>[1]</sup>	54.7 <sup>[1]</sup>	61.0
Respirator maintenance program guide	13.8	17.0 <sup>[4]</sup>	13.1	13.9	9.8 <sup>[1]</sup>
CDs of firefighter program materials	28.0	31.2	26.3	27.4	28.2
Alerts	31.7	38.8 <sup>[2,3]</sup>	29.8 <sup>[1]</sup>	27.3 <sup>[1]</sup>	34.9
Hazard IDs	16.6	19.8	14.1	16.8	17.1
Workplace Solutions	12.5	15.2	11.2	10.4	15.9
	0.8	** <sup>[3]</sup>	0.9 <sup>[+]</sup>	1.2 <sup>[1]</sup>	0.7 <sup>[+]</sup>
None. I have not seen any NIOSH materials.	25.2	18.2 <sup>[2,3]</sup>	28.2 <sup>[1]</sup>	28.1 <sup>[1]</sup>	22.4
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>					
Very dissatisfied	1.3	2.6	0.4 <sup>[+]</sup>	1.0	2.4
Dissatisfied	0.2	0.4 <sup>[+]</sup>	** <sup>[+]</sup>	0.3 <sup>[+]</sup>	**
Neither satisfied nor dissatisfied	21.2	20.9	17.9 <sup>[4]</sup>	22.8	26.4 <sup>[2]</sup>
Satisfied	47.1	53.1 <sup>[3]</sup>	48.1	43.4 <sup>[1]</sup>	42.9
Very satisfied	5.2	4.9	5.1	4.8	6.7
<i>Legitimately Skipped Question</i>	24.9	18.1 <sup>[2,3]</sup>	28.4 <sup>[1]</sup>	27.6 <sup>[1]</sup>	21.7
<b>54. Have you ever visited the NIOSH website at www.cdc.gov/niosh/firehome.html?</b>					
	59.4	56.3 <sup>[3]</sup>	57.9	64.3 <sup>[1]</sup>	56.8
Yes, in the last year	34.5	37.7	34.2	31.6	37.0
No Yes, longer than one year ago	6.1	6.0	8.0 <sup>[3]</sup>	4.1 <sup>[2]</sup>	6.2

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+ ] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.



**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>1. Does your department have a Safety Officer?</b>					
Yes	(67.5, 72.9)	(66.9, 78.2)	(68.3, 77.8)	(58.6, 68.3)	(65.4, 80.3)
No	(27.1, 32.5)	(21.8, 33.1)	(22.2, 31.7)	(31.7, 41.4)	(19.7, 34.6)
<b>2. Does your department have a Training Officer?</b>					
Yes	(86.4, 90.3)	(82.0, 90.7)	(89.1, 94.8)	(83.7, 90.7)	(75.1, 88.6)
No	(9.7, 13.6)	(9.3, 18.0)	(5.2, 10.9)	(9.3, 16.3)	(11.4, 24.9)
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>					
Incident Command Systems	(81.3, 85.8)	(82.3, 91.0)	(81.4, 89.2)	(74.4, 82.8)	(75.7, 89.1)
Maintenance of SCBAs	(66.9, 72.3)	(72.1, 82.7)	(61.1, 71.2)	(63.8, 73.1)	(58.4, 74.1)
Motor vehicle safety	(76.3, 81.2)	(79.9, 88.7)	(75.6, 84.1)	(66.0, 75.3)	(76.1, 88.9)
Participation in a personal physical fitness program	(9.6, 12.7)	(6.8, 13.9)	(8.4, 14.1)	(5.6, 10.2)	(16.7, 28.2)
Participation in regular health screenings for cardiovascular disease (CVD)	(14.9, 18.9)	(22.2, 33.6)	(7.1, 12.1)	(12.4, 19.2)	(15.6, 27.5)
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	(37.7, 43.2)	(42.1, 54.5)	(30.9, 40.7)	(29.5, 38.5)	(46.8, 62.9)
Use of Personal Alert Safety System (PASS) devices	(72.7, 77.9)	(78.3, 87.6)	(65.7, 75.5)	(69.9, 78.7)	(66.8, 81.7)
Use of personal protective equipment and protective clothing	(87.1, 90.9)	(91.3, 96.8)	(85.7, 92.4)	(81.1, 88.5)	(81.0, 92.4)
Use of radio communications	(82.5, 86.8)	(87.9, 94.5)	(81.3, 88.9)	(73.5, 82.0)	(79.8, 91.4)
Other	(7.2, 10.5)	(8.5, 17.2)	(4.6, 9.7)	(5.1, 10.0)	(7.5, 17.9)
Does not apply. Our fire department does not use SOPs/SOGs.	(3.8, 6.5)	(0.3, 3.2)	(2.7, 7.6)	(5.5, 11.2)	(3.0, 12.2)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>					
<b>4a. Fighting structure fires</b>					
No Training	(0.6, 2.0)	(0.1, 2.6)	(0.6, 3.9)	(0.2, 2.0)	(1.0, 6.4)
Optional Training	(14.6, 19.1)	(11.2, 20.3)	(9.9, 17.4)	(19.2, 28.0)	(8.1, 20.5)
Required Training	(80.4, 85.0)	(79.8, 88.8)	(81.6, 89.3)	(72.2, 80.9)	(77.8, 90.5)
<b>4b. Driving safety</b>					
No Training	(2.9, 5.3)	(0.3, 3.2)	(1.2, 5.0)	(4.4, 9.7)	(3.4, 13.5)
Optional Training	(16.3, 21.1)	(15.0, 25.5)	(12.5, 20.6)	(19.6, 28.5)	(6.3, 18.0)
Required Training	(75.1, 80.1)	(73.6, 84.2)	(77.1, 85.6)	(65.0, 74.5)	(74.2, 88.2)
<b>4c. Incident Command systems</b>					
No Training	(2.0, 4.1)	(0.4, 3.8)	(1.8, 6.2)	(2.5, 6.9)	(0.4, 5.8)
Optional Training	(24.8, 30.2)	(24.1, 35.9)	(20.4, 30.0)	(26.8, 36.4)	(14.2, 28.6)
Required Training	(67.1, 72.6)	(62.9, 74.7)	(66.6, 76.4)	(59.9, 69.7)	(69.9, 84.5)
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>					
No Training	(5.2, 8.3)	(2.1, 7.6)	(4.8, 10.4)	(3.2, 7.9)	(8.2, 20.5)
Optional Training	(30.8, 36.5)	(27.2, 39.1)	(27.1, 37.2)	(35.3, 45.3)	(17.0, 31.1)
Required Training	(57.3, 63.1)	(56.8, 69.0)	(56.0, 66.5)	(49.9, 60.0)	(56.6, 72.5)
<b>4e. Rapid Intervention Teams (RITs)</b>					
No Training	(25.8, 31.3)	(16.0, 26.4)	(26.1, 36.5)	(30.5, 40.7)	(13.8, 27.6)
Optional Training	(33.3, 39.2)	(46.5, 59.3)	(27.1, 37.5)	(29.4, 39.4)	(15.3, 28.8)
Required Training	(32.8, 38.3)	(21.7, 32.9)	(31.8, 42.1)	(26.3, 35.3)	(50.6, 66.8)

(continued)

Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>4f. Use of personal protective equipment and/or protective clothing</b>					
No Training	(0.9, 2.4)	(0.1, 2.4)	(0.9, 4.2)	(0.6, 3.0)	(0.6, 5.9)
Optional Training	(8.2, 11.8)	(4.3, 10.9)	(6.8, 13.4)	(11.1, 18.5)	(2.2, 10.3)
Required Training	(86.9, 90.7)	(89.1, 95.7)	(84.8, 91.8)	(80.0, 87.7)	(87.6, 96.5)
<b>4g. Use of radio communication devices</b>					
No Training	(1.9, 3.8)	(0.8, 5.0)	(1.3, 5.3)	(2.1, 5.7)	(0.6, 5.9)
Optional Training	(19.0, 23.9)	(16.4, 26.6)	(17.1, 26.1)	(21.9, 30.9)	(6.6, 17.7)
Required Training	(73.6, 78.6)	(71.4, 82.0)	(71.8, 81.0)	(65.5, 74.8)	(80.2, 91.8)
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>					
Our department's Training Officer	(82.6, 86.9)	(76.1, 86.1)	(83.7, 90.9)	(80.7, 88.2)	(75.4, 88.7)
Other officers within our department	(80.4, 85.0)	(83.6, 92.0)	(70.5, 79.8)	(80.2, 87.7)	(82.9, 93.0)
State fire training agency	(74.8, 79.8)	(84.9, 93.0)	(71.7, 80.8)	(70.5, 79.3)	(55.6, 71.2)
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	(18.9, 23.1)	(21.2, 31.8)	(18.6, 26.6)	(11.2, 17.3)	(19.3, 31.2)
Conferences or regional meetings	(48.8, 54.6)	(48.8, 61.3)	(38.3, 48.6)	(50.3, 60.2)	(50.9, 67.1)
Other	(22.7, 27.8)	(24.6, 36.0)	(21.3, 30.5)	(13.9, 21.3)	(27.3, 42.4)
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>					
Roadside incidents/Motor Vehicle Accidents (MVA)	(52.4, 58.2)	(61.2, 72.9)	(43.7, 54.0)	(45.0, 54.9)	(56.5, 71.9)
Scuba diving	(6.2, 9.1)	(5.0, 11.3)	(5.5, 11.1)	(6.7, 12.1)	(1.2, 5.7)
Swift water rescue	(9.6, 13.0)	(9.7, 18.0)	(8.3, 14.3)	(5.9, 10.7)	(11.5, 21.4)
Wildland fire fighting	(44.1, 49.9)	(26.8, 38.4)	(44.6, 55.1)	(33.8, 43.6)	(78.2, 89.9)
HAZMAT	(63.8, 69.4)	(69.3, 80.3)	(58.2, 68.4)	(56.5, 66.3)	(64.4, 79.6)
Other	(28.5, 33.9)	(36.3, 48.7)	(24.8, 34.4)	(21.1, 29.6)	(23.9, 38.5)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>					
Not at all familiar	(6.8, 10.2)	(1.4, 5.9)	(6.4, 12.8)	(7.2, 13.6)	(7.1, 18.7)
Not very familiar	(21.8, 27.0)	(14.6, 24.5)	(19.2, 28.4)	(24.6, 33.8)	(17.5, 32.8)
Somewhat familiar	(55.2, 61.0)	(56.9, 68.9)	(54.5, 64.9)	(49.8, 59.7)	(44.7, 60.9)
Very familiar	(7.8, 10.9)	(11.1, 19.8)	(5.5, 10.3)	(4.4, 8.8)	(7.2, 16.6)
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>					
Not at all familiar	(18.4, 23.3)	(10.2, 19.2)	(15.2, 23.8)	(21.1, 30.0)	(19.0, 34.0)
Not very familiar	(30.8, 36.4)	(26.9, 38.8)	(32.2, 42.4)	(29.5, 38.9)	(17.6, 31.9)
Somewhat familiar	(35.1, 40.7)	(37.7, 50.2)	(32.1, 42.0)	(30.6, 40.0)	(29.5, 44.5)
Very familiar	(6.5, 9.4)	(6.5, 13.5)	(4.8, 9.4)	(3.8, 8.0)	(8.8, 20.0)
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>					
NIOSH mailings	(64.9, 70.5)	(64.9, 76.4)	(62.1, 72.1)	(61.9, 71.4)	(57.3, 73.1)
National conference presentations	(2.8, 4.7)	(1.3, 5.3)	(2.8, 6.5)	(1.5, 4.1)	(3.9, 9.9)
State-level conference presentations	(9.7, 13.5)	(7.6, 15.8)	(8.2, 14.6)	(8.5, 15.0)	(8.8, 20.3)
Other firefighters or departments	(20.5, 25.5)	(23.0, 34.5)	(16.8, 25.4)	(16.3, 24.3)	(19.2, 33.3)
At seminars or other training opportunities (not conferences)	(14.3, 18.6)	(18.3, 28.7)	(10.6, 17.7)	(10.6, 17.4)	(12.8, 24.9)
Trade publications (such as Firehouse and Fire Engineering)	(44.3, 50.1)	(43.3, 55.9)	(41.3, 51.8)	(39.5, 49.3)	(43.4, 59.4)
NIOSH website	(22.0, 26.7)	(23.8, 35.1)	(18.0, 26.3)	(16.8, 24.3)	(25.4, 39.4)
Links from other websites (such as NFPA and Firehouse)	(25.7, 30.9)	(28.9, 40.8)	(22.0, 31.0)	(19.8, 28.0)	(26.1, 41.0)
Media reports—newspaper, television, radio	(12.9, 17.1)	(17.2, 28.0)	(8.7, 15.4)	(10.1, 16.6)	(10.2, 22.4)
Other	(0.7, 1.9)	(0.4, 3.2)	(0.7, 3.3)	(0.2, 1.8)	(0.5, 4.3)
Does not apply. We have not received information about NIOSH recommendations.	(9.3, 13.2)	(2.8, 9.0)	(9.9, 17.5)	(8.5, 15.2)	(10.0, 22.8)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>					
Made changes to training program	(37.3, 43.1)	(40.1, 53.0)	(32.6, 42.7)	(31.4, 41.2)	(37.8, 53.8)
Developed new SOPs/SOGs	(23.8, 29.0)	(25.6, 37.7)	(19.4, 28.0)	(19.5, 27.9)	(25.0, 40.2)
Made changes to SOPs/SOGs	(32.2, 37.7)	(36.5, 49.1)	(26.0, 35.5)	(28.5, 38.0)	(30.0, 45.3)
Justified current budget/staffing	(4.0, 6.3)	(3.7, 9.5)	(1.9, 5.5)	(3.8, 8.4)	(3.8, 10.7)
Made new budget/staffing requests	(4.4, 6.8)	(3.8, 9.8)	(3.6, 7.9)	(2.4, 5.8)	(5.4, 13.7)
Justified grant applications	(13.5, 17.8)	(16.4, 26.8)	(10.7, 17.8)	(10.5, 17.3)	(9.9, 22.0)
Does not apply. We have not used NIOSH recommendations.	(27.3, 32.9)	(21.2, 32.9)	(27.7, 38.0)	(27.1, 36.9)	(18.4, 33.1)
<i>Legitimately Skipped Question</i>	(9.8, 13.9)	(2.9, 9.4)	(10.4, 18.4)	(9.1, 16.2)	(10.3, 23.3)
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>					
Traffic hazards	(26.7, 32.1)	(26.2, 38.3)	(24.8, 34.5)	(21.7, 30.4)	(25.6, 41.1)
Personal protective equipment and clothing	(38.7, 44.5)	(44.5, 57.6)	(32.4, 42.6)	(35.7, 45.7)	(31.3, 47.2)
SCBA	(37.2, 43.0)	(42.4, 55.4)	(29.3, 39.1)	(35.3, 45.2)	(32.9, 49.0)
PASS systems	(29.9, 35.5)	(35.1, 47.9)	(23.6, 33.0)	(27.3, 36.8)	(24.4, 39.8)
Incident Command systems	(29.4, 34.9)	(31.4, 44.0)	(26.1, 35.7)	(25.8, 35.0)	(24.0, 39.2)
Radio communications	(20.7, 25.6)	(19.7, 30.8)	(17.7, 26.2)	(17.7, 26.0)	(20.6, 35.0)
Physical fitness and cardiovascular disease (CVD)	(7.1, 10.2)	(5.3, 12.3)	(5.8, 10.9)	(5.9, 11.3)	(7.5, 16.8)
Building code compliance (e.g., warning against the use of wooden trusses)	(5.6, 8.5)	(6.4, 14.1)	(3.2, 7.5)	(4.6, 9.4)	(4.7, 14.3)
Other	(1.6, 3.4)	(1.0, 4.9)	(1.7, 5.8)	(0.7, 3.2)	(1.1, 4.8)
Does not apply. We have not used NIOSH recommendations for training purposes.	(1.3, 2.9)	(1.5, 6.1)	(0.9, 3.9)	(0.8, 3.7)	(0.1, 3.3)
<i>Legitimately Skipped Question</i>	(38.9, 44.8)	(26.3, 38.7)	(41.1, 51.8)	(38.7, 48.9)	(34.0, 50.6)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>					
No	(76.4, 80.4)	(76.3, 85.9)	(74.8, 82.3)	(80.1, 86.5)	(51.6, 66.6)
Yes, it's required	(5.9, 8.3)	(0.6, 3.9)	(6.4, 11.3)	(2.8, 6.1)	(14.6, 26.0)
Yes, it's optional	(12.8, 16.4)	(12.8, 22.0)	(9.9, 16.1)	(9.7, 15.5)	(15.6, 27.7)
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>					
One time, when they first join the department	(12.7, 16.6)	(13.9, 23.4)	(6.6, 12.3)	(13.9, 21.2)	(11.3, 22.6)
Less frequently than once a year	(5.8, 8.6)	(3.9, 10.2)	(2.0, 5.3)	(8.6, 14.9)	(4.9, 13.0)
One time a year	(15.2, 19.3)	(25.3, 37.1)	(8.6, 14.2)	(10.3, 16.6)	(14.1, 24.9)
More than one time a year	(0.1, 0.7)	(**, **)	(0.1, 0.9)	(0.1, 1.7)	(0.1, 3.1)
Does not apply. Firefighters are not required to receive CVD screenings	(58.3, 63.5)	(38.3, 51.0)	(72.0, 79.9)	(53.1, 62.7)	(48.6, 64.0)
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>					
No	(5.1, 8.0)	(0.3, 4.1)	(2.1, 6.5)	(9.7, 16.7)	(3.9, 12.8)
Yes, they receive training required by the department	(81.7, 86.0)	(89.3, 95.7)	(82.4, 89.8)	(71.2, 79.8)	(73.9, 86.9)
Yes, they receive training required by the state	(23.3, 28.3)	(13.8, 23.8)	(25.5, 35.0)	(18.9, 27.0)	(27.3, 42.1)
Yes, they receive optional training	(11.8, 15.9)	(8.8, 17.0)	(10.2, 17.6)	(11.3, 18.4)	(9.8, 22.5)
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>					
Two or more times a year	(12.2, 16.4)	(10.8, 20.0)	(13.7, 21.8)	(7.1, 13.0)	(10.5, 22.3)
Once every year	(37.5, 43.2)	(31.9, 44.2)	(35.4, 45.8)	(37.9, 47.7)	(31.2, 46.8)
Less frequently than once a year	(22.3, 27.3)	(21.7, 32.8)	(21.1, 30.2)	(18.1, 26.1)	(20.2, 34.0)
Does not apply. Firefighters are not required to receive continuing driver training.	(18.4, 23.2)	(15.9, 25.9)	(13.1, 21.3)	(21.6, 30.6)	(13.3, 27.1)

(continued)

Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>					
Yes	(81.9, 86.3)	(80.4, 89.5)	(83.2, 90.5)	(72.0, 80.7)	(86.5, 95.4)
No	(13.7, 18.1)	(10.5, 19.6)	(9.5, 16.8)	(19.3, 28.0)	(4.6, 13.5)
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>					
Strongly disagree	(5.5, 8.5)	(3.2, 9.0)	(4.9, 10.4)	(6.6, 12.4)	(1.5, 7.4)
Disagree	(15.8, 20.4)	(15.6, 25.7)	(13.0, 20.9)	(16.5, 24.7)	(7.9, 19.1)
Neither agree nor disagree	(28.2, 33.7)	(25.8, 37.7)	(25.4, 35.2)	(27.0, 36.4)	(23.2, 38.5)
Agree	(29.5, 34.9)	(27.0, 38.9)	(29.1, 39.1)	(24.0, 32.9)	(28.6, 43.4)
Strongly agree	(10.4, 14.2)	(7.2, 14.7)	(9.3, 16.0)	(8.2, 14.3)	(12.5, 25.5)
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>					
Never	(4.2, 6.9)	(2.5, 7.9)	(1.7, 5.9)	(6.2, 12.1)	(2.3, 9.7)
Some of the time	(20.3, 25.3)	(21.9, 33.3)	(17.9, 26.8)	(23.5, 32.5)	(2.2, 10.2)
About half the time	(14.8, 19.4)	(15.1, 25.1)	(12.7, 20.6)	(14.5, 22.6)	(7.0, 18.0)
Most of the time	(35.6, 41.3)	(30.8, 42.9)	(36.5, 46.9)	(28.5, 37.8)	(38.0, 54.1)
Always	(14.6, 18.7)	(8.4, 16.8)	(13.5, 21.0)	(9.6, 15.7)	(26.3, 40.8)
<b>21. How often is Incident Command established when responding to structure fires?</b>					
Never	(1.5, 3.5)	(0.5, 3.8)	(1.5, 5.9)	(0.7, 3.4)	(1.5, 10.0)
Rarely	(5.4, 8.5)	(1.7, 6.1)	(4.4, 10.1)	(7.3, 13.5)	(2.5, 11.4)
About half the time	(5.3, 8.4)	(2.3, 7.9)	(4.0, 9.3)	(6.1, 12.0)	(3.9, 14.5)
Most of the time	(25.0, 30.4)	(19.5, 30.3)	(24.4, 34.1)	(29.7, 39.4)	(8.7, 19.7)
Always	(53.7, 59.4)	(60.4, 72.2)	(49.8, 60.4)	(40.7, 50.4)	(61.3, 77.0)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>					
Fires are not usually big enough to require an Incident Commander	(20.1, 25.1)	(11.8, 21.1)	(20.2, 29.6)	(23.2, 32.3)	(10.9, 24.4)
Not enough firefighters available at the scene of the fire	(18.8, 23.7)	(9.9, 18.5)	(17.5, 26.5)	(22.8, 31.9)	(12.9, 26.9)
Other	(5.0, 7.8)	(4.7, 11.2)	(2.8, 7.2)	(5.9, 11.7)	(1.5, 9.5)
Does not apply. My department always assigns an Incident Commander for structure fires.	(2.7, 4.9)	(2.4, 7.7)	(1.6, 5.3)	(2.3, 6.7)	(1.4, 8.3)
<i>Legitimately Skipped Question</i>	(53.7, 59.5)	(60.4, 72.2)	(49.6, 60.1)	(40.9, 50.7)	(61.6, 77.4)
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>					
Conduct an initial assessment before the other firefighters begin entering the building	(89.1, 92.6)	(89.8, 96.2)	(85.8, 92.5)	(88.6, 94.2)	(80.6, 92.4)
Develop and coordinate the fire attack strategy	(91.4, 94.5)	(90.8, 96.9)	(89.2, 94.8)	(90.2, 95.5)	(84.6, 95.4)
Develop and initiate a risk management plan	(49.4, 55.3)	(52.5, 65.0)	(47.4, 58.1)	(42.0, 52.1)	(44.0, 60.1)
Document all assessments, plans and events related to the fire	(36.0, 41.7)	(36.0, 48.5)	(29.8, 39.8)	(31.6, 41.3)	(41.7, 57.8)
Ensure that at least four (4) firefighters are on the scene before entering the building	(65.7, 71.3)	(56.9, 69.1)	(60.8, 70.9)	(69.5, 78.4)	(62.8, 78.0)
Establish a collapse zone around the building	(46.1, 52.0)	(49.2, 61.8)	(39.9, 50.4)	(43.4, 53.4)	(41.8, 57.9)
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	(45.7, 51.3)	(56.6, 68.7)	(36.3, 46.5)	(36.1, 45.6)	(52.2, 68.4)
Identify and implement a communication strategy	(61.9, 67.5)	(60.7, 72.5)	(57.3, 67.5)	(60.2, 69.8)	(57.6, 73.3)
Monitor location of all firefighters at the scene	(73.6, 78.7)	(56.6, 68.9)	(78.4, 86.5)	(73.8, 82.2)	(69.7, 83.7)
Other	(7.6, 10.9)	(7.1, 14.7)	(4.5, 9.7)	(6.2, 11.8)	(9.4, 21.7)

(continued)



Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>					
Never	(11.4, 15.5)	(5.3, 11.9)	(9.4, 16.8)	(14.9, 22.8)	(7.2, 19.1)
Some of the time	(24.0, 29.2)	(16.4, 26.6)	(23.2, 32.7)	(24.6, 33.7)	(20.5, 35.0)
About half the time	(6.6, 9.9)	(3.8, 10.4)	(6.3, 12.2)	(6.4, 12.4)	(4.2, 12.2)
Most of the time	(27.2, 32.5)	(27.1, 38.9)	(25.1, 34.7)	(22.5, 31.3)	(25.4, 40.1)
Always	(19.9, 24.9)	(26.2, 38.2)	(17.1, 25.8)	(13.6, 20.9)	(15.5, 28.9)
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>					
Fires are not big enough to require an Incident Safety Officer	(29.5, 35.1)	(18.7, 29.5)	(28.8, 38.9)	(29.1, 38.7)	(31.8, 47.7)
Not enough firefighters are available at the scene of the fire	(48.7, 54.6)	(36.6, 49.1)	(45.6, 56.2)	(53.7, 63.6)	(44.1, 60.1)
Other	(11.3, 15.1)	(10.0, 18.6)	(10.5, 17.5)	(6.9, 12.4)	(14.2, 26.4)
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	(1.4, 3.0)	(1.5, 6.2)	(1.1, 4.2)	(0.6, 3.0)	(0.6, 5.0)
<i>Legitimately Skipped Question</i>	(20.3, 25.2)	(27.4, 39.7)	(17.1, 25.8)	(13.9, 21.3)	(15.6, 29.1)
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>					
Never	(26.7, 32.1)	(8.5, 16.8)	(30.7, 41.0)	(34.3, 44.1)	(13.5, 27.3)
Some of the time	(19.5, 24.3)	(16.6, 27.0)	(16.8, 25.3)	(19.5, 28.1)	(15.3, 29.0)
About half the time	(5.2, 8.0)	(3.0, 8.6)	(4.5, 9.9)	(5.3, 10.6)	(2.9, 10.2)
Most of the time	(20.2, 25.0)	(19.1, 29.8)	(18.1, 26.7)	(15.1, 22.6)	(23.6, 38.5)
Always	(17.8, 22.1)	(31.6, 43.7)	(11.6, 18.5)	(8.8, 14.4)	(17.6, 29.9)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>					
When the building has more than one story/floor	(7.8, 11.2)	(6.3, 13.5)	(7.2, 13.6)	(6.6, 12.3)	(5.0, 13.6)
When there are enough firefighters on and at the scene of the fire	(29.6, 35.1)	(18.5, 29.1)	(31.1, 41.2)	(28.3, 37.6)	(29.3, 44.9)
Whenever firefighters enter a burning building	(23.9, 29.1)	(23.3, 34.6)	(20.7, 29.9)	(18.5, 26.7)	(28.4, 44.2)
Other	(3.8, 6.3)	(5.5, 12.6)	(1.4, 4.8)	(3.4, 7.6)	(2.3, 9.0)
<i>Legitimately Skipped Question</i>	(46.4, 52.2)	(43.5, 56.0)	(45.3, 55.8)	(45.6, 55.5)	(34.5, 50.4)
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>					
The structure fire may not be large enough to need an RIT/RIC	(32.1, 37.8)	(22.3, 33.4)	(29.1, 39.4)	(36.6, 46.7)	(27.3, 43.0)
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	(7.2, 10.8)	(2.8, 8.3)	(7.1, 13.9)	(8.6, 15.5)	(2.9, 13.1)
We don't have enough firefighters available at the scene of the fire	(50.6, 56.5)	(27.3, 39.2)	(54.1, 64.5)	(58.5, 68.2)	(42.8, 58.9)
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	(18.3, 23.2)	(12.7, 22.4)	(13.4, 21.7)	(23.6, 33.0)	(13.3, 27.1)
We have never established an RIT/RIC	(15.5, 20.1)	(7.7, 16.1)	(14.9, 23.5)	(21.4, 30.5)	(3.8, 13.3)
We use other fire departments in the area for RITs/RICs	(26.6, 32.0)	(37.2, 49.6)	(18.4, 27.5)	(26.7, 36.2)	(12.0, 25.2)
We use other safety practices and so we don't need them	(3.1, 5.7)	(0.9, 4.9)	(3.6, 9.2)	(2.8, 7.6)	(0.7, 8.7)
Other	(3.1, 5.4)	(1.3, 5.6)	(1.7, 5.4)	(2.2, 6.3)	(6.0, 15.5)
<i>Legitimately Skipped Question</i>	(18.1, 22.6)	(32.1, 44.2)	(11.9, 18.8)	(9.1, 14.9)	(17.5, 29.9)
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>					
Yes	(76.2, 81.1)	(81.7, 90.5)	(67.5, 77.3)	(73.5, 82.1)	(74.9, 88.5)
No	(18.9, 23.8)	(9.5, 18.3)	(22.7, 32.5)	(17.9, 26.5)	(11.5, 25.1)

(continued)

## Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>					
Never	(4.9, 8.0)	(0.1, 2.9)	(6.7, 13.5)	(3.2, 8.0)	(5.9, 17.8)
Some of the time	(2.9, 5.3)	(0.7, 5.1)	(2.2, 6.9)	(4.5, 9.8)	(0.1, 4.7)
About half the time	(1.2, 2.8)	(0.2, 2.8)	(0.8, 4.2)	(1.6, 5.4)	(0.1, 5.0)
Most of the time	(10.9, 15.0)	(4.7, 11.1)	(10.5, 18.0)	(13.7, 21.5)	(5.6, 15.5)
Always	(72.5, 77.6)	(85.2, 92.8)	(65.6, 75.5)	(63.1, 72.6)	(70.6, 85.0)
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>					
They don't have a PASS device to use	(11.2, 15.4)	(3.7, 10.1)	(13.5, 22.0)	(10.6, 18.0)	(7.3, 19.8)
Situation doesn't require them	(7.9, 11.4)	(2.1, 7.0)	(7.1, 13.8)	(11.2, 18.5)	(3.2, 11.6)
Firefighters think the devices do not always work reliably	(0.1, 1.0)	(0.1, 2.0)	(**, **)	(0.2, 2.9)	(**, **)
Firefighters don't think they need them	(3.5, 5.9)	(2.3, 7.3)	(2.5, 6.7)	(3.8, 8.6)	(1.7, 8.5)
Devices go off while firefighters are resting	(2.7, 4.9)	(1.1, 5.0)	(1.3, 4.5)	(4.6, 9.9)	(0.6, 5.4)
<i>Legitimately Skipped Question</i>	(72.9, 78.0)	(85.1, 92.8)	(65.8, 75.7)	(63.8, 73.2)	(71.3, 85.6)
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>					
Yes	(98.4, 99.6)	(97.5, 99.9)	(99.8, 100.0)	(98.8, 100.0)	(89.4, 98.1)
No	(0.4, 1.6)	(0.1, 2.5)	(**, **)	(0.0, 1.2)	(1.9, 10.6)
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>					
Yes	(46.7, 52.7)	(37.5, 50.5)	(51.5, 62.0)	(46.3, 56.4)	(28.6, 45.3)
No	(46.5, 52.5)	(49.0, 61.9)	(38.0, 48.5)	(43.4, 53.5)	(50.1, 66.9)
<i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.1, 2.7)	(**, **)	(0.0, 1.3)	(1.9, 10.9)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>					
Didn't know it was recommended	(3.5, 6.3)	(1.2, 6.9)	(4.1, 9.6)	(2.9, 7.7)	(1.3, 10.0)
Firefighters don't like using the equipment	(0.1, 0.9)	(**, **)	(**, **)	(0.1, 2.3)	(0.1, 5.3)
Have never needed them (e.g., we don't do interior attacks)	(0.3, 1.5)	(0.1, 3.0)	(0.3, 3.4)	(0.1, 1.5)	(0.1, 5.3)
They cost too much, there is not enough money in the budget	(29.0, 34.7)	(20.0, 31.6)	(32.7, 43.2)	(27.9, 37.6)	(17.5, 32.9)
We don't have enough equipment for all of our firefighters	(22.0, 27.3)	(11.5, 21.0)	(21.7, 31.3)	(25.4, 35.1)	(15.5, 30.4)
Shared systems work fine for our needs	(20.9, 26.2)	(15.3, 26.1)	(21.7, 31.5)	(20.8, 29.7)	(11.6, 25.1)
Other	(3.8, 6.5)	(4.6, 11.3)	(3.0, 7.5)	(2.7, 6.8)	(1.1, 9.7)
<i>Legitimately Skipped Question</i>	(47.4, 53.3)	(49.7, 62.7)	(38.1, 48.6)	(43.6, 53.7)	(54.6, 71.2)
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>					
Never	(0.6, 2.2)	(**, **)	(0.6, 4.2)	(0.2, 2.3)	(0.8, 9.3)
Some of the time	(3.6, 6.2)	(0.2, 3.4)	(3.9, 9.4)	(4.2, 9.6)	(1.6, 8.7)
About half the time	(1.8, 3.9)	(**, **)	(1.3, 5.0)	(3.4, 8.5)	(0.2, 3.6)
Most of the time	(22.0, 27.2)	(17.4, 28.3)	(21.1, 30.7)	(22.9, 32.1)	(12.6, 26.4)
Always	(63.3, 68.9)	(70.2, 81.3)	(58.7, 69.1)	(54.8, 64.8)	(60.7, 76.8)
<i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.1, 2.7)	(**, **)	(0.0, 1.3)	(1.9, 10.8)

(continued)

Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>					
Situation doesn't require them	(23.3, 28.6)	(13.4, 23.6)	(23.2, 33.2)	(27.2, 36.9)	(13.8, 27.9)
Firefighters do not trust that the SCBAs will work reliably	(**, **)	(**, **)	(**, **)	(0.0, 2.0)	(**, **)
Firefighters don't think they need them	(8.6, 12.3)	(5.4, 12.8)	(8.3, 15.4)	(9.2, 16.0)	(3.6, 11.6)
Firefighters don't like sharing facepieces with others	(0.5, 1.8)	(**, **)	(0.3, 2.9)	(0.6, 3.4)	(0.4, 5.7)
Firefighters are concerned that the SCBA may be or become contaminated	(**, **)	(**, **)	(0.0, 1.6)	(**, **)	(**, **)
Wearing SCBAs makes it more difficult to work	(4.6, 7.5)	(1.9, 6.8)	(4.2, 9.7)	(5.6, 11.2)	(1.7, 7.8)
Firefighters don't have SCBAs to use	(2.8, 5.4)	(0.9, 5.1)	(1.8, 6.2)	(3.7, 8.9)	(1.4, 10.2)
<i>Legitimately Skipped Question</i>	(64.9, 70.5)	(71.6, 82.6)	(59.5, 69.9)	(56.1, 66.1)	(65.7, 81.0)
<b>36. How often is routine maintenance performed on your SCBAs?</b>					
After every time they are used	(39.7, 46.3)	(35.6, 50.0)	(38.1, 49.6)	(40.5, 51.9)	(26.3, 43.4)
Once a month or more	(16.5, 21.7)	(22.2, 35.5)	(13.8, 22.6)	(12.7, 21.3)	(7.3, 19.7)
Several times a year	(12.8, 17.5)	(7.9, 17.2)	(10.7, 19.0)	(13.4, 22.0)	(11.0, 24.7)
Once a year	(14.1, 19.1)	(10.6, 21.1)	(14.9, 24.0)	(9.2, 16.6)	(13.9, 29.2)
Less than once a year	(3.1, 5.9)	(0.3, 4.8)	(2.3, 7.3)	(3.2, 8.8)	(3.4, 13.3)
Never. Maintenance has not been done on our SCBAs.	(0.8, 2.5)	(**, **)	(0.2, 2.7)	(0.8, 4.2)	(1.3, 11.0)
Does not apply. My department does not have SCBAs.	(**, **)	(**, **)	(**, **)	(**, **)	(**, **)
<i>Legitimately Skipped Question</i>	(0.5, 2.0)	(0.2, 3.4)	(**, **)	(0.1, 1.6)	(2.3, 12.7)
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>					
Greater than zero	(15.5, 19.8)	(14.9, 25.0)	(13.4, 21.0)	(14.6, 21.9)	(10.5, 20.6)
Zero	(80.2, 84.5)	(75.0, 85.1)	(79.0, 86.6)	(78.1, 85.4)	(79.4, 89.5)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>					
CBRN SCBA devices are not needed in our department	(18.5, 23.6)	(13.5, 23.8)	(16.0, 25.2)	(18.8, 27.8)	(16.3, 31.1)
We didn't know they were available	(12.9, 17.5)	(9.6, 19.2)	(11.1, 19.2)	(12.3, 20.2)	(10.7, 24.1)
We don't have adequate technical information to purchase them	(17.3, 22.3)	(14.0, 24.7)	(11.6, 19.8)	(18.5, 27.4)	(18.4, 34.4)
We don't have adequate funding to purchase them	(57.2, 63.2)	(50.8, 64.0)	(57.8, 68.5)	(53.9, 64.1)	(51.4, 67.6)
Other	(3.7, 6.4)	(2.4, 7.7)	(2.9, 7.8)	(2.2, 5.9)	(5.3, 15.7)
<i>Legitimately Skipped Question</i>	(16.2, 20.6)	(15.5, 26.0)	(14.1, 22.0)	(15.3, 23.0)	(10.5, 20.6)
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>					
Yes	(74.8, 79.9)	(72.3, 83.1)	(69.4, 78.9)	(74.7, 83.0)	(72.2, 86.1)
No	(20.1, 25.2)	(16.9, 27.7)	(21.1, 30.6)	(17.0, 25.3)	(13.9, 27.8)
<b>38a. At your fire department, where do you have AEDs?</b>					
At the fire station(s)	(1.9, 4.1)	(1.5, 7.0)	(1.6, 5.8)	(1.1, 4.9)	(0.8, 6.2)
On the emergency vehicles (or apparatus)	(58.9, 64.9)	(52.9, 66.2)	(56.1, 66.8)	(59.8, 69.8)	(50.9, 67.8)
Both at the fire station(s) and on the vehicles (or apparatus)	(8.7, 12.3)	(8.7, 17.4)	(5.5, 11.7)	(6.9, 12.9)	(10.6, 21.8)
<i>Legitimately Skipped Question</i>	(22.2, 27.7)	(19.1, 31.0)	(22.6, 32.5)	(19.0, 28.0)	(15.9, 31.4)
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>					
After every time they are used	(11.7, 16.4)	(10.2, 20.4)	(11.0, 19.7)	(8.7, 16.4)	(9.4, 21.1)
Once a month or more	(22.6, 28.5)	(18.9, 31.4)	(17.4, 27.5)	(23.7, 34.4)	(20.9, 37.4)
Several times a year	(18.0, 23.4)	(15.1, 26.9)	(14.9, 24.0)	(15.5, 25.1)	(19.0, 35.7)
Once a year	(19.6, 25.3)	(17.5, 29.8)	(20.0, 30.3)	(16.8, 26.2)	(10.9, 25.9)
Less frequently than once a year	(5.8, 9.5)	(2.9, 9.5)	(4.7, 11.3)	(6.4, 13.5)	(3.1, 14.6)
Never. Maintenance on our AEDs has not been done.	(8.4, 12.8)	(7.8, 17.9)	(8.3, 16.8)	(6.0, 12.8)	(3.0, 14.8)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>					
Never	(1.0, 2.6)	(1.4, 5.9)	(0.2, 2.6)	(0.9, 4.2)	(0.3, 5.1)
Some of the time	(3.6, 6.1)	(4.8, 11.7)	(0.6, 3.6)	(4.3, 9.2)	(1.7, 9.9)
About half the time	(1.8, 3.8)	(0.4, 3.6)	(1.7, 5.9)	(1.6, 5.2)	(1.1, 7.6)
Most of the time	(18.3, 23.1)	(17.3, 27.9)	(14.0, 22.1)	(20.1, 28.9)	(11.8, 23.8)
Always	(67.7, 73.0)	(60.0, 71.9)	(72.1, 81.1)	(59.6, 69.3)	(66.9, 81.0)
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>					
Never	(15.9, 20.4)	(11.1, 20.1)	(14.2, 22.2)	(16.5, 24.7)	(12.7, 25.7)
Some of the time	(61.6, 67.3)	(62.3, 74.1)	(58.3, 68.5)	(58.3, 67.9)	(55.0, 70.7)
About half the time	(8.6, 12.2)	(7.1, 15.1)	(7.0, 13.5)	(7.7, 14.0)	(7.0, 16.9)
Most of the time	(4.2, 6.9)	(1.9, 6.5)	(4.6, 10.3)	(3.0, 7.3)	(2.9, 11.9)
Always	(1.1, 2.9)	(1.1, 5.9)	(0.8, 4.2)	(0.6, 3.3)	(0.4, 5.6)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>42. How would you rate your department's budget in the following areas?</b>					
<b>42a. Equipment</b>					
Not adequate	(45.7, 51.6)	(34.2, 46.6)	(43.8, 54.3)	(48.3, 58.2)	(42.8, 58.8)
Adequate	(42.8, 48.6)	(45.5, 58.2)	(39.8, 50.3)	(37.4, 47.2)	(37.1, 53.1)
More than adequate	(4.5, 7.2)	(5.0, 12.2)	(4.0, 8.9)	(2.9, 7.0)	(2.3, 7.5)
<b>42b. Training</b>					
Not adequate	(36.3, 42.0)	(22.1, 32.9)	(34.0, 44.3)	(39.9, 49.9)	(38.5, 54.7)
Adequate	(52.7, 58.6)	(58.4, 70.4)	(50.0, 60.6)	(46.2, 56.2)	(43.1, 59.3)
More than adequate	(4.0, 6.8)	(5.1, 12.9)	(3.6, 8.6)	(2.4, 6.2)	(0.9, 5.4)
<b>42c. Personnel</b>					
Not adequate	(48.5, 54.5)	(37.8, 50.8)	(49.2, 60.1)	(42.7, 52.8)	(56.3, 71.9)
Adequate	(41.3, 47.3)	(44.6, 57.8)	(34.8, 45.5)	(43.3, 53.4)	(26.6, 42.1)
More than adequate	(3.1, 5.7)	(2.3, 8.8)	(3.2, 8.4)	(2.4, 6.5)	(0.6, 4.3)
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>					
Never	(24.2, 29.5)	(16.8, 27.4)	(25.5, 35.4)	(24.6, 33.8)	(15.1, 29.3)
One or two times per year	(31.6, 37.2)	(25.8, 37.4)	(30.0, 40.1)	(33.5, 43.2)	(22.3, 36.1)
Several times per year	(30.5, 35.9)	(34.8, 47.3)	(24.9, 34.2)	(24.3, 33.0)	(33.8, 49.4)
Once a month or more	(4.5, 7.2)	(3.7, 10.1)	(3.7, 8.5)	(2.7, 6.6)	(4.8, 15.0)

(continued)



Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>					
By mail	(53.1, 58.9)	(52.4, 64.8)	(47.3, 57.9)	(52.1, 62.0)	(49.5, 65.5)
On the Internet	(22.4, 27.1)	(22.5, 33.6)	(18.5, 26.8)	(18.0, 25.9)	(26.0, 40.2)
From colleagues in other departments	(8.3, 11.8)	(9.0, 17.4)	(8.7, 15.7)	(4.1, 8.8)	(6.3, 14.7)
At conferences or other meetings	(5.7, 8.5)	(4.1, 10.1)	(4.8, 10.1)	(4.3, 8.8)	(6.2, 14.2)
<i>Legitimately Skipped Question</i>	(24.2, 29.5)	(16.7, 27.4)	(25.3, 35.2)	(24.7, 33.9)	(15.3, 29.6)
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>					
Yes	(50.4, 56.2)	(51.3, 63.9)	(44.6, 55.0)	(45.7, 55.6)	(53.5, 69.2)
No	(17.8, 22.5)	(15.9, 26.0)	(16.4, 25.2)	(16.5, 24.7)	(12.2, 24.0)
<i>Legitimately Skipped Question</i>	(24.1, 29.4)	(16.9, 27.6)	(25.1, 34.9)	(24.6, 33.8)	(14.8, 28.9)
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>					
Yes	(57.7, 63.5)	(57.7, 70.0)	(53.1, 63.7)	(54.2, 64.1)	(55.5, 71.6)
No	(10.2, 14.1)	(10.2, 19.0)	(8.0, 14.7)	(8.4, 14.8)	(9.1, 20.7)
<i>Legitimately Skipped Question</i>	(24.7, 30.0)	(17.0, 27.8)	(25.8, 35.9)	(25.1, 34.5)	(15.7, 30.3)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>					
Regular staff meetings	(21.1, 26.1)	(19.0, 30.1)	(19.8, 28.9)	(21.6, 30.4)	(10.4, 22.5)
Training sessions	(41.3, 47.2)	(37.8, 50.5)	(41.9, 52.4)	(34.5, 44.3)	(40.5, 56.6)
Provide copies of NIOSH reports to firefighters	(14.2, 18.3)	(13.1, 22.8)	(10.1, 16.7)	(14.5, 21.7)	(13.3, 25.2)
Provide copies of NIOSH report summaries to firefighters	(5.0, 7.7)	(4.4, 11.0)	(3.4, 8.0)	(4.2, 8.7)	(4.6, 12.6)
Provide summaries prepared by department to firefighters	(1.2, 2.7)	(0.8, 4.4)	(1.2, 4.4)	(0.3, 2.2)	(1.0, 6.4)
Postings on bulletin boards	(35.6, 41.3)	(45.7, 58.5)	(27.5, 37.2)	(32.7, 42.3)	(26.8, 41.8)
Post report on the department website	(0.7, 1.8)	(0.7, 4.3)	(0.4, 2.3)	(0.2, 1.8)	(0.9, 4.3)
Send message to firefighters by email	(4.3, 6.5)	(1.5, 5.9)	(3.3, 7.1)	(2.2, 5.4)	(11.1, 20.8)
Other	(0.8, 2.0)	(0.2, 2.5)	(0.7, 3.5)	(0.4, 2.7)	(0.9, 3.8)
<i>Legitimately Skipped Question</i>	(36.2, 42.0)	(30.1, 42.5)	(36.0, 46.4)	(35.5, 45.4)	(28.3, 44.2)
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>					
Yes	(31.6, 36.9)	(34.8, 47.1)	(27.8, 37.4)	(28.1, 37.2)	(25.0, 39.0)
No	(35.5, 41.3)	(31.3, 43.8)	(31.5, 41.9)	(32.7, 42.6)	(38.8, 55.1)
<i>Legitimately Skipped Question</i>	(24.8, 30.2)	(16.9, 27.7)	(26.2, 36.3)	(25.5, 35.0)	(15.3, 29.6)

(continued)

## Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>					
<b>52a. Recommendations are practical</b>					
Strongly Disagree	(0.2, 1.1)	(**, **)	(0.2, 2.8)	(0.0, 0.6)	(0.6, 4.3)
Disagree	(2.6, 4.8)	(2.6, 8.2)	(1.6, 5.5)	(1.7, 5.1)	(2.3, 8.8)
Neither Agree nor Disagree	(16.5, 21.2)	(11.0, 20.0)	(13.2, 21.6)	(17.3, 25.7)	(17.8, 31.7)
Agree	(42.7, 48.6)	(46.1, 58.8)	(39.4, 50.0)	(37.0, 47.0)	(36.7, 53.0)
Strongly Agree	(2.7, 5.0)	(3.4, 9.9)	(1.8, 5.4)	(1.9, 5.6)	(0.5, 8.7)
<i>Legitimately Skipped Question</i>	(25.3, 30.8)	(17.0, 27.7)	(26.7, 36.9)	(25.9, 35.5)	(16.3, 31.3)
<b>52b. Recommendations are easy to understand</b>					
Strongly Disagree	(0.2, 1.0)	(**, **)	(0.2, 2.8)	(**, **)	(0.5, 4.1)
Disagree	(1.1, 2.6)	(0.7, 4.4)	(0.8, 3.7)	(0.9, 3.9)	(0.3, 4.2)
Neither Agree nor Disagree	(17.5, 22.3)	(14.0, 23.7)	(13.9, 22.5)	(17.8, 26.3)	(17.0, 30.5)
Agree	(42.4, 48.4)	(43.9, 56.6)	(39.0, 49.7)	(36.7, 46.6)	(40.5, 57.0)
Strongly Agree	(3.5, 6.1)	(4.8, 12.0)	(2.1, 6.0)	(2.6, 6.9)	(0.8, 8.5)
<i>Legitimately Skipped Question</i>	(25.4, 30.9)	(17.0, 27.7)	(26.9, 37.2)	(26.0, 35.6)	(16.4, 31.5)
<b>52c. Recommendations are specific and concrete</b>					
Strongly Disagree	(0.2, 1.0)	(0.0, 0.8)	(0.2, 2.7)	(**, **)	(0.3, 2.7)
Disagree	(2.3, 4.4)	(1.5, 6.2)	(1.4, 4.9)	(2.1, 5.9)	(2.0, 8.1)
Neither Agree nor Disagree	(24.0, 29.4)	(21.8, 33.0)	(19.5, 28.8)	(24.5, 33.8)	(21.2, 35.7)
Agree	(35.0, 40.8)	(36.6, 49.2)	(32.1, 42.3)	(29.1, 38.7)	(33.5, 49.7)
Strongly Agree	(2.8, 5.2)	(2.8, 8.7)	(2.6, 6.7)	(1.7, 5.4)	(0.8, 8.7)
<i>Legitimately Skipped Question</i>	(25.4, 30.8)	(17.0, 27.8)	(26.7, 36.9)	(26.0, 35.6)	(16.4, 31.5)

(continued)

**Exhibit B-2b. Results from the Fire Department Survey, Confidence Interval Estimates by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>					
Pocket guide to chemical hazards	(54.4, 60.4)	(60.4, 72.7)	(46.9, 57.7)	(49.5, 59.7)	(52.6, 68.8)
Respirator maintenance program guide	(11.9, 15.9)	(12.8, 22.2)	(9.9, 17.0)	(10.8, 17.8)	(6.4, 14.7)
CDs of firefighter program materials	(25.4, 30.7)	(25.6, 37.5)	(21.9, 31.3)	(23.0, 32.2)	(21.4, 36.0)
Alerts	(29.1, 34.5)	(32.7, 45.2)	(25.3, 34.7)	(23.0, 31.9)	(27.9, 42.6)
Hazard IDs	(14.5, 19.0)	(15.1, 25.5)	(10.7, 18.3)	(13.4, 21.0)	(11.9, 23.9)
Workplace Solutions	(10.7, 14.6)	(11.1, 20.5)	(8.3, 15.1)	(7.8, 13.8)	(11.0, 22.3)
Other	(0.4, 1.4)	(**, **)	(0.3, 2.5)	(0.5, 3.0)	(0.2, 3.1)
None. I have not seen any NIOSH materials.	(22.6, 27.9)	(13.7, 23.9)	(23.5, 33.5)	(23.6, 33.1)	(16.0, 30.4)
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>					
Very dissatisfied	(0.8, 2.2)	(1.1, 6.1)	(0.1, 1.2)	(0.4, 2.6)	(1.0, 5.8)
Dissatisfied	(0.0, 0.7)	(0.1, 3.0)	(**, **)	(0.0, 2.0)	(**, **)
Neither satisfied nor dissatisfied	(18.8, 23.8)	(16.1, 26.6)	(14.1, 22.6)	(18.8, 27.4)	(19.8, 34.1)
Satisfied	(44.1, 50.1)	(46.6, 59.5)	(42.7, 53.5)	(38.4, 48.6)	(35.1, 51.1)
Very satisfied	(4.0, 6.7)	(2.8, 8.4)	(3.2, 8.1)	(3.1, 7.4)	(3.6, 12.1)
<i>Legitimately Skipped Question</i>	(22.4, 27.7)	(13.6, 23.7)	(23.7, 33.7)	(23.1, 32.5)	(15.4, 29.6)
<b>54. Have you ever visited the NIOSH website at www.cdc.gov/niosh/firehome.html?</b>					
No	(56.5, 62.2)	(50.0, 62.4)	(52.6, 63.0)	(59.5, 68.9)	(48.9, 64.4)
Yes, in the last year	(31.9, 37.3)	(31.8, 43.9)	(29.4, 39.3)	(27.2, 36.3)	(29.9, 44.8)
Yes, longer than one year ago	(4.9, 7.6)	(3.7, 9.6)	(5.6, 11.2)	(2.6, 6.4)	(3.5, 10.7)

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>1. Does your department have a Safety Officer?</b>	1,587	325	514	515	233
	1,587	325	514	515	233
<b>2. Does your department have a Training Officer?</b>					
Yes					
No	1,600	330	517	519	234
	1,600	330	517	519	234
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>					
Yes					
No					
Incident Command Systems	1,600	330	521	515	234
Maintenance of SCBAs	1,600	330	521	515	234
Motor vehicle safety	1,600	330	521	515	234
Participation in a personal physical fitness program	1,600	330	521	515	234
Participation in regular health screenings for cardiovascular disease (CVD)	1,600	330	521	515	234
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	1,600	330	521	515	234
Use of Personal Alert Safety System (PASS) devices	1,600	330	521	515	234
Use of personal protective equipment and protective clothing	1,600	330	521	515	234
Use of radio communications	1,600	330	521	515	234
	1,600	330	521	515	234
Does not apply. Our fire department does not use SOPs/SOGs.	1,600	330	521	515	234
Other					

(continued)

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>					
<b>4a. Fighting structure fires</b>					
No Training	1,607	333	520	520	234
Optional Training	1,607	333	520	520	234
Required Training	1,607	333	520	520	234
<b>4b. Driving safety</b>					
No Training	1,598	332	521	512	233
Optional Training	1,598	332	521	512	233
Required Training	1,598	332	521	512	233
<b>4c. Incident Command systems</b>					
No Training	1,584	330	512	510	232
Optional Training	1,584	330	512	510	232
Required Training	1,584	330	512	510	232
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>					
No Training	1,581	330	506	513	232
Optional Training	1,581	330	506	513	232
Required Training	1,581	330	506	513	232
<b>4e. Rapid Intervention Teams (RITs)</b>					
No Training	1,511	321	485	477	228
Optional Training	1,511	321	485	477	228
Required Training	1,511	321	485	477	228

(continued)

Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>4f. Use of personal protective equipment and/or protective clothing</b>					
No Training	1,611	333	522	521	235
Optional Training	1,611	333	522	521	235
Required Training	1,611	333	522	521	235
<b>4g. Use of radio communication devices</b>					
No Training	1,606	333	520	518	235
Optional Training	1,606	333	520	518	235
Required Training	1,606	333	520	518	235
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>					
Our department's Training Officer	1,611	333	521	522	235
Other officers within our department	1,611	333	521	522	235
State fire training agency	1,611	333	521	522	235
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	1,611	333	521	522	235
Conferences or regional meetings	1,611	333	521	522	235
	1,611	333	521	522	235
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>					
Other					
Roadside incidents/Motor Vehicle Accidents (MVA)	1,622	333	525	526	238
Scuba diving	1,622	333	525	526	238
Swift water rescue	1,622	333	525	526	238
Wildland fire fighting	1,622	333	525	526	238
HAZMAT	1,622	333	525	526	238
	1,622	333	525	526	238

(continued)

Other

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>					
Not at all familiar	1,610	332	524	521	233
Not very familiar	1,610	332	524	521	233
Somewhat familiar	1,610	332	524	521	233
Very familiar	1,610	332	524	521	233
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>					
Not at all familiar	1,611	331	522	525	233
Not very familiar	1,611	331	522	525	233
Somewhat familiar	1,611	331	522	525	233
Very familiar	1,611	331	522	525	233
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>					
NIOSH mailings	1,609	331	522	522	234
National conference presentations	1,609	331	522	522	234
State-level conference presentations	1,609	331	522	522	234
Other firefighters or departments	1,609	331	522	522	234
At seminars or other training opportunities (not conferences)	1,609	331	522	522	234
Trade publications (such as Firehouse and Fire Engineering)	1,609	331	522	522	234
NIOSH website	1,609	331	522	522	234
Links from other websites (such as NFPA and Firehouse)	1,609	331	522	522	234
Media reports—newspaper, television, radio	1,609	331	522	522	234
Does not apply. We have not received information	1,609	331	522	522	234
Other about NIOSH recommendations.					

(continued)



Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>					
Made changes to training program	1,536	316	496	494	230
Developed new SOPs/SOGs	1,536	316	496	494	230
Made changes to SOPs/SOGs	1,536	316	496	494	230
Justified current budget/staffing	1,536	316	496	494	230
Made new budget/staffing requests	1,536	316	496	494	230
Justified grant applications	1,536	316	496	494	230
Does not apply. We have not used NIOSH recommendations.	1,536	316	496	494	230
<i>Legitimately Skipped Question</i>	1,536	316	496	494	230
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>					
Traffic hazards	1,530	314	494	497	225
Personal protective equipment and clothing	1,530	314	494	497	225
SCBA	1,530	314	494	497	225
PASS systems	1,530	314	494	497	225
Incident Command systems	1,530	314	494	497	225
Radio communications	1,530	314	494	497	225
Physical fitness and cardiovascular disease (CVD)	1,530	314	494	497	225
Building code compliance (e.g., warning against the use of wooden trusses)	1,530	314	494	497	225
Does not apply. We have not used NIOSH recommendations for training purposes.	1,530	314	494	497	225
Other	1,530	314	494	497	225
<i>Legitimately Skipped Question</i>	1,530	314	494	497	225

(continued)

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>					
Yes, it's required	1,596	330	518	519	229
No Yes, it's optional	1,596	330	518	519	229
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>					
One time, when they first join the department	1,582	326	509	519	228
Less frequently than once a year	1,582	326	509	519	228
One time a year	1,582	326	509	519	228
More than one time a year	1,582	326	509	519	228
Does not apply. Firefighters are not required to receive CVD screenings	1,582	326	509	519	228
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>					
Yes, they receive training required by the department	1,616	332	523	524	237
No Yes, they receive training required by the state	1,616	332	523	524	237
Yes, they receive optional training	1,616	332	523	524	237
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>					
Two or more times a year	1,611	330	520	524	237
Once every year	1,611	330	520	524	237
Less frequently than once a year	1,611	330	520	524	237
Does not apply. Firefighters are not required to receive continuing driver training.	1,611	330	520	524	237

(continued)

Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>					
Yes	1,613	331	523	522	237
	1,613	331	523	522	237
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>					
No					
Strongly disagree	1,603	331	518	520	234
Disagree	1,603	331	518	520	234
Neither agree nor disagree	1,603	331	518	520	234
Agree	1,603	331	518	520	234
Strongly agree	1,603	331	518	520	234
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>					
Never	1,616	331	523	525	237
Some of the time	1,616	331	523	525	237
About half the time	1,616	331	523	525	237
Most of the time	1,616	331	523	525	237
Always	1,616	331	523	525	237
<b>21. How often is Incident Command established when responding to structure fires?</b>					
	1,604	332	518	523	231
Rarely	1,604	332	518	523	231
Never About half the time	1,604	332	518	523	231
Most of the time	1,604	332	518	523	231
Always	1,604	332	518	523	231

(continued)

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>					
Fires are not usually big enough to require an Incident Commander	1,600	332	518	520	230
Not enough firefighters available at the scene of the fire	1,600	332	518	520	230
Does not apply. My department always assigns an Incident Commander for structure fires.	1,600	332	518	520	230
Other <i>Legitimately Skipped Question</i>	1,600	332	518	520	230
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>					
Conduct an initial assessment before the other firefighters begin entering the building	1,588	327	513	515	233
Develop and coordinate the fire attack strategy	1,588	327	513	515	233
Develop and initiate a risk management plan	1,588	327	513	515	233
Document all assessments, plans and events related to the fire	1,588	327	513	515	233
Ensure that at least four (4) firefighters are on the scene before entering the building	1,588	327	513	515	233
Establish a collapse zone around the building	1,588	327	513	515	233
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	1,588	327	513	515	233
Identify and implement a communication strategy	1,588	327	513	515	233
Monitor location of all firefighters at the scene	1,588	327	513	515	233
	1,588	327	513	515	233

(continued)

Other

Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>					
Some of the time	1,605	331	517	522	235
NeverAbout half the time	1,605	331	517	522	235
Most of the time	1,605	331	517	522	235
Always	1,605	331	517	522	235
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>					
Fires are not big enough to require an Incident Safety Officer	1,588	322	516	516	234
Not enough firefighters are available at the scene of the fire	1,588	322	516	516	234
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	1,588	322	516	516	234
Other <i>Legitimately Skipped Question</i>	1,588	322	516	516	234
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>					
Some of the time	1,602	331	518	518	235
NeverAbout half the time	1,602	331	518	518	235
Most of the time	1,602	331	518	518	235
Always	1,602	331	518	518	235

(continued)

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>					
When the building has more than one story/floor	1,600	330	517	518	235
When there are enough firefighters on and at the scene of the fire	1,600	330	517	518	235
Whenever firefighters enter a burning building	1,600	330	517	518	235
<i>Legitimately Skipped Question</i>	1,600	330	517	518	235
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>					
The structure fire may not be large enough to need an RIT/RIC	1,575	329	508	505	233
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	1,575	329	508	505	233
We don't have enough firefighters available at the scene of the fire	1,575	329	508	505	233
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	1,575	329	508	505	233
We have never established an RIT/RIC	1,575	329	508	505	233
We use other fire departments in the area for RITs/RICs	1,575	329	508	505	233
We use other safety practices and so we don't need them	1,575	329	508	505	233
<i>Legitimately Skipped Question</i>	1,575	329	508	505	233
<i>Legitimately Skipped Question</i>	1,575	329	508	505	233
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>					
Yes	1,606	330	520	520	236
	1,606	330	520	520	236

(continued)

No

Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>					
Never	1,600	329	514	521	236
Some of the time	1,600	329	514	521	236
About half the time	1,600	329	514	521	236
Most of the time	1,600	329	514	521	236
Always	1,600	329	514	521	236
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>					
They don't have a PASS device to use	1,590	329	511	516	234
Situation doesn't require them	1,590	329	511	516	234
Firefighters think the devices do not always work reliably	1,590	329	511	516	234
Firefighters don't think they need them	1,590	329	511	516	234
Devices go off while firefighters are resting	1,590	329	511	516	234
<i>Legitimately Skipped Question</i>	1,590	329	511	516	234
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>					
Yes	1,606	330	522	522	232
	1,606	330	522	522	232
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>					
No					
Yes	1,521	309	497	497	218
	1,521	309	497	497	218
<i>Legitimately Skipped Question</i>	1,521	309	497	497	218

No

(continued)

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>					
Didn't know it was recommended	1,517	310	494	495	218
Firefighters don't like using the equipment	1,517	310	494	495	218
Have never needed them (e.g., we don't do interior attacks)	1,517	310	494	495	218
They cost too much, there is not enough money in the budget	1,517	310	494	495	218
We don't have enough equipment for all of our firefighters	1,517	310	494	495	218
Shared systems work fine for our needs	1,517	310	494	495	218
<i>Legitimately Skipped Question</i>	1,517	310	494	495	218
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>					
Some of the time	1,536	313	501	502	220
Never	1,536	313	501	502	220
About half the time	1,536	313	501	502	220
Most of the time	1,536	313	501	502	220
Always	1,536	313	501	502	220
<i>Legitimately Skipped Question</i>	1,536	313	501	502	220

(continued)



Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>					
Situation doesn't require them	1,525	311	497	497	220
Firefighters do not trust that the SCBAs will work reliably	1,525	311	497	497	220
Firefighters don't think they need them	1,525	311	497	497	220
Firefighters don't like sharing facepieces with others	1,525	311	497	497	220
Firefighters are concerned that the SCBA may be or become contaminated	1,525	311	497	497	220
Wearing SCBAs makes it more difficult to work	1,525	311	497	497	220
Firefighters don't have SCBAs to use	1,525	311	497	497	220
<i>Legitimately Skipped Question</i>	1,525	311	497	497	220
<b>36. How often is routine maintenance performed on your SCBAs?</b>					
After every time they are used	1,270	250	429	408	183
Once a month or more	1,270	250	429	408	183
Several times a year	1,270	250	429	408	183
Once a year	1,270	250	429	408	183
Less than once a year	1,270	250	429	408	183
Never. Maintenance has not been done on our SCBAs.	1,270	250	429	408	183
Does not apply. My department does not have SCBAs.	1,270	250	429	408	183
<i>Legitimately Skipped Question</i>	1,270	250	429	408	183
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>					
Greater than zero	1,518	317	491	495	215
	1,518	317	491	495	215

(continued)

Zero

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>					
CBRN SCBA devices are not needed in our department	1,454	301	461	477	215
We didn't know they were available	1,454	301	461	477	215
We don't have adequate technical information to purchase them	1,454	301	461	477	215
We don't have adequate funding to purchase them	1,454	301	461	477	215
<i>Legitimately Skipped Question</i>	1,454	301	461	477	215
<b>38a. Does your fire department have Automated External Defibrillators (AEDs)?</b>					
Yes	1,610	330	521	524	235
	1,610	330	521	524	235
<b>38a. At your fire department, where do you have AEDs?</b>					
No					
At the fire station(s)	1,424	284	472	465	203
On the emergency vehicles (or apparatus)	1,424	284	472	465	203
Both at the fire station(s) and on the vehicles (or apparatus)	1,424	284	472	465	203
<i>Legitimately Skipped Question</i>	1,424	284	472	465	203
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>					
After every time they are used	1,235	258	411	388	178
Once a month or more	1,235	258	411	388	178
Several times a year	1,235	258	411	388	178
Once a year	1,235	258	411	388	178
Less frequently than once a year	1,235	258	411	388	178
Never. Maintenance on our AEDs has not been done.	1,235	258	411	388	178

(continued)

Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>					
Some of the time	1,610	331	520	524	235
Never About half the time	1,610	331	520	524	235
Most of the time	1,610	331	520	524	235
Always	1,610	331	520	524	235
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>					
Some of the time	1,612	331	523	522	236
Never About half the time	1,612	331	523	522	236
Most of the time	1,612	331	523	522	236
Always	1,612	331	523	522	236

(continued)

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>42. How would you rate your department's budget in the following areas?</b>					
<b>42a. Equipment</b>					
Not adequate	1,608	328	521	523	236
Adequate	1,608	328	521	523	236
More than adequate	1,608	328	521	523	236
<b>42b. Training</b>					
Not adequate	1,608	330	521	521	236
Adequate	1,608	330	521	521	236
More than adequate	1,608	330	521	521	236
<b>42c. Personnel</b>					
Not adequate	1,551	306	499	512	234
Adequate	1,551	306	499	512	234
More than adequate	1,551	306	499	512	234
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>					
	1,605	329	517	524	235
One or two times per year	1,605	329	517	524	235
Never	1,605	329	517	524	235
Several times per year	1,605	329	517	524	235
Once a month or more	1,605	329	517	524	235

(continued)

Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>					
By mail	1,605	328	521	522	234
On the Internet	1,605	328	521	522	234
From colleagues in other departments	1,605	328	521	522	234
At conferences or other meetings	1,605	328	521	522	234
<i>Legitimately Skipped Question</i>	1,605	328	521	522	234
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>					
	1,611	328	524	522	237
	1,611	328	524	522	237
Yes <i>Legitimately Skipped Question</i>	1,611	328	524	522	237
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>					
Yes	1,583	324	512	516	231
	1,583	324	512	516	231
<i>Legitimately Skipped Question</i>	1,583	324	512	516	231

No

(continued)

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>					
Regular staff meetings	1,585	321	515	517	232
Training sessions	1,585	321	515	517	232
Provide copies of NIOSH reports to firefighters	1,585	321	515	517	232
Provide copies of NIOSH report summaries to firefighters	1,585	321	515	517	232
Provide summaries prepared by department to firefighters	1,585	321	515	517	232
Postings on bulletin boards	1,585	321	515	517	232
Post report on the department website	1,585	321	515	517	232
Send message to firefighters by email	1,585	321	515	517	232
<i>Legitimately Skipped Question</i>	1,585	321	515	517	232
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>					
Yes	1,564	322	504	507	231
No	1,564	322	504	507	231
<i>Legitimately Skipped Question</i>	1,564	322	504	507	231

(continued)

Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>					
<b>52a. Recommendations are practical</b>					
Strongly Disagree	1,547	323	500	502	222
Disagree	1,547	323	500	502	222
Neither Agree nor Disagree	1,547	323	500	502	222
Agree	1,547	323	500	502	222
Strongly Agree	1,547	323	500	502	222
<i>Legitimately Skipped Question</i>	1,547	323	500	502	222
<b>52b. Recommendations are easy to understand</b>					
Strongly Disagree	1,537	323	492	500	222
Disagree	1,537	323	492	500	222
Neither Agree nor Disagree	1,537	323	492	500	222
Agree	1,537	323	492	500	222
Strongly Agree	1,537	323	492	500	222
<i>Legitimately Skipped Question</i>	1,537	323	492	500	222
<b>52c. Recommendations are specific and concrete</b>					
Strongly Disagree	1,537	321	496	499	221
Disagree	1,537	321	496	499	221
Neither Agree nor Disagree	1,537	321	496	499	221
Agree	1,537	321	496	499	221
Strongly Agree	1,537	321	496	499	221
<i>Legitimately Skipped Question</i>	1,537	321	496	499	221

(continued)

**Exhibit B-2c. Results from the Fire Department Survey, Sample Sizes by Census Region (continued)**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>					
Pocket guide to chemical hazards	1,537	317	498	492	230
Respirator maintenance program guide	1,537	317	498	492	230
CDs of firefighter program materials	1,537	317	498	492	230
Alerts	1,537	317	498	492	230
Hazard IDs	1,537	317	498	492	230
Workplace Solutions	1,537	317	498	492	230
	1,537	317	498	492	230
None. I have not seen any NIOSH materials.	1,537	317	498	492	230
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>					
Very dissatisfied	1,536	320	491	495	230
Dissatisfied	1,536	320	491	495	230
Neither satisfied nor dissatisfied	1,536	320	491	495	230
Satisfied	1,536	320	491	495	230
Very satisfied	1,536	320	491	495	230
<i>Legitimately Skipped Question</i>	1,536	320	491	495	230
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>					
	1,589	330	510	515	234
Yes, in the last year	1,589	330	510	515	234
No Yes, longer than one year ago	1,589	330	510	515	234

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.



**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>1. Does your department have a Safety Officer?</b>	70.3 29.7	69.8 30.2	72.0 28.0	70.5 29.5
<b>2. Does your department have a Training Officer?</b>				
Yes	88.5	88.9	90.1	85.4
No	11.5	11.1	9.9	14.6
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	83.7	82.5 <sup>[2]</sup>	93.0 <sup>[1,3]</sup>	79.1 <sup>[2]</sup>
Maintenance of SCBAs	69.7	67.1 <sup>[2]</sup>	79.1 <sup>[1]</sup>	70.5
Motor vehicle safety	78.8	78.3 <sup>[2]</sup>	83.8 <sup>[1]</sup>	76.0
Participation in a personal physical fitness program	11.0	8.4 <sup>[2]</sup>	27.6 <sup>[1,3]</sup>	5.2 <sup>[2]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	16.8	15.2 <sup>[2]</sup>	29.6 <sup>[1,3]</sup>	10.5 <sup>[2]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	40.4	36.6 <sup>[2,3]</sup>	68.9 <sup>[1,3]</sup>	27.2 <sup>[1,2]</sup>
Use of Personal Alert Safety System (PASS) devices	75.4	74.6 <sup>[2]</sup>	85.4 <sup>[1,3]</sup>	68.4 <sup>[2]</sup>
Use of personal protective equipment and protective clothing	89.1	89.1	91.4	86.9
Use of radio communications	84.8	83.7	87.5	86.3
	8.7	7.7 <sup>[2]</sup>	14.2 <sup>[1,3]</sup>	7.2 <sup>[2]</sup>
Does not apply. Our fire department does not use SOPs/SOGs.	5.0	5.2 <sup>[2]</sup>	2.2 <sup>[1]</sup>	6.7

Other

(continued)

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.1	1.0	0.2 <sup>[+]</sup>	2.4 <sup>[+]</sup>
Optional Training	16.7	18.2 <sup>[2]</sup>	6.7 <sup>[1,3]</sup>	21.0 <sup>[2]</sup>
Required Training	82.8	81.7 <sup>[2]</sup>	93.4 <sup>[1,3]</sup>	76.6 <sup>[2]</sup>
<b>4b. Driving safety</b>				
No Training	3.9	4.0 <sup>[2]</sup>	1.2 <sup>[1,3]</sup>	6.3 <sup>[2]</sup>
Optional Training	18.6	18.8 <sup>[2]</sup>	10.8 <sup>[1,3]</sup>	25.6 <sup>[2]</sup>
Required Training	77.7	77.5 <sup>[2,3]</sup>	88.2 <sup>[1,3]</sup>	68.1 <sup>[1,2]</sup>
<b>4c. Incident Command systems</b>				
No Training	2.9	3.1 <sup>[2]</sup>	** <sup>[1,3,+]</sup>	4.9 <sup>[2]</sup>
Optional Training	27.4	28.3 <sup>[2,3]</sup>	9.7 <sup>[1,3]</sup>	41.1 <sup>[1,2]</sup>
Required Training	69.9	68.8 <sup>[2,3]</sup>	90.2 <sup>[1,3]</sup>	54.0 <sup>[1,2]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	6.6	6.8 <sup>[2]</sup>	2.6 <sup>[1,3]</sup>	9.5 <sup>[2]</sup>
Optional Training	33.6	35.8 <sup>[2]</sup>	20.9 <sup>[1,3]</sup>	37.4 <sup>[2]</sup>
Required Training	60.3	57.9 <sup>[2]</sup>	76.7 <sup>[1,3]</sup>	53.1 <sup>[2]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	28.5	31.2 <sup>[2]</sup>	7.9 <sup>[1,3]</sup>	39.1 <sup>[2]</sup>
Optional Training	36.2	37.9	32.2	33.5
Required Training	35.5	31.0 <sup>[2]</sup>	60.6 <sup>[1,3]</sup>	27.4 <sup>[2]</sup>

(continued)

Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.5	1.4	1.6	1.7 <sup>[+]</sup>
Optional Training	9.9	9.7 <sup>[2]</sup>	4.8 <sup>[1,3]</sup>	15.5 <sup>[2]</sup>
Required Training	88.9	89.3 <sup>[2]</sup>	93.8 <sup>[1,3]</sup>	82.8 <sup>[2]</sup>
<b>4g. Use of radio communication devices</b>				
No Training	2.7	2.7	1.6	3.4
Optional Training	21.4	20.5 <sup>[2,3]</sup>	14.8 <sup>[1,3]</sup>	31.0 <sup>[1,2]</sup>
Required Training	76.2	77.0 <sup>[2,3]</sup>	83.8 <sup>[1,3]</sup>	65.6 <sup>[1,2]</sup>
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	84.9	85.1	88.6	80.4
Other officers within our department	82.8	82.8 <sup>[2]</sup>	91.0 <sup>[1,3]</sup>	74.9 <sup>[2]</sup>
State fire training agency	77.4	78.1	80.9 <sup>[3]</sup>	71.1 <sup>[2]</sup>
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	20.9	19.3 <sup>[2,3]</sup>	40.8 <sup>[1,3]</sup>	7.8 <sup>[1,2]</sup>
Conferences or regional meetings	51.7	50.7 <sup>[2,3]</sup>	67.9 <sup>[1,3]</sup>	39.8 <sup>[1,2]</sup>
Other	25.2	23.7 <sup>[2]</sup>	36.3 <sup>[1,3]</sup>	19.9 <sup>[2]</sup>
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	55.3	58.1 <sup>[3]</sup>	55.7 <sup>[3]</sup>	44.2 <sup>[1,2]</sup>
Scuba diving	7.5	6.6 <sup>[2]</sup>	12.7 <sup>[1,3]</sup>	5.9 <sup>[2]</sup>
Swift water rescue	11.2	10.0 <sup>[2,3]</sup>	22.7 <sup>[1,3]</sup>	4.8 <sup>[1,2]</sup>
Wildland fire fighting	47.0	52.2 <sup>[2]</sup>	23.8 <sup>[1,3]</sup>	49.3 <sup>[2]</sup>
HAZMAT	66.7	65.9 <sup>[2,3]</sup>	83.7 <sup>[1,3]</sup>	53.0 <sup>[1,2]</sup>
Other	31.2	28.9 <sup>[2]</sup>	41.8 <sup>[1,3]</sup>	29.6 <sup>[2]</sup>

(continued)

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	8.3	9.1 <sup>[2]</sup>	2.8 <sup>[1,3]</sup>	10.8 <sup>[2]</sup>
Not very familiar	24.3	25.4 <sup>[2]</sup>	13.5 <sup>[1,3]</sup>	30.5 <sup>[2]</sup>
Somewhat familiar	58.1	57.8	63.6	54.0
Very familiar	9.3	7.7 <sup>[2]</sup>	20.1 <sup>[1,3]</sup>	4.7 <sup>[2]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	20.8	22.1 <sup>[2]</sup>	9.6 <sup>[1,3]</sup>	26.7 <sup>[2]</sup>
Not very familiar	33.5	34.4 <sup>[2]</sup>	24.5 <sup>[1,3]</sup>	39.1 <sup>[2]</sup>
Somewhat familiar	37.9	37.0 <sup>[2]</sup>	49.5 <sup>[1,3]</sup>	30.2 <sup>[2]</sup>
Very familiar	7.8	6.6 <sup>[2]</sup>	16.4 <sup>[1,3]</sup>	4.0 <sup>[2]</sup>
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	67.8	71.0 <sup>[3]</sup>	67.6 <sup>[3]</sup>	55.3 <sup>[1,2]</sup>
National conference presentations	3.6	2.8 <sup>[2]</sup>	9.9 <sup>[1,3]</sup>	0.9 <sup>[2,+]</sup>
State-level conference presentations	11.5	9.8 <sup>[2]</sup>	16.3 <sup>[1]</sup>	13.2
Other firefighters or departments	22.9	22.4	22.1	25.4
At seminars or other training opportunities (not conferences)	16.4	16.6	19.8 <sup>[3]</sup>	12.0 <sup>[2]</sup>
Trade publications (such as Firehouse and Fire Engineering)	47.2	45.9 <sup>[2]</sup>	56.7 <sup>[1,3]</sup>	42.5 <sup>[2]</sup>
NIOSH website	24.3	21.8 <sup>[2]</sup>	42.0 <sup>[1,3]</sup>	16.4 <sup>[2]</sup>
Links from other websites (such as NFPA and Firehouse)	28.2	28.9 <sup>[2,3]</sup>	36.8 <sup>[1,3]</sup>	17.1 <sup>[1,2]</sup>
Media reports—newspaper, television, radio	14.9	14.6	17.4	13.5
	1.1	1.0 <sup>[3]</sup>	2.8 <sup>[3]</sup>	0.2 <sup>[1,2,+]</sup>
Does not apply. We have not received information about NIOSH recommendations.	11.1	9.9 <sup>[3]</sup>	6.7 <sup>[3]</sup>	20.2 <sup>[1,2]</sup>
Other				

(continued)

Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	40.2	40.5 <sup>[2,3]</sup>	53.3 <sup>[1,3]</sup>	25.2 <sup>[1,2]</sup>
Developed new SOPs/SOGs	26.3	25.1 <sup>[2]</sup>	38.1 <sup>[1,3]</sup>	19.1 <sup>[2]</sup>
Made changes to SOPs/SOGs	34.9	34.8 <sup>[2,3]</sup>	48.3 <sup>[1,3]</sup>	21.5 <sup>[1,2]</sup>
Justified current budget/staffing	5.0	3.6 <sup>[2]</sup>	12.1 <sup>[1,3]</sup>	3.2 <sup>[2]</sup>
Made new budget/staffing requests	5.5	4.8 <sup>[2,3]</sup>	11.8 <sup>[1,3]</sup>	1.6 <sup>[1,2,+]</sup>
Justified grant applications	15.5	15.7	20.5 <sup>[3]</sup>	9.8 <sup>[2]</sup>
Does not apply. We have not used NIOSH recommendations.	30.1	30.8 <sup>[2]</sup>	19.7 <sup>[1,3]</sup>	37.9 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	11.7	10.6 <sup>[3]</sup>	6.8 <sup>[3]</sup>	21.3 <sup>[1,2]</sup>
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	29.3	30.3	32.5 <sup>[3]</sup>	22.1 <sup>[2]</sup>
Personal protective equipment and clothing	41.6	41.0 <sup>[2]</sup>	52.6 <sup>[1,3]</sup>	32.6 <sup>[2]</sup>
SCBA	40.1	40.0 <sup>[2,3]</sup>	54.4 <sup>[1,3]</sup>	25.7 <sup>[1,2]</sup>
PASS systems	32.6	31.1 <sup>[2]</sup>	45.3 <sup>[1,3]</sup>	25.7 <sup>[2]</sup>
Incident Command systems	32.1	30.8 <sup>[2]</sup>	44.5 <sup>[1,3]</sup>	24.4 <sup>[2]</sup>
Radio communications	23.0	22.3 <sup>[2]</sup>	32.1 <sup>[1,3]</sup>	16.9 <sup>[2]</sup>
Physical fitness and cardiovascular disease (CVD)	8.5	7.5 <sup>[2]</sup>	16.2 <sup>[1,3]</sup>	4.4 <sup>[2]</sup>
Building code compliance (e.g., warning against the use of wooden trusses)	6.9	7.3	7.6	4.7
	2.3	1.6 <sup>[2]</sup>	5.7 <sup>[1,3]</sup>	1.8 <sup>[2,+]</sup>
Does not apply. We have not used NIOSH recommendations for training purposes.	1.9	2.0	2.2	1.3 <sup>[+]</sup>
Other				
<i>Legitimately Skipped Question</i>	41.9	41.5 <sup>[2,3]</sup>	26.6 <sup>[1,3]</sup>	58.6 <sup>[1,2]</sup>

(continued)

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	78.5	83.6 <sup>[2]</sup>	46.7 <sup>[1,3]</sup>	89.4 <sup>[2]</sup>
No Yes, it's optional	7.0	4.7 <sup>[2]</sup>	18.4 <sup>[1,3]</sup>	5.0 <sup>[2]</sup>
	14.5	11.7 <sup>[2,3]</sup>	34.8 <sup>[1,3]</sup>	5.6 <sup>[1,2]</sup>
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	12.8 <sup>[2]</sup>	26.9 <sup>[1,3]</sup>	9.0 <sup>[2]</sup>
Less frequently than once a year	7.1	7.7 <sup>[3]</sup>	8.6 <sup>[3]</sup>	3.4 <sup>[1,2]</sup>
One time a year	17.1	14.6 <sup>[2]</sup>	33.1 <sup>[1,3]</sup>	11.1 <sup>[2]</sup>
More than one time a year	0.3	0.2 <sup>[+]</sup>	0.8 <sup>[+]</sup>	**
Does not apply. Firefighters are not required to receive CVD screenings	60.9	64.7 <sup>[2,3]</sup>	30.6 <sup>[1,3]</sup>	76.5 <sup>[1,2]</sup>
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	6.4	6.9 <sup>[2]</sup>	3.2 <sup>[1]</sup>	7.5
Yes, they receive training required by the department	84.0	82.3 <sup>[2]</sup>	90.2 <sup>[1]</sup>	84.4
Yes, they receive training required by the state	25.7	25.6 <sup>[2]</sup>	32.0 <sup>[1,3]</sup>	20.0 <sup>[2]</sup>
Yes, they receive optional training	13.8	13.3	13.2	16.2
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	14.2	14.3	11.0	16.8
Once every year	40.3	38.1 <sup>[2]</sup>	48.1 <sup>[1]</sup>	41.3
Less frequently than once a year	24.8	25.8	25.0	20.5
Does not apply. Firefighters are not required to receive continuing driver training.	20.7	21.8 <sup>[2]</sup>	15.9 <sup>[1]</sup>	21.5

(continued)

Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
Yes	84.2	83.0 <sup>[2]</sup>	89.8 <sup>[1]</sup>	83.5
	15.8	17.0 <sup>[2]</sup>	10.2 <sup>[1]</sup>	16.5
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
No				
Strongly disagree	6.9	7.5	7.2	4.1
Disagree	18.0	17.9	17.5	18.8
Neither agree nor disagree	30.8	31.4 <sup>[2]</sup>	22.5 <sup>[1,3]</sup>	36.8 <sup>[2]</sup>
Agree	32.1	31.0 <sup>[2]</sup>	38.3 <sup>[1]</sup>	30.5
Strongly agree	12.2	12.1	14.6	9.8
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	5.4	6.3 <sup>[2]</sup>	2.8 <sup>[1]</sup>	4.2
Never	22.7	22.2	24.1	23.5
About half the time	17.0	16.6	14.2	21.3
Most of the time	38.4	38.6	36.1	39.8
	16.5	16.3 <sup>[2]</sup>	22.8 <sup>[1,3]</sup>	11.2 <sup>[2]</sup>
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Always				
Rarely	2.3	2.1 <sup>[2]</sup>	0.3 <sup>[1,3,+]</sup>	5.2 <sup>[2]</sup>
Never	6.8	8.1 <sup>[2]</sup>	1.3 <sup>[1,3,+]</sup>	7.0 <sup>[2]</sup>
About half the time	6.7	7.9 <sup>[2]</sup>	2.3 <sup>[1]</sup>	6.2
Most of the time	27.6	28.5 <sup>[2]</sup>	18.1 <sup>[1,3]</sup>	33.6 <sup>[2]</sup>
Always	56.6	53.4 <sup>[2]</sup>	77.9 <sup>[1,3]</sup>	47.9 <sup>[2]</sup>

(continued)

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	22.5	24.9 <sup>[2]</sup>	7.8 <sup>[1,3]</sup>	27.9 <sup>[2]</sup>
Not enough firefighters available at the scene of the fire	21.2	23.5 <sup>[2]</sup>	8.1 <sup>[1,3]</sup>	25.0 <sup>[2]</sup>
Other	6.2	6.3	7.7	4.5
Does not apply. My department always assigns an Incident Commander for structure fires.	3.6	3.6	1.8	5.5
<i>Legitimately Skipped Question</i>	56.6	53.4 <sup>[2]</sup>	78.4 <sup>[1,3]</sup>	48.1 <sup>[2]</sup>
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.0	91.7	91.8	87.4
Develop and coordinate the fire attack strategy	93.1	92.2 <sup>[2]</sup>	95.8 <sup>[1]</sup>	93.9
Develop and initiate a risk management plan	52.3	50.4 <sup>[2]</sup>	64.0 <sup>[1,3]</sup>	48.4 <sup>[2]</sup>
Document all assessments, plans and events related to the fire	38.8	39.4 <sup>[3]</sup>	45.0 <sup>[3]</sup>	29.9 <sup>[1,2]</sup>
Ensure that at least four (4) firefighters are on the scene before entering the building	68.6	67.8	71.2	68.9
Establish a collapse zone around the building	49.1	48.4 <sup>[2]</sup>	58.3 <sup>[1,3]</sup>	42.6 <sup>[2]</sup>
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	48.5	43.6 <sup>[2]</sup>	77.7 <sup>[1,3]</sup>	38.7 <sup>[2]</sup>
Identify and implement a communication strategy	64.7	62.9	65.5	71.2
Monitor location of all firefighters at the scene	76.2	75.7	80.6	73.9
	9.1	9.4	10.6	6.5

(continued)

Other



**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	13.3	14.2 <sup>[2]</sup>	7.5 <sup>[1,3]</sup>	15.6 <sup>[2]</sup>
Some of the time	26.5	27.5	23.8	25.1
About half the time	8.1	8.6	5.8	8.5
Most of the time	29.8	29.0	35.3	27.4
	22.3	20.7 <sup>[2]</sup>	27.6 <sup>[1]</sup>	23.3
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Always				
Fires are not big enough to require an Incident Safety Officer	32.3	33.3 <sup>[2]</sup>	26.5 <sup>[1]</sup>	33.8
Not enough firefighters are available at the scene of the fire	51.7	54.2 <sup>[2]</sup>	42.4 <sup>[1]</sup>	50.8
	13.1	11.4 <sup>[2]</sup>	22.8 <sup>[1,3]</sup>	9.9 <sup>[2]</sup>
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	2.1	2.2	1.5	2.2
Other				
<i>Legitimately Skipped Question</i>	22.6	21.0 <sup>[2]</sup>	28.1 <sup>[1]</sup>	24.0
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	29.4	30.3 <sup>[2,3]</sup>	9.2 <sup>[1,3]</sup>	45.1 <sup>[1,2]</sup>
Some of the time	21.8	24.8 <sup>[2]</sup>	14.5 <sup>[1]</sup>	17.4
About half the time	6.5	7.3	5.3	4.3
Most of the time	22.5	22.2	26.4	20.0
	19.9	15.4 <sup>[2]</sup>	44.7 <sup>[1,3]</sup>	13.3 <sup>[2]</sup>

(continued)

Always

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	9.3	10.4	7.1	7.4
When there are enough firefighters on and at the scene of the fire	32.3	34.9 <sup>[2]</sup>	28.0 <sup>[1]</sup>	26.3
Whenever firefighters enter a burning building	26.4	28.3	22.5	22.7
	4.9	4.4 <sup>[2]</sup>	9.2 <sup>[1,3]</sup>	2.7 <sup>[2,+]</sup>
<i>Legitimately Skipped Question</i>	49.3	45.8 <sup>[2,3]</sup>	53.4 <sup>[1]</sup>	58.9 <sup>[1]</sup>
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	34.9	35.5 <sup>[2]</sup>	28.1 <sup>[1,3]</sup>	39.2 <sup>[2]</sup>
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	8.8	10.0 <sup>[2]</sup>	0.9 <sup>[1,3,+]</sup>	12.4 <sup>[2]</sup>
We don't have enough firefighters available at the scene of the fire	53.5	57.8 <sup>[2]</sup>	34.0 <sup>[1,3]</sup>	56.5 <sup>[2]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	20.7	23.2 <sup>[2]</sup>	8.5 <sup>[1,3]</sup>	22.9 <sup>[2]</sup>
We have never established an RIT/RIC	17.7	19.0 <sup>[2]</sup>	5.9 <sup>[1,3]</sup>	24.2 <sup>[2]</sup>
We use other fire departments in the area for RITs/RICs	29.2	31.9 <sup>[2]</sup>	22.1 <sup>[1]</sup>	25.9
We use other safety practices and so we don't need them	4.2	3.5 <sup>[2,3]</sup>	0.9 <sup>[1,3,+]</sup>	10.3 <sup>[1,2]</sup>
Other	4.1	4.3	5.1	2.3 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	20.3	15.8 <sup>[2]</sup>	44.7 <sup>[1,3]</sup>	13.6 <sup>[2]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
Yes	78.8	78.7 <sup>[2,3]</sup>	98.3 <sup>[1,3]</sup>	59.9 <sup>[1,2]</sup>
No	21.2	21.3 <sup>[2,3]</sup>	1.7 <sup>[1,3]</sup>	40.1 <sup>[1,2]</sup>

(continued)

Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
Some of the time	6.3	5.3 [2,3]	** [1,3,+]	16.2 [1,2]
About half the time	3.9	4.6 [2]	0.2 [1,3,+]	5.1 [2]
Never	1.8	2.1 [2]	** [1,+]	2.6 [+]
Most of the time	12.8	14.8 [2]	3.7 [1,3]	14.0 [2]
Always	75.2	73.2 [2,3]	96.0 [1,3]	62.1 [1,2]
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	13.1	12.4 [2,3]	0.7 [1,3,+]	28.4 [1,2]
Situation doesn't require them	9.5	11.5 [2]	1.4 [1,3,+]	9.6 [2]
Firefighters think the devices do not always work reliably	0.3	0.3 [+]	** [+]	0.8 [+]
Firefighters don't think they need them	4.6	6.4 [2,3]	1.4 [1,+]	0.7 [1,+]
Devices go off while firefighters are resting	3.7	4.9 [2,3]	0.8 [1]	1.8 [1,+]
<i>Legitimately Skipped Question</i>	75.5	73.7 [2,3]	96.1 [1,3]	62.1 [1,2]
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	99.2	99.4	99.6	98.3
	0.8	0.6	0.4 [+]	1.7 [+]
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	49.7	52.5 [2]	27.4 [1,3]	59.5 [2]
Yes	49.5	46.9 [2]	72.2 [1,3]	38.8 [2]
<i>Legitimately Skipped Question</i>	0.8	0.6	0.5 [+]	1.7 [+]

(continued)

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	4.8	4.7	2.5	7.0
Firefighters don't like using the equipment	0.3	0.4 <sup>[+]</sup>	**	**
Have never needed them (e.g., we don't do interior attacks)	0.7	0.7 <sup>[2]</sup>	** <sup>[1]</sup>	0.9 <sup>[+]</sup>
They cost too much, there is not enough money in the budget	31.8	33.7 <sup>[2]</sup>	15.6 <sup>[1,3]</sup>	39.0 <sup>[2]</sup>
We don't have enough equipment for all of our firefighters	24.6	26.4 <sup>[2]</sup>	9.9 <sup>[1,3]</sup>	30.6 <sup>[2]</sup>
Shared systems work fine for our needs	23.4	24.3 <sup>[2]</sup>	11.4 <sup>[1,3]</sup>	30.9 <sup>[2]</sup>
Other	5.0	5.3	5.3	3.4 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	50.3	47.8 <sup>[2]</sup>	72.7 <sup>[1,3]</sup>	39.8 <sup>[2]</sup>
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1.1	0.8 <sup>[2]</sup>	** <sup>[1,3]</sup>	3.7 <sup>[2]</sup>
Some of the time	4.7	5.6 <sup>[2]</sup>	** <sup>[1,3]</sup>	5.8 <sup>[2]</sup>
About half the time	2.7	2.9 <sup>[2]</sup>	** <sup>[1,3]</sup>	4.3 <sup>[2]</sup>
Most of the time	24.5	25.6 <sup>[2]</sup>	13.5 <sup>[1,3]</sup>	30.3 <sup>[2]</sup>
Always	66.1	64.5 <sup>[2,3]</sup>	86.0 <sup>[1,3]</sup>	54.2 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	0.8	0.6	0.4 <sup>[+]</sup>	1.7 <sup>[+]</sup>

(continued)

Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	25.9	27.5 <sup>[2]</sup>	9.9 <sup>[1,3]</sup>	34.4 <sup>[2]</sup>
Firefighters do not trust that the SCBAs will work reliably	**	0.1 <sup>[+]</sup>	**	**
Firefighters don't think they need them	10.3	11.4 <sup>[2]</sup>	7.3 <sup>[1]</sup>	8.9
Firefighters don't like sharing facepieces with others	1.0	1.2 <sup>[2]</sup>	** <sup>[1]</sup>	0.9 <sup>[+]</sup>
Firefighters are concerned that the SCBA may be or become contaminated	**	0.1 <sup>[+]</sup>	**	**
Wearing SCBAs makes it more difficult to work	5.9	7.3 <sup>[2]</sup>	2.0 <sup>[1]</sup>	4.0
Firefighters don't have SCBAs to use	3.9	4.4 <sup>[2]</sup>	** <sup>[1,3]</sup>	5.5 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	67.8	65.6 <sup>[2]</sup>	86.9 <sup>[1,3]</sup>	58.2 <sup>[2]</sup>
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	43.0	42.4	44.6	43.8
Once a month or more	19.0	17.7 <sup>[2]</sup>	25.6 <sup>[1]</sup>	17.4
Several times a year	15.0	15.5	14.2	13.9
Once a year	16.4	17.2	14.0	16.0
Less than once a year	4.3	5.0 <sup>[2]</sup>	0.2 <sup>[1,3,+]</sup>	5.5 <sup>[2]</sup>
Never. Maintenance has not been done on our SCBAs.	1.4	1.5	1.0 <sup>[+]</sup>	1.3 <sup>[+]</sup>
Does not apply. My department does not have SCBAs.	**	**	**	**
<i>Legitimately Skipped Question</i>	1.0	0.8	0.5 <sup>[+]</sup>	2.1 <sup>[+]</sup>
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	17.5	15.0 <sup>[2]</sup>	34.5 <sup>[1,3]</sup>	10.8 <sup>[2]</sup>
Zero	82.5	85.0 <sup>[2]</sup>	65.5 <sup>[1,3]</sup>	89.2 <sup>[2]</sup>

(continued)

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
CBRN SCBA devices are not needed in our department	20.9	21.1 <sup>[2]</sup>	13.6 <sup>[1,3]</sup>	27.3 <sup>[2]</sup>
We didn't know they were available	15.1	15.6	10.8	17.3
We don't have adequate technical information to purchase them	19.7	21.0 <sup>[2]</sup>	14.4 <sup>[1]</sup>	19.8
We don't have adequate funding to purchase them	60.3	63.6 <sup>[2]</sup>	44.6 <sup>[1,3]</sup>	62.7 <sup>[2]</sup>
Other	4.9	3.9 <sup>[2]</sup>	8.2 <sup>[1]</sup>	5.6
<i>Legitimately Skipped Question</i>	18.3	15.9 <sup>[2]</sup>	35.4 <sup>[1,3]</sup>	10.8 <sup>[2]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
Yes	77.4	77.6 <sup>[2,3]</sup>	87.8 <sup>[1,3]</sup>	66.7 <sup>[1,2]</sup>
No	22.6	22.4 <sup>[2,3]</sup>	12.2 <sup>[1,3]</sup>	33.3 <sup>[1,2]</sup>
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	2.8	3.3 <sup>[2]</sup>	0.1 <sup>[1,3,+]</sup>	3.5 <sup>[2]</sup>
On the emergency vehicles (or apparatus)	62.0	61.6 <sup>[2]</sup>	72.4 <sup>[1,3]</sup>	54.1 <sup>[2]</sup>
Both at the fire station(s) and on the vehicles (or apparatus)	10.4	10.6	13.3 <sup>[3]</sup>	6.7 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	24.9	24.5 <sup>[2,3]</sup>	14.2 <sup>[1,3]</sup>	35.7 <sup>[1,2]</sup>
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	13.9	12.3 <sup>[2]</sup>	19.1 <sup>[1]</sup>	14.8
Once a month or more	25.4	24.6	25.1	29.3
Several times a year	20.6	22.7 <sup>[3]</sup>	19.7	12.4 <sup>[1]</sup>
Once a year	22.3	21.7	25.4	21.7
Less frequently than once a year	7.4	8.0	6.1	6.6
Never. Maintenance on our AEDs has not been done.	10.4	10.7 <sup>[2]</sup>	4.6 <sup>[1,3]</sup>	15.2 <sup>[2]</sup>

(continued)

Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Never	1.6	1.9	0.6 <sup>[+]</sup>	1.6 <sup>[+]</sup>
Some of the time	4.7	6.0 <sup>[2,3]</sup>	1.9 <sup>[1,+]</sup>	2.2 <sup>[1,+]</sup>
About half the time	2.6	3.0	1.4 <sup>[+]</sup>	2.5 <sup>[+]</sup>
Most of the time	20.6	23.7 <sup>[2]</sup>	10.4 <sup>[1,3]</sup>	18.7 <sup>[2]</sup>
Always	70.4	65.4 <sup>[2,3]</sup>	85.6 <sup>[1,3]</sup>	75.0 <sup>[1,2]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Never	18.0	18.3	17.3	17.5
About half the time	64.5	62.4 <sup>[2]</sup>	74.4 <sup>[1,3]</sup>	63.2 <sup>[2]</sup>
Most of the time	10.3	11.2 <sup>[2]</sup>	5.3 <sup>[1,3]</sup>	11.5 <sup>[2]</sup>
Always	5.4	6.0 <sup>[2]</sup>	2.9 <sup>[1]</sup>	5.4
	1.8	2.1 <sup>[2]</sup>	0.2 <sup>[1,+]</sup>	2.4 <sup>[+]</sup>

(continued)

Always

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	48.6	50.8 <sup>[2]</sup>	35.6 <sup>[1,3]</sup>	52.7 <sup>[2]</sup>
Adequate	45.7	44.7 <sup>[2]</sup>	53.0 <sup>[1,3]</sup>	42.2 <sup>[2]</sup>
More than adequate	5.7	4.4 <sup>[2]</sup>	11.5 <sup>[1,3]</sup>	5.1 <sup>[2]</sup>
<b>42b. Training</b>				
Not adequate	39.1	40.9 <sup>[2]</sup>	33.6 <sup>[1]</sup>	37.6
Adequate	55.6	55.0	58.8	55.2
More than adequate	5.2	4.1	7.6	7.1
<b>42c. Personnel</b>				
Not adequate	51.5	53.7	48.2	46.3
Adequate	44.3	43.5	45.0	46.5
More than adequate	4.2	2.8 <sup>[2]</sup>	6.8 <sup>[1]</sup>	7.2
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	26.8	27.6 <sup>[2,3]</sup>	12.7 <sup>[1,3]</sup>	37.6 <sup>[1,2]</sup>
Several times per year	34.3	35.3	33.9	31.0
Never	33.2	32.1 <sup>[2]</sup>	47.2 <sup>[1,3]</sup>	23.7 <sup>[2]</sup>
Once a month or more	5.7	5.1	6.2	7.6

(continued)



Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	56.0	57.0	58.4	49.9
On the Internet	24.7	23.6 <sup>[2,3]</sup>	40.7 <sup>[1,3]</sup>	13.1 <sup>[1,2]</sup>
From colleagues in other departments	10.0	8.7	12.8	12.2
At conferences or other meetings	6.9	5.9 <sup>[2]</sup>	13.6 <sup>[1,3]</sup>	4.4 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	26.8	27.7 <sup>[2,3]</sup>	12.6 <sup>[1,3]</sup>	37.3 <sup>[1,2]</sup>
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	53.3	51.9 <sup>[2,3]</sup>	72.7 <sup>[1,3]</sup>	40.2 <sup>[1,2]</sup>
No	20.0	20.5 <sup>[2]</sup>	14.6 <sup>[1,3]</sup>	23.5 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	26.6	27.6 <sup>[2]</sup>	12.7 <sup>[1,3]</sup>	36.3 <sup>[2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
No	60.7	61.0 <sup>[2,3]</sup>	70.5 <sup>[1,3]</sup>	49.3 <sup>[1,2]</sup>
Yes	12.1	10.8 <sup>[2]</sup>	16.8 <sup>[1]</sup>	12.2
<i>Legitimately Skipped Question</i>	27.3	28.2 <sup>[2,3]</sup>	12.8 <sup>[1,3]</sup>	38.5 <sup>[1,2]</sup>

(continued)

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	23.5	24.0	21.6	23.7
Training sessions	44.2	43.9	49.4	40.2
Provide copies of NIOSH reports to firefighters	16.2	14.3 <sup>[2]</sup>	28.9 <sup>[1,3]</sup>	10.9 <sup>[2]</sup>
Provide copies of NIOSH report summaries to firefighters	6.2	6.1	9.2 <sup>[3]</sup>	3.8 <sup>[2]</sup>
Provide summaries prepared by department to firefighters	1.8	1.7 <sup>[3]</sup>	3.8 <sup>[3]</sup>	0.1 <sup>[1,2,+]</sup>
Postings on bulletin boards	38.5	38.6 <sup>[2]</sup>	46.7 <sup>[1,3]</sup>	29.7 <sup>[2]</sup>
Post report on the department website	1.1	1.0 <sup>[3]</sup>	2.7 <sup>[3]</sup>	** <sup>[1,2]</sup>
Send message to firefighters by email	5.3	4.3 <sup>[2]</sup>	13.1 <sup>[1,3]</sup>	1.9 <sup>[2,+]</sup>
Other	1.3	1.3 <sup>[3]</sup>	2.2 <sup>[3]</sup>	** <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	39.1	38.6 <sup>[2,3]</sup>	29.8 <sup>[1,3]</sup>	50.0 <sup>[1,2]</sup>
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	34.2	31.8 <sup>[2,3]</sup>	59.0 <sup>[1,3]</sup>	19.4 <sup>[1,2]</sup>
Yes	38.4	39.9 <sup>[2]</sup>	28.0 <sup>[1,3]</sup>	42.5 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	27.4	28.3 <sup>[2,3]</sup>	13.0 <sup>[1,3]</sup>	38.1 <sup>[1,2]</sup>

(continued)

Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	0.5	0.3 <sup>[+]</sup>	0.6 <sup>[+]</sup>	0.9 <sup>[+]</sup>
Disagree	3.6	3.8 <sup>[3]</sup>	5.2 <sup>[3]</sup>	1.0 <sup>[1,2,+]</sup>
Neither Agree nor Disagree	18.7	19.3	17.9	17.3
Agree	45.6	44.6 <sup>[2]</sup>	58.3 <sup>[1,3]</sup>	36.9 <sup>[2]</sup>
Strongly Agree	3.7	3.3	5.0	4.0
<i>Legitimately Skipped Question</i>	28.0	28.8 <sup>[2,3]</sup>	13.0 <sup>[1,3]</sup>	40.0 <sup>[1,2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	0.4	0.3 <sup>[+]</sup>	0.5 <sup>[+]</sup>	0.9 <sup>[+]</sup>
Disagree	1.7	1.6	3.0	0.9 <sup>[+]</sup>
Neither Agree nor Disagree	19.8	21.3	16.9	16.5
Agree	45.4	44.1 <sup>[2]</sup>	59.2 <sup>[1,3]</sup>	36.4 <sup>[2]</sup>
Strongly Agree	4.6	3.9 <sup>[2]</sup>	7.4 <sup>[1]</sup>	4.9
<i>Legitimately Skipped Question</i>	28.1	28.9 <sup>[2,3]</sup>	13.1 <sup>[1,3]</sup>	40.4 <sup>[1,2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	0.4	0.2 <sup>[+]</sup>	1.0	0.9 <sup>[+]</sup>
Disagree	3.2	3.3 <sup>[3]</sup>	4.8 <sup>[3]</sup>	0.9 <sup>[1,2,+]</sup>
Neither Agree nor Disagree	26.6	27.0	26.3	25.3
Agree	37.9	37.0 <sup>[2]</sup>	49.5 <sup>[1,3]</sup>	29.7 <sup>[2]</sup>
Strongly Agree	3.8	3.7	5.2	3.1 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	28.0	28.8 <sup>[2,3]</sup>	13.1 <sup>[1,3]</sup>	40.0 <sup>[1,2]</sup>

(continued)

**Exhibit B-3a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	57.4	55.0 <sup>[2]</sup>	73.7 <sup>[1,3]</sup>	50.1 <sup>[2]</sup>
Respirator maintenance program guide	13.8	13.9 <sup>[2,3]</sup>	20.3 <sup>[1,3]</sup>	6.8 <sup>[1,2]</sup>
CDs of firefighter program materials	28.0	27.8	34.0 <sup>[3]</sup>	22.6 <sup>[2]</sup>
Alerts	31.7	30.9 <sup>[2,3]</sup>	47.3 <sup>[1,3]</sup>	19.1 <sup>[1,2]</sup>
Hazard IDs	16.6	16.5	18.9	14.8
Workplace Solutions	12.5	12.9	14.8	8.4
	0.8	1.0 <sup>[3]</sup>	0.8 <sup>[+]</sup>	** <sup>[1]</sup>
None. I have not seen any NIOSH materials.	25.2	25.4 <sup>[2,3]</sup>	14.1 <sup>[1,3]</sup>	35.7 <sup>[1,2]</sup>
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.3	1.2	1.6	1.7 <sup>[+]</sup>
Dissatisfied	0.2	0.3 <sup>[+]</sup>	**	**
Neither satisfied nor dissatisfied	21.2	22.4	18.7	19.0
Satisfied	47.1	47.0 <sup>[2]</sup>	55.5 <sup>[1,3]</sup>	39.1 <sup>[2]</sup>
Very satisfied	5.2	4.0 <sup>[2]</sup>	10.2 <sup>[1,3]</sup>	4.7 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	24.9	25.1 <sup>[2,3]</sup>	14.1 <sup>[1,3]</sup>	35.6 <sup>[1,2]</sup>
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	59.4	61.0 <sup>[2]</sup>	43.2 <sup>[1,3]</sup>	69.3 <sup>[2]</sup>
No	34.5	32.3 <sup>[2]</sup>	51.3 <sup>[1,3]</sup>	26.3 <sup>[2]</sup>
Yes, longer than one year ago	6.1	6.7	5.5	4.4

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+ ] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>1. Does your department have a Safety Officer?</b>	(67.5, 72.9) (27.1, 32.5)	(66.4, 72.9) (27.1, 33.6)	(66.2, 77.1) (22.9, 33.8)	(61.8, 78.0) (22.0, 38.2)
<b>2. Does your department have a Training Officer?</b>	(86.4, 90.3) (9.7, 13.6)	(86.5, 90.9) (9.1, 13.5)	(85.8, 93.1) (6.9, 14.2)	(77.6, 90.8) (9.2, 22.4)
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Incident Command Systems	(81.3, 85.8)	(79.7, 85.1)	(89.0, 95.6)	(70.8, 85.6)
Maintenance of SCBAs	(66.9, 72.3)	(63.7, 70.3)	(73.6, 83.7)	(61.7, 77.9)
Motor vehicle safety	(76.3, 81.2)	(75.3, 81.1)	(78.6, 87.9)	(67.7, 82.7)
Participation in a personal physical fitness program	(9.6, 12.7)	(6.7, 10.4)	(23.1, 32.5)	(2.4, 10.7)
Participation in regular health screenings for cardiovascular disease (CVD)	(14.9, 18.9)	(13.0, 17.7)	(24.7, 35.0)	(6.1, 17.3)
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	(37.7, 43.2)	(33.4, 40.0)	(63.1, 74.2)	(20.0, 35.8)
Use of Personal Alert Safety System (PASS) devices	(72.7, 77.9)	(71.4, 77.6)	(80.4, 89.3)	(59.6, 76.1)
Use of personal protective equipment and protective clothing	(87.1, 90.9)	(86.7, 91.2)	(86.9, 94.4)	(79.9, 91.7)
Use of radio communications	(82.5, 86.8)	(80.9, 86.1)	(83.0, 90.9)	(79.1, 91.4)
	(7.2, 10.5)	(6.1, 9.8)	(10.4, 19.0)	(3.6, 13.8)
Does not apply. Our fire department does not use SOPs/SOGs.	(3.8, 6.5)	(3.9, 7.1)	(0.9, 5.3)	(3.4, 13.0)

Other

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	(0.6, 2.0)	(0.5, 2.1)	(0.1, 1.1)	(0.8, 6.7)
Optional Training	(14.6, 19.1)	(15.6, 21.1)	(4.2, 10.7)	(14.5, 29.3)
Required Training	(80.4, 85.0)	(78.8, 84.3)	(89.4, 95.9)	(68.1, 83.3)
<b>4b. Driving safety</b>				
No Training	(2.9, 5.3)	(2.8, 5.7)	(0.5, 2.8)	(3.1, 12.6)
Optional Training	(16.3, 21.1)	(16.2, 21.7)	(7.3, 15.6)	(18.4, 34.4)
Required Training	(75.1, 80.1)	(74.4, 80.3)	(83.3, 91.8)	(59.0, 76.0)
<b>4c. Incident Command systems</b>				
No Training	(2.0, 4.1)	(2.1, 4.6)	(**, **)	(2.2, 10.4)
Optional Training	(24.8, 30.2)	(25.2, 31.6)	(6.5, 14.4)	(32.6, 50.2)
Required Training	(67.1, 72.6)	(65.5, 72.0)	(85.6, 93.5)	(45.0, 62.7)
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	(5.2, 8.3)	(5.2, 8.9)	(1.4, 4.8)	(5.3, 16.4)
Optional Training	(30.8, 36.5)	(32.5, 39.3)	(16.3, 26.4)	(29.2, 46.4)
Required Training	(57.3, 63.1)	(54.4, 61.4)	(71.1, 81.5)	(44.1, 61.9)
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	(25.8, 31.3)	(28.0, 34.7)	(5.0, 12.3)	(30.5, 48.4)
Optional Training	(33.3, 39.2)	(34.4, 41.5)	(26.8, 38.2)	(25.4, 42.7)
Required Training	(32.8, 38.3)	(27.8, 34.3)	(54.8, 66.2)	(19.9, 36.5)

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	(0.9, 2.4)	(0.7, 2.5)	(0.8, 3.4)	(0.4, 6.4)
Optional Training	(8.2, 11.8)	(7.8, 12.0)	(2.7, 8.5)	(10.1, 23.0)
Required Training	(86.9, 90.7)	(86.9, 91.2)	(90.0, 96.2)	(75.1, 88.5)
<b>4g. Use of radio communication devices</b>				
No Training	(1.9, 3.8)	(1.8, 4.2)	(0.8, 3.4)	(1.3, 8.7)
Optional Training	(19.0, 23.9)	(17.8, 23.5)	(10.8, 20.0)	(23.5, 39.7)
Required Training	(73.6, 78.6)	(74.0, 79.9)	(78.6, 87.9)	(56.8, 73.4)
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	(82.6, 86.9)	(82.4, 87.4)	(84.1, 92.0)	(72.2, 86.7)
Other officers within our department	(80.4, 85.0)	(79.9, 85.3)	(86.5, 94.1)	(66.5, 81.8)
State fire training agency	(74.8, 79.8)	(75.1, 80.9)	(75.8, 85.2)	(62.4, 78.5)
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	(18.9, 23.1)	(16.8, 22.0)	(35.5, 46.5)	(4.2, 13.9)
Conferences or regional meetings	(48.8, 54.6)	(47.2, 54.1)	(62.1, 73.3)	(31.3, 48.9)
	(22.7, 27.8)	(20.9, 26.8)	(30.6, 42.4)	(13.6, 28.1)
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Other				
Roadside incidents/Motor Vehicle Accidents (MVA)	(52.4, 58.2)	(54.6, 61.5)	(49.7, 61.6)	(35.7, 53.0)
Scuba diving	(6.2, 9.1)	(5.1, 8.5)	(9.4, 16.8)	(2.9, 11.7)
Swift water rescue	(9.6, 13.0)	(8.1, 12.2)	(18.4, 27.7)	(2.2, 10.3)
Wildland fire fighting	(44.1, 49.9)	(48.7, 55.7)	(19.2, 29.0)	(40.6, 58.1)
	(63.8, 69.4)	(62.5, 69.1)	(78.5, 87.8)	(44.1, 61.7)
	(28.5, 33.9)	(25.8, 32.2)	(36.0, 47.8)	(22.1, 38.3)

HAZMAT

Other

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	(6.8, 10.2)	(7.2, 11.4)	(1.2, 6.2)	(6.3, 17.8)
Not very familiar	(21.8, 27.0)	(22.5, 28.6)	(9.7, 18.4)	(22.9, 39.5)
Somewhat familiar	(55.2, 61.0)	(54.3, 61.2)	(57.6, 69.2)	(45.0, 62.8)
Very familiar	(7.8, 10.9)	(6.1, 9.6)	(16.1, 24.9)	(2.0, 10.4)
<b>9. How familiar are you with NIOSH’s Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	(18.4, 23.3)	(19.3, 25.1)	(6.5, 13.8)	(19.5, 35.4)
Not very familiar	(30.8, 36.4)	(31.1, 37.8)	(19.6, 30.2)	(30.9, 48.0)
Somewhat familiar	(35.1, 40.7)	(33.6, 40.4)	(43.5, 55.6)	(22.8, 38.7)
Very familiar	(6.5, 9.4)	(5.2, 8.5)	(12.6, 21.1)	(1.5, 9.9)
<b>10. How does your department receive information about NIOSH’s firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	(64.9, 70.5)	(67.7, 74.1)	(61.6, 73.0)	(46.2, 64.0)
National conference presentations	(2.8, 4.7)	(1.9, 4.0)	(7.3, 13.3)	(0.1, 5.6)
State-level conference presentations	(9.7, 13.5)	(7.9, 12.1)	(12.5, 20.9)	(8.1, 21.0)
Other firefighters or departments	(20.5, 25.5)	(19.6, 25.5)	(17.6, 27.4)	(18.4, 34.1)
At seminars or other training opportunities (not conferences)	(14.3, 18.6)	(14.2, 19.4)	(15.6, 24.9)	(7.3, 19.1)
Trade publications (such as Firehouse and Fire Engineering)	(44.3, 50.1)	(42.5, 49.4)	(50.7, 62.4)	(33.9, 51.6)
NIOSH website	(22.0, 26.7)	(19.1, 24.7)	(36.4, 47.7)	(10.9, 24.0)
Links from other websites (such as NFPA and Firehouse)	(25.7, 30.9)	(25.8, 32.1)	(31.3, 42.6)	(11.2, 25.1)
Media reports—newspaper, television, radio	(12.9, 17.1)	(12.3, 17.3)	(13.3, 22.3)	(8.2, 21.3)
	(0.7, 1.9)	(0.5, 2.0)	(1.4, 5.5)	(0.0, 0.7)
Does not apply. We have not received information about NIOSH recommendations.	(9.3, 13.2)	(8.0, 12.3)	(4.1, 10.6)	(13.9, 28.4)
Other				

(continued)



Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	(37.3, 43.1)	(37.1, 44.1)	(47.4, 59.2)	(18.1, 33.9)
Developed new SOPs/SOGs	(23.8, 29.0)	(22.2, 28.3)	(32.5, 44.0)	(12.7, 27.6)
Made changes to SOPs/SOGs	(32.2, 37.7)	(31.5, 38.3)	(42.6, 54.1)	(14.9, 29.9)
Justified current budget/staffing	(4.0, 6.3)	(2.5, 5.2)	(8.9, 16.2)	(1.2, 8.2)
Made new budget/staffing requests	(4.4, 6.8)	(3.5, 6.5)	(8.5, 16.0)	(0.4, 5.9)
Justified grant applications	(13.5, 17.8)	(13.3, 18.5)	(16.0, 25.8)	(5.5, 16.7)
Does not apply. We have not used NIOSH recommendations.	(27.3, 32.9)	(27.5, 34.2)	(15.2, 25.2)	(29.5, 47.2)
<i>Legitimately Skipped Question</i>	(9.8, 13.9)	(8.5, 13.1)	(4.2, 10.8)	(14.7, 29.8)
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	(26.7, 32.1)	(27.1, 33.8)	(27.2, 38.2)	(15.4, 30.7)
Personal protective equipment and clothing	(38.7, 44.5)	(37.5, 44.6)	(46.6, 58.5)	(24.7, 41.7)
	(37.2, 43.0)	(36.6, 43.5)	(48.3, 60.3)	(18.5, 34.4)
PASS systems	(29.9, 35.5)	(27.9, 34.5)	(39.4, 51.3)	(18.5, 34.5)
SCBA Incident Command systems	(29.4, 34.9)	(27.6, 34.2)	(38.6, 50.6)	(17.4, 33.0)
Radio communications	(20.7, 25.6)	(19.4, 25.4)	(26.8, 37.9)	(11.1, 24.8)
Physical fitness and cardiovascular disease (CVD)	(7.1, 10.2)	(5.9, 9.6)	(12.6, 20.7)	(2.0, 9.6)
Building code compliance (e.g., warning against the use of wooden trusses)	(5.6, 8.5)	(5.7, 9.4)	(5.4, 10.7)	(2.0, 10.7)
	(1.6, 3.4)	(0.9, 2.8)	(3.4, 9.3)	(0.4, 6.8)
Does not apply. We have not used NIOSH recommendations for training purposes.	(1.3, 2.9)	(1.2, 3.3)	(1.0, 4.7)	(0.4, 4.8)
Other				
<i>Legitimately Skipped Question</i>	(38.9, 44.8)	(38.0, 45.1)	(21.5, 32.4)	(49.5, 67.2)

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	(76.4, 80.4)	(81.1, 85.8)	(41.4, 52.1)	(82.5, 93.8)
No Yes, it's optional	(5.9, 8.3)	(3.6, 6.1)	(15.0, 22.5)	(2.3, 10.5)
	(12.8, 16.4)	(9.8, 14.0)	(29.7, 40.4)	(2.6, 11.6)
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	(12.7, 16.6)	(10.7, 15.2)	(22.0, 32.5)	(5.1, 15.5)
Less frequently than once a year	(5.8, 8.6)	(6.0, 9.7)	(6.1, 12.1)	(1.3, 8.5)
One time a year	(15.2, 19.3)	(12.4, 17.2)	(28.1, 38.6)	(6.6, 18.1)
More than one time a year	(0.1, 0.7)	(0.1, 0.8)	(0.2, 2.3)	(**, **)
Does not apply. Firefighters are not required to receive CVD screenings	(58.3, 63.5)	(61.4, 67.8)	(25.5, 36.1)	(68.3, 83.1)
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	(5.1, 8.0)	(5.3, 8.9)	(1.6, 6.2)	(3.9, 13.7)
Yes, they receive training required by the department	(81.7, 86.0)	(79.5, 84.8)	(85.9, 93.3)	(76.9, 89.8)
Yes, they receive training required by the state	(23.3, 28.3)	(22.7, 28.8)	(26.8, 37.7)	(13.9, 27.9)
Yes, they receive optional training	(11.8, 15.9)	(11.1, 15.8)	(9.5, 18.0)	(10.7, 23.9)
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	(12.2, 16.4)	(12.0, 17.0)	(7.9, 15.1)	(11.1, 24.5)
Once every year	(37.5, 43.2)	(34.8, 41.6)	(42.1, 54.2)	(32.9, 50.1)
Less frequently than once a year	(22.3, 27.3)	(22.8, 29.0)	(20.4, 30.3)	(14.3, 28.5)
Does not apply. Firefighters are not required to receive continuing driver training.	(18.4, 23.2)	(19.0, 24.8)	(11.8, 20.9)	(14.9, 29.8)

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b> Yes	(81.9, 86.3) (13.7, 18.1)	(80.2, 85.5) (14.5, 19.8)	(85.0, 93.1) (6.9, 15.0)	(76.0, 89.0) (11.0, 24.0)
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b> No Strongly disagree Disagree Neither agree nor disagree Agree Strongly agree	(5.5, 8.5) (15.8, 20.4) (28.2, 33.7) (29.5, 34.9) (10.4, 14.2)	(5.8, 9.6) (15.4, 20.8) (28.3, 34.8) (27.9, 34.4) (10.1, 14.6)	(4.5, 11.3) (13.3, 22.5) (17.7, 28.1) (32.7, 44.2) (11.1, 18.9)	(1.7, 9.4) (12.7, 26.9) (28.6, 45.8) (23.1, 39.0) (5.6, 16.7)
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b> Some of the time Never About half the time Most of the time	(4.2, 6.9) (20.3, 25.3) (14.8, 19.4) (35.6, 41.3) (14.6, 18.7)	(4.8, 8.3) (19.4, 25.2) (14.1, 19.4) (35.3, 42.1) (13.9, 18.9)	(1.3, 5.9) (19.2, 29.8) (10.3, 19.2) (30.7, 42.0) (18.6, 27.6)	(1.8, 9.8) (16.8, 31.8) (14.8, 29.6) (31.4, 48.8) (6.7, 18.3)
<b>21. How often is Incident Command established when responding to structure fires?</b> Always Rarely Never About half the time Most of the time	(1.5, 3.5) (5.4, 8.5) (5.3, 8.4) (25.0, 30.4) (53.7, 59.4)	(1.2, 3.4) (6.4, 10.3) (6.2, 10.1) (25.4, 31.8) (49.9, 56.8)	(0.1, 1.2) (0.5, 3.7) (1.1, 4.7) (13.7, 23.6) (72.3, 82.6)	(2.4, 11.2) (3.6, 13.3) (3.0, 12.6) (25.8, 42.4) (39.1, 56.9)

(continued)

Always

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	(20.1, 25.1)	(21.9, 28.0)	(5.1, 11.6)	(20.6, 36.5)
Not enough firefighters available at the scene of the fire	(18.8, 23.7)	(20.6, 26.6)	(5.2, 12.3)	(18.0, 33.5)
	(5.0, 7.8)	(4.8, 8.3)	(4.9, 11.8)	(1.9, 10.2)
Does not apply. My department always assigns an Incident Commander for structure fires.	(2.7, 4.9)	(2.5, 5.2)	(0.8, 4.4)	(2.8, 10.5)
Other <i>Legitimately Skipped Question</i>	(53.7, 59.5)	(49.9, 56.8)	(72.9, 83.1)	(39.2, 57.1)
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	(89.1, 92.6)	(89.5, 93.4)	(88.1, 94.4)	(79.9, 92.4)
Develop and coordinate the fire attack strategy	(91.4, 94.5)	(90.0, 93.9)	(92.0, 97.8)	(87.6, 97.1)
Develop and initiate a risk management plan	(49.4, 55.3)	(46.9, 53.9)	(58.0, 69.5)	(39.4, 57.5)
Document all assessments, plans and events related to the fire	(36.0, 41.7)	(36.0, 42.9)	(39.1, 51.1)	(22.3, 38.9)
Ensure that at least four (4) firefighters are on the scene before entering the building	(65.7, 71.3)	(64.4, 71.0)	(65.2, 76.5)	(59.8, 76.7)
Establish a collapse zone around the building	(46.1, 52.0)	(44.9, 51.9)	(52.3, 64.1)	(33.8, 51.8)
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	(45.7, 51.3)	(40.2, 47.0)	(72.0, 82.5)	(30.4, 47.7)
Identify and implement a communication strategy	(61.9, 67.5)	(59.5, 66.3)	(59.5, 71.0)	(62.3, 78.8)
Monitor location of all firefighters at the scene	(73.6, 78.7)	(72.6, 78.6)	(75.0, 85.1)	(65.1, 81.2)
	(7.6, 10.9)	(7.5, 11.6)	(7.3, 15.2)	(3.2, 13.0)

(continued)

Other

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b> Never Some of the time About half the time Most of the time	(11.4, 15.5) (24.0, 29.2) (6.6, 9.9) (27.2, 32.5) (19.9, 24.9)	(11.9, 16.8) (24.5, 30.8) (6.8, 10.7) (25.9, 32.2) (18.0, 23.7)	(4.8, 11.4) (19.3, 29.0) (3.6, 9.3) (29.7, 41.4) (22.6, 33.2)	(10.0, 23.5) (18.1, 33.8) (4.7, 14.9) (20.2, 36.1) (16.4, 32.0)
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b> Always Fires are not big enough to require an Incident Safety Officer Not enough firefighters are available at the scene of the fire Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires. Other <i>Legitimately Skipped Question</i>	(29.5, 35.1) (48.7, 54.6) (11.3, 15.1) (1.4, 3.0) (20.3, 25.2)	(30.1, 36.7) (50.7, 57.7) (9.4, 13.9) (1.4, 3.5) (18.2, 24.0)	(21.5, 32.1) (36.7, 48.3) (18.4, 28.0) (0.6, 3.8) (23.0, 33.7)	(25.7, 43.1) (41.8, 59.7) (5.6, 16.8) (0.8, 5.6) (17.0, 32.9)
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b> Never Some of the time About half the time Most of the time	(26.7, 32.1) (19.5, 24.3) (5.2, 8.0) (20.2, 25.0) (17.8, 22.1)	(27.2, 33.6) (21.9, 27.9) (5.7, 9.3) (19.5, 25.2) (13.1, 18.0)	(6.0, 13.7) (10.7, 19.2) (3.1, 9.0) (21.5, 32.0) (39.0, 50.5)	(36.5, 54.0) (11.5, 25.3) (1.9, 9.6) (13.7, 28.1) (8.2, 20.7)
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b> Always When the building has more than one story/floor When there are enough firefighters on and at the scene of the fire Whenever firefighters enter a burning building Other <i>Legitimately Skipped Question</i>	(7.8, 11.2) (29.6, 35.1) (23.9, 29.1) (3.8, 6.3) (46.4, 52.2)	(8.5, 12.7) (31.6, 38.3) (25.3, 31.6) (3.2, 6.1) (42.4, 49.3)	(4.6, 10.8) (23.0, 33.7) (17.9, 27.9) (6.2, 13.4) (47.4, 59.3)	(3.9, 13.7) (19.2, 35.0) (16.0, 31.3) (0.9, 7.9) (49.8, 67.5)

Other

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	(32.1, 37.8)	(32.2, 39.0)	(23.0, 33.8)	(30.7, 48.4)
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	(7.2, 10.8)	(8.0, 12.3)	(0.2, 3.3)	(7.5, 19.8)
We don't have enough firefighters available at the scene of the fire	(50.6, 56.5)	(54.2, 61.2)	(28.5, 40.0)	(47.5, 65.1)
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	(18.3, 23.2)	(20.3, 26.3)	(5.6, 12.7)	(16.2, 31.5)
We have never established an RIT/RIC	(15.5, 20.1)	(16.3, 21.9)	(3.5, 9.9)	(17.4, 32.8)
We use other fire departments in the area for RITs/RICs	(26.6, 32.0)	(28.7, 35.3)	(17.3, 27.8)	(18.7, 34.6)
We use other safety practices and so we don't need them	(3.1, 5.7)	(2.4, 5.1)	(0.3, 2.7)	(5.9, 17.3)
<i>Legitimately Skipped Question</i>	(3.1, 5.4)	(3.0, 5.9)	(2.9, 8.9)	(0.8, 6.6)
	(18.1, 22.6)	(13.4, 18.5)	(39.0, 50.5)	(8.5, 21.1)
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	(76.2, 81.1)	(75.6, 81.4)	(95.6, 99.4)	(50.9, 68.3)
	(18.9, 23.8)	(18.6, 24.4)	(0.6, 4.4)	(31.7, 49.1)
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No	(4.9, 8.0)	(3.9, 7.2)	(**, **)	(10.6, 24.0)
Some of the time	(2.9, 5.3)	(3.3, 6.3)	(0.0, 1.3)	(2.3, 11.0)
Never	(1.2, 2.8)	(1.3, 3.3)	(**, **)	(0.8, 7.6)
About half the time	(10.9, 15.0)	(12.5, 17.5)	(1.9, 7.0)	(8.9, 21.3)
Most of the time	(72.5, 77.6)	(70.0, 76.2)	(92.8, 97.9)	(53.0, 70.4)

(continued)

Always

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	(11.2, 15.4)	(10.2, 15.0)	(0.1, 4.0)	(21.0, 37.1)
Situation doesn't require them	(7.9, 11.4)	(9.4, 14.0)	(0.5, 4.0)	(5.5, 16.2)
Firefighters think the devices do not always work reliably	(0.1, 1.0)	(0.1, 0.9)	(**, **)	(0.1, 5.7)
Firefighters don't think they need them	(3.5, 5.9)	(4.8, 8.4)	(0.5, 4.0)	(0.1, 3.4)
Devices go off while firefighters are resting	(2.7, 4.9)	(3.6, 6.6)	(0.3, 1.9)	(0.5, 6.4)
<i>Legitimately Skipped Question</i>	(72.9, 78.0)	(70.5, 76.7)	(92.8, 97.9)	(53.1, 70.4)
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	(98.4, 99.6)	(98.5, 99.7)	(97.7, 99.9)	(93.5, 99.6)
	(0.4, 1.6)	(0.3, 1.5)	(0.1, 2.3)	(0.4, 6.5)
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	(46.7, 52.7)	(48.9, 56.0)	(22.0, 33.5)	(50.3, 68.0)
	(46.5, 52.5)	(43.4, 50.5)	(66.0, 77.6)	(30.3, 47.9)
Yes <i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.3, 1.6)	(0.1, 2.5)	(0.4, 6.6)
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	(3.5, 6.3)	(3.4, 6.5)	(0.9, 6.5)	(3.5, 13.7)
Firefighters don't like using the equipment	(0.1, 0.9)	(0.1, 1.3)	(**, **)	(**, **)
Have never needed them (e.g., we don't do interior attacks)	(0.3, 1.5)	(0.3, 1.8)	(**, **)	(0.2, 5.4)
They cost too much, there is not enough money in the budget	(29.0, 34.7)	(30.4, 37.2)	(11.4, 21.1)	(30.6, 48.1)
We don't have enough equipment for all of our firefighters	(22.0, 27.3)	(23.4, 29.7)	(6.4, 14.9)	(22.9, 39.5)
Shared systems work fine for our needs	(20.9, 26.2)	(21.3, 27.5)	(7.7, 16.4)	(23.2, 39.9)
	(3.8, 6.5)	(4.0, 7.1)	(2.9, 9.6)	(1.3, 8.9)
<i>Legitimately Skipped Question</i>	(47.4, 53.3)	(44.3, 51.4)	(66.5, 78.1)	(31.4, 48.9)

Other

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	(0.6, 2.2)	(0.3, 1.7)	(**, **)	(1.4, 9.4)
Some of the time	(3.6, 6.2)	(4.1, 7.5)	(**, **)	(2.8, 11.6)
About half the time	(1.8, 3.9)	(1.9, 4.3)	(**, **)	(1.9, 9.4)
Most of the time	(22.0, 27.2)	(22.6, 28.9)	(9.7, 18.5)	(22.7, 39.1)
<i>Legitimately Skipped Question</i>	(63.3, 68.9)	(61.1, 67.8)	(81.0, 89.9)	(45.2, 63.0)
	(0.4, 1.6)	(0.3, 1.6)	(0.1, 2.5)	(0.4, 6.6)
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	(23.3, 28.6)	(24.4, 30.8)	(6.6, 14.6)	(26.3, 43.6)
Firefighters do not trust that the SCBAs will work reliably	(**, **)	(0.0, 0.9)	(**, **)	(**, **)
Firefighters don't think they need them	(8.6, 12.3)	(9.3, 13.9)	(4.6, 11.5)	(4.9, 15.6)
Firefighters don't like sharing facepieces with others	(0.5, 1.8)	(0.6, 2.3)	(**, **)	(0.1, 5.8)
Firefighters are concerned that the SCBA may be or become contaminated	(**, **)	(0.0, 0.8)	(**, **)	(**, **)
Wearing SCBAs makes it more difficult to work	(4.6, 7.5)	(5.7, 9.4)	(0.8, 4.7)	(1.6, 9.2)
Firefighters don't have SCBAs to use	(2.8, 5.4)	(3.1, 6.2)	(**, **)	(2.5, 11.8)
<i>Legitimately Skipped Question</i>	(64.9, 70.5)	(62.2, 68.9)	(81.9, 90.6)	(48.9, 66.9)
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	(39.7, 46.3)	(38.5, 46.3)	(37.9, 51.4)	(34.4, 53.7)
Once a month or more	(16.5, 21.7)	(14.9, 21.0)	(19.7, 32.4)	(11.2, 26.1)
Several times a year	(12.8, 17.5)	(12.8, 18.6)	(10.2, 19.4)	(8.3, 22.2)
Once a year	(14.1, 19.1)	(14.4, 20.4)	(10.1, 19.1)	(10.0, 24.6)
Less than once a year	(3.1, 5.9)	(3.5, 7.0)	(0.1, 0.6)	(2.5, 11.7)
Never. Maintenance has not been done on our SCBAs.	(0.8, 2.5)	(0.8, 2.8)	(0.3, 3.6)	(0.2, 9.0)
Does not apply. My department does not have SCBAs.	(**, **)	(**, **)	(**, **)	(**, **)
<i>Legitimately Skipped Question</i>	(0.5, 2.0)	(0.3, 1.9)	(0.1, 2.9)	(0.5, 7.8)

(continued)



Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	(15.5, 19.8) (80.2, 84.5)	(12.7, 17.7) (82.3, 87.3)	(29.1, 40.2) (59.8, 70.9)	(6.3, 17.9) (82.1, 93.7)
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero				
CBRN SCBA devices are not needed in our department	(18.5, 23.6)	(18.2, 24.3)	(9.7, 18.7)	(19.9, 36.3)
We didn't know they were available	(12.9, 17.5)	(13.0, 18.5)	(7.3, 15.6)	(11.3, 25.6)
We don't have adequate technical information to purchase them	(17.3, 22.3)	(18.1, 24.2)	(10.3, 19.8)	(13.1, 28.7)
We don't have adequate funding to purchase them	(57.2, 63.2)	(60.0, 67.1)	(38.5, 50.9)	(53.3, 71.2)
<i>Legitimately Skipped Question</i>	(3.7, 6.4)	(2.7, 5.5)	(5.4, 12.3)	(2.5, 11.9)
	(16.2, 20.6)	(13.4, 18.7)	(30.0, 41.3)	(6.3, 18.0)
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> Yes	(74.8, 79.9) (20.1, 25.2)	(74.6, 80.4) (19.6, 25.4)	(83.0, 91.4) (8.6, 17.0)	(58.0, 74.5) (25.5, 42.0)
<b>38a. At your fire department, where do you have AEDs?</b> No				
At the fire station(s)	(1.9, 4.1)	(2.1, 4.9)	(0.0, 0.5)	(1.4, 8.8)
On the emergency vehicles (or apparatus)	(58.9, 64.9)	(58.0, 65.1)	(66.2, 77.8)	(44.9, 63.0)
Both at the fire station(s) and on the vehicles (or apparatus)	(8.7, 12.3)	(8.6, 13.1)	(9.7, 18.0)	(3.4, 13.0)
<i>Legitimately Skipped Question</i>	(22.2, 27.7)	(21.5, 27.8)	(10.0, 19.7)	(27.5, 44.8)
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b> After every time they are used	(11.7, 16.4)	(9.8, 15.2)	(14.6, 24.6)	(8.6, 24.1)
Once a month or more	(22.6, 28.5)	(21.2, 28.3)	(19.9, 31.1)	(20.5, 40.1)
Several times a year	(18.0, 23.4)	(19.4, 26.4)	(14.9, 25.6)	(6.8, 21.6)
Once a year	(19.6, 25.3)	(18.5, 25.2)	(20.0, 31.7)	(14.0, 32.0)
Less frequently than once a year	(5.8, 9.5)	(6.0, 10.6)	(3.5, 10.4)	(2.8, 14.8)
Never. Maintenance on our AEDs has not been done.	(8.4, 12.8)	(8.4, 13.6)	(2.2, 9.2)	(8.8, 24.8)

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Never	(1.0, 2.6)	(1.1, 3.1)	(0.1, 3.7)	(0.4, 6.4)
Some of the time	(3.6, 6.1)	(4.6, 7.9)	(0.7, 5.1)	(0.6, 7.6)
About half the time	(1.8, 3.8)	(2.0, 4.5)	(0.4, 4.2)	(0.8, 7.4)
Most of the time	(18.3, 23.1)	(20.8, 26.8)	(7.1, 15.1)	(12.8, 26.5)
	(67.7, 73.0)	(62.0, 68.7)	(80.5, 89.6)	(66.5, 81.9)
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Always	(15.9, 20.4)	(15.8, 21.2)	(13.1, 22.4)	(11.6, 25.4)
Some of the time	(61.6, 67.3)	(58.9, 65.7)	(68.7, 79.3)	(54.2, 71.4)
Never	(8.6, 12.2)	(9.2, 13.6)	(3.2, 8.5)	(7.0, 18.3)
About half the time	(4.2, 6.9)	(4.5, 7.9)	(1.3, 6.1)	(2.5, 11.4)
Most of the time	(1.1, 2.9)	(1.3, 3.5)	(0.0, 0.5)	(0.8, 7.4)

(continued)

Always

Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	(45.7, 51.6)	(47.3, 54.3)	(30.0, 41.5)	(43.8, 61.4)
Adequate	(42.8, 48.6)	(41.3, 48.2)	(46.9, 59.0)	(33.7, 51.1)
More than adequate	(4.5, 7.2)	(3.2, 6.1)	(8.1, 16.0)	(2.3, 10.8)
<b>42b. Training</b>				
Not adequate	(36.3, 42.0)	(37.5, 44.4)	(28.5, 39.2)	(29.4, 46.7)
Adequate	(52.7, 58.6)	(51.4, 58.4)	(52.9, 64.4)	(46.2, 64.0)
More than adequate	(4.0, 6.8)	(3.0, 5.7)	(4.9, 11.7)	(3.6, 13.8)
<b>42c. Personnel</b>				
Not adequate	(48.5, 54.5)	(50.1, 57.2)	(42.4, 54.1)	(37.2, 55.7)
Adequate	(41.3, 47.3)	(40.0, 47.1)	(39.1, 51.1)	(37.4, 55.9)
More than adequate	(3.1, 5.7)	(1.8, 4.3)	(4.1, 10.9)	(3.6, 13.8)
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	(24.2, 29.5)	(24.5, 30.8)	(9.0, 17.6)	(29.4, 46.6)
Several times per year	(31.6, 37.2)	(32.0, 38.7)	(28.4, 39.9)	(23.4, 39.9)
Never	(30.5, 35.9)	(28.9, 35.4)	(41.2, 53.3)	(16.9, 32.2)
Once a month or more	(4.5, 7.2)	(3.8, 6.8)	(4.2, 8.9)	(3.9, 14.4)
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	(53.1, 58.9)	(53.4, 60.4)	(52.5, 64.1)	(40.9, 58.8)
On the Internet	(22.4, 27.1)	(20.8, 26.6)	(35.1, 46.5)	(8.2, 20.4)
From colleagues in other departments	(8.3, 11.8)	(6.9, 10.8)	(9.4, 17.2)	(7.4, 19.3)
At conferences or other meetings	(5.7, 8.5)	(4.5, 7.7)	(10.3, 17.8)	(1.9, 9.9)
<i>Legitimately Skipped Question</i>	(24.2, 29.5)	(24.6, 30.9)	(9.0, 17.5)	(29.1, 46.2)

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	(50.4, 56.2)	(48.4, 55.4)	(66.9, 77.9)	(31.9, 49.1)
<i>Legitimately Skipped Question</i>	(17.8, 22.5)	(17.8, 23.5)	(10.8, 19.4)	(16.9, 31.8)
	(24.1, 29.4)	(24.6, 30.9)	(9.0, 17.6)	(28.3, 45.1)
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	(57.7, 63.5)	(57.5, 64.4)	(64.6, 75.8)	(40.2, 58.3)
<i>Legitimately Skipped Question</i>	(10.2, 14.1)	(8.8, 13.2)	(12.6, 21.9)	(7.4, 19.6)
	(24.7, 30.0)	(25.1, 31.5)	(9.1, 17.7)	(30.1, 47.7)
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	(21.1, 26.1)	(21.1, 27.1)	(17.1, 27.0)	(16.9, 32.3)
Training sessions	(41.3, 47.2)	(40.4, 47.4)	(43.3, 55.5)	(31.7, 49.4)
Provide copies of NIOSH reports to firefighters	(14.2, 18.3)	(12.1, 16.9)	(24.1, 34.3)	(6.4, 17.9)
Provide copies of NIOSH report summaries to firefighters	(5.0, 7.7)	(4.6, 7.9)	(6.4, 13.2)	(1.5, 9.1)
Provide summaries prepared by department to firefighters	(1.2, 2.7)	(1.0, 2.9)	(2.1, 6.9)	(0.0, 0.8)
Postings on bulletin boards	(35.6, 41.3)	(35.3, 42.0)	(40.6, 52.8)	(22.1, 38.6)
Post report on the department website	(0.7, 1.8)	(0.5, 2.0)	(1.4, 5.1)	(**, **)
Send message to firefighters by email	(4.3, 6.5)	(3.2, 5.7)	(10.1, 16.8)	(0.5, 6.6)
<i>Legitimately Skipped Question</i>	(0.8, 2.0)	(0.7, 2.4)	(1.1, 4.4)	(**, **)
	(36.2, 42.0)	(35.3, 42.1)	(24.5, 35.8)	(41.1, 59.0)
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
Yes	(31.6, 36.9)	(28.6, 35.1)	(52.9, 64.9)	(13.4, 27.3)
<i>Legitimately Skipped Question</i>	(35.5, 41.3)	(36.5, 43.4)	(22.8, 33.9)	(33.9, 51.6)
No	(24.8, 30.2)	(25.2, 31.7)	(9.2, 17.9)	(29.8, 47.1)

(continued)

## Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	(0.2, 1.1)	(0.1, 0.9)	(0.2, 2.0)	(0.1, 6.2)
Disagree	(2.6, 4.8)	(2.6, 5.4)	(3.0, 8.8)	(0.1, 6.0)
Neither Agree nor Disagree	(16.5, 21.2)	(16.6, 22.2)	(13.7, 23.0)	(11.3, 25.5)
Agree	(42.7, 48.6)	(41.1, 48.1)	(52.2, 64.2)	(28.4, 46.3)
Strongly Agree	(2.7, 5.0)	(2.2, 4.8)	(3.1, 8.1)	(1.5, 10.2)
<i>Legitimately Skipped Question</i>	(25.3, 30.8)	(25.6, 32.2)	(9.3, 18.0)	(31.4, 49.3)
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	(0.2, 1.0)	(0.1, 0.9)	(0.2, 1.8)	(0.1, 6.3)
Disagree	(1.1, 2.6)	(0.9, 2.8)	(1.5, 5.9)	(0.1, 6.2)
Neither Agree nor Disagree	(17.5, 22.3)	(18.5, 24.4)	(12.8, 21.9)	(10.7, 24.5)
Agree	(42.4, 48.4)	(40.6, 47.6)	(53.1, 65.0)	(27.8, 45.9)
Strongly Agree	(3.5, 6.1)	(2.7, 5.5)	(4.8, 11.2)	(2.1, 11.4)
<i>Legitimately Skipped Question</i>	(25.4, 30.9)	(25.7, 32.2)	(9.3, 18.1)	(31.7, 49.7)
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	(0.2, 1.0)	(0.0, 0.7)	(0.4, 2.4)	(0.1, 6.3)
Disagree	(2.3, 4.4)	(2.3, 4.9)	(2.8, 8.3)	(0.1, 6.3)
Neither Agree nor Disagree	(24.0, 29.4)	(24.0, 30.3)	(21.3, 32.1)	(18.1, 34.3)
Agree	(35.0, 40.8)	(33.6, 40.5)	(43.4, 55.6)	(21.9, 39.0)
Strongly Agree	(2.8, 5.2)	(2.5, 5.4)	(3.2, 8.2)	(1.0, 9.0)
<i>Legitimately Skipped Question</i>	(25.4, 30.8)	(25.7, 32.2)	(9.3, 18.1)	(31.4, 49.3)

(continued)

**Exhibit B-3b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	(54.4, 60.4)	(51.4, 58.6)	(67.8, 78.9)	(41.0, 59.2)
Respirator maintenance program guide	(11.9, 15.9)	(11.6, 16.5)	(15.9, 25.4)	(3.6, 12.5)
CDs of firefighter program materials	(25.4, 30.7)	(24.7, 31.1)	(28.5, 39.9)	(15.8, 31.2)
Alerts	(29.1, 34.5)	(27.7, 34.2)	(41.3, 53.4)	(12.9, 27.4)
Hazard IDs	(14.5, 19.0)	(14.0, 19.3)	(14.5, 24.1)	(9.4, 22.7)
Workplace Solutions	(10.7, 14.6)	(10.7, 15.5)	(11.0, 19.6)	(4.6, 15.1)
	(0.4, 1.4)	(0.5, 2.0)	(0.2, 2.4)	(**, **)
None. I have not seen any NIOSH materials.	(22.6, 27.9)	(22.3, 28.7)	(10.2, 19.1)	(27.5, 44.9)
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	(0.8, 2.2)	(0.6, 2.2)	(0.7, 3.6)	(0.4, 6.6)
Dissatisfied	(0.0, 0.7)	(0.1, 1.1)	(**, **)	(**, **)
Neither satisfied nor dissatisfied	(18.8, 23.8)	(19.5, 25.5)	(14.3, 24.1)	(12.8, 27.3)
Satisfied	(44.1, 50.1)	(43.5, 50.6)	(49.4, 61.3)	(30.5, 48.4)
Very satisfied	(4.0, 6.7)	(2.8, 5.7)	(7.2, 14.3)	(2.0, 10.4)
<i>Legitimately Skipped Question</i>	(22.4, 27.7)	(22.1, 28.3)	(10.2, 19.0)	(27.4, 44.7)
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	(56.5, 62.2)	(57.6, 64.4)	(37.5, 49.2)	(60.4, 76.9)
No	(31.9, 37.3)	(29.2, 35.7)	(45.4, 57.1)	(19.1, 35.0)
Yes, longer than one year ago	(4.9, 7.6)	(5.1, 8.6)	(3.5, 8.6)	(2.1, 9.3)

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>1. Does your department have a Safety Officer?</b>	1,587	930	515	142
	1,587	930	515	142
<b>2. Does your department have a Training Officer?</b>				
Yes				
No	1,600	940	520	140
	1,600	940	520	140
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	1,600	937	520	143
Maintenance of SCBAs	1,600	937	520	143
Motor vehicle safety	1,600	937	520	143
Participation in a personal physical fitness program	1,600	937	520	143
Participation in regular health screenings for cardiovascular disease (CVD)	1,600	937	520	143
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	1,600	937	520	143
Use of Personal Alert Safety System (PASS) devices	1,600	937	520	143
Use of personal protective equipment and protective clothing	1,600	937	520	143
Use of radio communications	1,600	937	520	143
	1,600	937	520	143
Does not apply. Our fire department does not use SOPs/SOGs.	1,600	937	520	143

Other

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	1,607	946	521	140
Optional Training	1,607	946	521	140
Required Training	1,607	946	521	140
<b>4b. Driving safety</b>				
No Training	1,598	938	520	140
Optional Training	1,598	938	520	140
Required Training	1,598	938	520	140
<b>4c. Incident Command systems</b>				
No Training	1,584	928	514	142
Optional Training	1,584	928	514	142
Required Training	1,584	928	514	142
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	1,581	929	511	141
Optional Training	1,581	929	511	141
Required Training	1,581	929	511	141
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	1,511	871	508	132
Optional Training	1,511	871	508	132
Required Training	1,511	871	508	132
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1,611	948	520	143
Optional Training	1,611	948	520	143
Required Training	1,611	948	520	143

(continued)



Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>4g. Use of radio communication devices</b>				
No Training	1,606	945	517	144
Optional Training	1,606	945	517	144
Required Training	1,606	945	517	144
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	1,611	949	520	142
Other officers within our department	1,611	949	520	142
State fire training agency	1,611	949	520	142
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	1,611	949	520	142
Conferences or regional meetings	1,611	949	520	142
	1,611	949	520	142
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Other				
Roadside incidents/Motor Vehicle Accidents (MVA)	1,622	954	524	144
Scuba diving	1,622	954	524	144
Swift water rescue	1,622	954	524	144
Wildland fire fighting	1,622	954	524	144
	1,622	954	524	144
	1,622	954	524	144
<b>BAZMA How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Other				
Not at all familiar	1,610	947	521	142
Not very familiar	1,610	947	521	142
Somewhat familiar	1,610	947	521	142
Very familiar	1,610	947	521	142

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>9. How familiar are you with NIOSH’s Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	1,611	947	521	143
Not very familiar	1,611	947	521	143
Somewhat familiar	1,611	947	521	143
Very familiar	1,611	947	521	143
<b>10. How does your department receive information about NIOSH’s firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	1,609	946	522	141
National conference presentations	1,609	946	522	141
State-level conference presentations	1,609	946	522	141
Other firefighters or departments	1,609	946	522	141
At seminars or other training opportunities (not conferences)	1,609	946	522	141
Trade publications (such as Firehouse and Fire Engineering)	1,609	946	522	141
NIOSH website	1,609	946	522	141
Links from other websites (such as NFPA and Firehouse)	1,609	946	522	141
Media reports—newspaper, television, radio	1,609	946	522	141
Does not apply. We have not received information about NIOSH Other recommendations.	1,609	946	522	141
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	1,536	895	509	132
Developed new SOPs/SOGs	1,536	895	509	132
Made changes to SOPs/SOGs	1,536	895	509	132
Justified current budget/staffing	1,536	895	509	132
Made new budget/staffing requests	1,536	895	509	132
Justified grant applications	1,536	895	509	132
Does not apply. We have not used NIOSH recommendations.	1,536	895	509	132
<i>Legitimately Skipped Question</i>	1,536	895	509	132

(continued)

Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	1,530	891	507	132
Personal protective equipment and clothing	1,530	891	507	132
PASS systems	1,530	891	507	132
SCBA Incident Command systems	1,530	891	507	132
Radio communications	1,530	891	507	132
Physical fitness and cardiovascular disease (CVD)	1,530	891	507	132
Building code compliance (e.g., warning against the use of wooden trusses)	1,530	891	507	132
Does not apply. We have not used NIOSH recommendations for training purposes.	1,530	891	507	132
Other <i>Legitimately Skipped Question</i>	1,530	891	507	132
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	1,596	942	515	139
No Yes, it's optional	1,596	942	515	139
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	1,582	933	510	139
Less frequently than once a year	1,582	933	510	139
One time a year	1,582	933	510	139
More than one time a year	1,582	933	510	139
Does not apply. Firefighters are not required to receive CVD screenings	1,582	933	510	139

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	1,616	949	524	143
Yes, they receive training required by the department	1,616	949	524	143
Yes, they receive training required by the state	1,616	949	524	143
Yes, they receive optional training	1,616	949	524	143
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	1,611	946	522	143
Once every year	1,611	946	522	143
Less frequently than once a year	1,611	946	522	143
Does not apply. Firefighters are not required to receive continuing driver training.	1,611	946	522	143
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
Yes	1,613	947	522	144
	1,613	947	522	144
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
No				
Strongly disagree	1,603	943	520	140
Disagree	1,603	943	520	140
Neither agree nor disagree	1,603	943	520	140
Agree	1,603	943	520	140
Strongly agree	1,603	943	520	140

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	1,616	950	524	142
NeverAbout half the time	1,616	950	524	142
Most of the time	1,616	950	524	142
	1,616	950	524	142
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Always	1,604	942	521	141
Rarely	1,604	942	521	141
NeverAbout half the time	1,604	942	521	141
Most of the time	1,604	942	521	141
	1,604	942	521	141
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Always				
Fires are not usually big enough to require an Incident Commander	1,600	941	519	140
Not enough firefighters available at the scene of the fire	1,600	941	519	140
	1,600	941	519	140
Does not apply. My department always assigns an Incident Commander for structure fires.	1,600	941	519	140
Other				
<i>Legitimately Skipped Question</i>	1,600	941	519	140

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander’s responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	1,588	936	516	136
Develop and coordinate the fire attack strategy	1,588	936	516	136
Develop and initiate a risk management plan	1,588	936	516	136
Document all assessments, plans and events related to the fire	1,588	936	516	136
Ensure that at least four (4) firefighters are on the scene before entering the building	1,588	936	516	136
Establish a collapse zone around the building	1,588	936	516	136
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	1,588	936	516	136
Identify and implement a communication strategy	1,588	936	516	136
Monitor location of all firefighters at the scene	1,588	936	516	136
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Other Never	1,605	946	522	137
Some of the time	1,605	946	522	137
About half the time	1,605	946	522	137
Most of the time	1,605	946	522	137
	1,605	946	522	137
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Always Fires are not big enough to require an Incident Safety Officer	1,588	936	518	134
Not enough firefighters are available at the scene of the fire	1,588	936	518	134
	1,588	936	518	134
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	1,588	936	518	134
Other Legitimately Skipped Question	1,588	936	518	134

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	1,602	943	518	141
Some of the time	1,602	943	518	141
About half the time	1,602	943	518	141
Most of the time	1,602	943	518	141
	1,602	943	518	141
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
Always				
When the building has more than one story/floor	1,600	940	521	139
When there are enough firefighters on and at the scene of the fire	1,600	940	521	139
Whenever firefighters enter a burning building	1,600	940	521	139
	1,600	940	521	139
<i>Legitimately Skipped Question</i>	1,600	940	521	139
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	1,575	923	515	137
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	1,575	923	515	137
We don't have enough firefighters available at the scene of the fire	1,575	923	515	137
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	1,575	923	515	137
We have never established an RIT/RIC	1,575	923	515	137
We use other fire departments in the area for RITs/RICs	1,575	923	515	137
We use other safety practices and so we don't need them	1,575	923	515	137
	1,575	923	515	137
<i>Legitimately Skipped Question</i>	1,575	923	515	137
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
Yes	1,606	944	523	139
No	1,606	944	523	139

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
Some of the time	1,600	941	521	138
Never	1,600	941	521	138
About half the time	1,600	941	521	138
Most of the time	1,600	941	521	138
	1,600	941	521	138
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
Always				
They don't have a PASS device to use	1,590	933	520	137
Situation doesn't require them	1,590	933	520	137
Firefighters think the devices do not always work reliably	1,590	933	520	137
Firefighters don't think they need them	1,590	933	520	137
Devices go off while firefighters are resting	1,590	933	520	137
<i>Legitimately Skipped Question</i>	1,590	933	520	137
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	1,606	945	522	139
	1,606	945	522	139
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	1,521	908	476	137
	1,521	908	476	137
Yes <i>Legitimately Skipped Question</i>	1,521	908	476	137

(continued)



Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	1,517	904	474	139
Firefighters don't like using the equipment	1,517	904	474	139
Have never needed them (e.g., we don't do interior attacks)	1,517	904	474	139
They cost too much, there is not enough money in the budget	1,517	904	474	139
We don't have enough equipment for all of our firefighters	1,517	904	474	139
Shared systems work fine for our needs	1,517	904	474	139
<i>Legitimately Skipped Question</i>	1,517	904	474	139
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1,536	915	482	139
Some of the time	1,536	915	482	139
About half the time	1,536	915	482	139
Most of the time	1,536	915	482	139
<i>Legitimately Skipped Question</i>	1,536	915	482	139
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	1,525	910	481	134
Firefighters do not trust that the SCBAs will work reliably	1,525	910	481	134
Firefighters don't think they need them	1,525	910	481	134
Firefighters don't like sharing facepieces with others	1,525	910	481	134
Firefighters are concerned that the SCBA may be or become contaminated	1,525	910	481	134
Wearing SCBAs makes it more difficult to work	1,525	910	481	134
Firefighters don't have SCBAs to use	1,525	910	481	134
<i>Legitimately Skipped Question</i>	1,525	910	481	134

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	1,270	739	415	116
Once a month or more	1,270	739	415	116
Several times a year	1,270	739	415	116
Once a year	1,270	739	415	116
Less than once a year	1,270	739	415	116
Never. Maintenance has not been done on our SCBAs.	1,270	739	415	116
Does not apply. My department does not have SCBAs.	1,270	739	415	116
<i>Legitimately Skipped Question</i>	1,270	739	415	116
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	1,518	899	487	132
	1,518	899	487	132
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
Zero				
CBRN SCBA devices are not needed in our department	1,454	853	473	128
We didn't know they were available	1,454	853	473	128
We don't have adequate technical information to purchase them	1,454	853	473	128
We don't have adequate funding to purchase them	1,454	853	473	128
	1,454	853	473	128
<i>Legitimately Skipped Question</i>	1,454	853	473	128
<b>38a. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
Yes	1,610	951	515	144
	1,610	951	515	144
<b>38a. At your fire department, where do you have AEDs?</b>				
No				
At the fire station(s)	1,424	858	433	133
On the emergency vehicles (or apparatus)	1,424	858	433	133
Both at the fire station(s) and on the vehicles (or apparatus)	1,424	858	433	133
<i>Legitimately Skipped Question</i>	1,424	858	433	133

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	1,235	702	437	96
Once a month or more	1,235	702	437	96
Several times a year	1,235	702	437	96
Once a year	1,235	702	437	96
Less frequently than once a year	1,235	702	437	96
Never. Maintenance on our AEDs has not been done.	1,235	702	437	96
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Never	1,610	946	523	141
Some of the time	1,610	946	523	141
About half the time	1,610	946	523	141
Most of the time	1,610	946	523	141
	1,610	946	523	141
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Always	1,612	947	523	142
Some of the time	1,612	947	523	142
Never About half the time	1,612	947	523	142
Most of the time	1,612	947	523	142
	1,612	947	523	142

(continued)

Always

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	1,608	944	521	143
Adequate	1,608	944	521	143
More than adequate	1,608	944	521	143
<b>42b. Training</b>				
Not adequate	1,608	945	521	142
Adequate	1,608	945	521	142
More than adequate	1,608	945	521	142
<b>42c. Personnel</b>				
Not adequate	1,551	904	516	131
Adequate	1,551	904	516	131
More than adequate	1,551	904	516	131
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	1,605	948	518	139
Never	1,605	948	518	139
Several times per year	1,605	948	518	139
Once a month or more	1,605	948	518	139
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	1,605	945	519	141
On the Internet	1,605	945	519	141
From colleagues in other departments	1,605	945	519	141
At conferences or other meetings	1,605	945	519	141
<i>Legitimately Skipped Question</i>	1,605	945	519	141

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	1,611	948	519	144
<i>Legitimately Skipped Question</i>	1,611	948	519	144
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	1,583	929	518	136
<i>Legitimately Skipped Question</i>	1,583	929	518	136
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	1,585	935	511	139
Training sessions	1,585	935	511	139
Provide copies of NIOSH reports to firefighters	1,585	935	511	139
Provide copies of NIOSH report summaries to firefighters	1,585	935	511	139
Provide summaries prepared by department to firefighters	1,585	935	511	139
Postings on bulletin boards	1,585	935	511	139
Post report on the department website	1,585	935	511	139
Send message to firefighters by email	1,585	935	511	139
<i>Legitimately Skipped Question</i>	1,585	935	511	139
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
Yes	1,564	923	504	137
<i>Legitimately Skipped Question</i>	1,564	923	504	137
No	1,564	923	504	137

(continued)

**Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	1,547	908	507	132
Disagree	1,547	908	507	132
Neither Agree nor Disagree	1,547	908	507	132
Agree	1,547	908	507	132
Strongly Agree	1,547	908	507	132
<i>Legitimately Skipped Question</i>	1,547	908	507	132
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	1,537	905	503	129
Disagree	1,537	905	503	129
Neither Agree nor Disagree	1,537	905	503	129
Agree	1,537	905	503	129
Strongly Agree	1,537	905	503	129
<i>Legitimately Skipped Question</i>	1,537	905	503	129
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	1,537	904	502	131
Disagree	1,537	904	502	131
Neither Agree nor Disagree	1,537	904	502	131
Agree	1,537	904	502	131
Strongly Agree	1,537	904	502	131
<i>Legitimately Skipped Question</i>	1,537	904	502	131

(continued)

## Exhibit B-3c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Type (continued)

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	1,537	896	507	134
Respirator maintenance program guide	1,537	896	507	134
CDs of firefighter program materials	1,537	896	507	134
Alerts	1,537	896	507	134
Hazard IDs	1,537	896	507	134
Workplace Solutions	1,537	896	507	134
None. I have not seen any NIOSH materials.	1,537	896	507	134
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1,536	897	506	133
Dissatisfied	1,536	897	506	133
Neither satisfied nor dissatisfied	1,536	897	506	133
Satisfied	1,536	897	506	133
Very satisfied	1,536	897	506	133
<i>Legitimately Skipped Question</i>	1,536	897	506	133
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	1,589	934	518	137
No	1,589	934	518	137
Yes, longer than one year ago	1,589	934	518	137

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>1. Does your department have a Safety Officer?</b>	70.3	86.8 <sup>[2,3]</sup>	72.0 <sup>[1]</sup>	68.8 <sup>[1]</sup>
	29.7	13.2 <sup>[2,3]</sup>	28.0 <sup>[1]</sup>	31.2 <sup>[1]</sup>
<b>2. Does your department have a Training Officer?</b>	88.5	99.0 <sup>[2,3]</sup>	91.5 <sup>[1,3]</sup>	86.7 <sup>[1,2]</sup>
No	11.5	1.0 <sup>[2,3,+]</sup>	8.5 <sup>[1,3]</sup>	13.3 <sup>[1,2]</sup>
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
No				
Incident Command Systems	83.7	97.7 <sup>[2,3]</sup>	93.1 <sup>[1,3]</sup>	79.0 <sup>[1,2]</sup>
Maintenance of SCBAs	69.7	87.5 <sup>[2,3]</sup>	77.1 <sup>[1,3]</sup>	65.7 <sup>[1,2]</sup>
Motor vehicle safety	78.8	92.3 <sup>[2,3]</sup>	82.8 <sup>[1,3]</sup>	76.5 <sup>[1,2]</sup>
Participation in a personal physical fitness program	11.0	54.0 <sup>[2,3]</sup>	19.7 <sup>[1,3]</sup>	5.5 <sup>[1,2]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	16.8	50.1 <sup>[2,3]</sup>	26.8 <sup>[1,3]</sup>	11.0 <sup>[1,2]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	40.4	89.4 <sup>[2,3]</sup>	60.8 <sup>[1,3]</sup>	29.4 <sup>[1,2]</sup>
Use of Personal Alert Safety System (PASS) devices	75.4	90.4 <sup>[2,3]</sup>	84.8 <sup>[1,3]</sup>	70.6 <sup>[1,2]</sup>
Use of personal protective equipment and protective clothing	89.1	96.8 <sup>[2,3]</sup>	93.1 <sup>[1,3]</sup>	87.1 <sup>[1,2]</sup>
Use of radio communications	84.8	95.0 <sup>[2,3]</sup>	89.6 <sup>[1,3]</sup>	82.3 <sup>[1,2]</sup>
Other	8.7	16.8 <sup>[3]</sup>	13.5 <sup>[3]</sup>	6.3 <sup>[1,2]</sup>
Does not apply. Our fire department does not use SOPs/SOGs.	5.0	** <sup>[2,3]</sup>	2.1 <sup>[1,3]</sup>	6.5 <sup>[1,2]</sup>

(continued)



Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.1	0.4 <sup>[+]</sup>	** <sup>[3,+]</sup>	1.6 <sup>[2]</sup>
Optional Training	16.7	2.6 <sup>[2,3]</sup>	7.6 <sup>[1,3]</sup>	21.4 <sup>[1,2]</sup>
Required Training	82.8	97.0 <sup>[2,3]</sup>	92.7 <sup>[1,3]</sup>	77.8 <sup>[1,2]</sup>
<b>4b. Driving safety</b>				
No Training	3.9	1.4 <sup>[3]</sup>	1.2 <sup>[3]</sup>	5.3 <sup>[1,2]</sup>
Optional Training	18.6	4.1 <sup>[2,3]</sup>	11.8 <sup>[1,3]</sup>	22.2 <sup>[1,2]</sup>
Required Training	77.7	94.5 <sup>[2,3]</sup>	87.4 <sup>[1,3]</sup>	72.6 <sup>[1,2]</sup>
<b>4c. Incident Command systems</b>				
No Training	2.9	0.1 <sup>[3,+]</sup>	1.0 <sup>[3]</sup>	3.9 <sup>[1,2]</sup>
Optional Training	27.4	4.7 <sup>[2,3]</sup>	14.2 <sup>[1,3]</sup>	34.3 <sup>[1,2]</sup>
Required Training	69.9	95.1 <sup>[2,3]</sup>	84.8 <sup>[1,3]</sup>	62.1 <sup>[1,2]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	6.6	3.2 <sup>[3]</sup>	5.0	7.4 <sup>[1]</sup>
Optional Training	33.6	10.7 <sup>[2,3]</sup>	26.2 <sup>[1,3]</sup>	37.8 <sup>[1,2]</sup>
Required Training	60.3	87.3 <sup>[2,3]</sup>	69.0 <sup>[1,3]</sup>	55.3 <sup>[1,2]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	28.5	1.7 <sup>[2,3]</sup>	12.4 <sup>[1,3]</sup>	37.1 <sup>[1,2]</sup>
Optional Training	36.2	10.9 <sup>[2,3]</sup>	34.7 <sup>[1]</sup>	38.0 <sup>[1]</sup>
Required Training	35.5	87.4 <sup>[2,3]</sup>	53.6 <sup>[1,3]</sup>	24.9 <sup>[1,2]</sup>

(continued)

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.5	1.2 <sup>[+]</sup>	0.9	1.7
Optional Training	9.9	3.2 <sup>[3]</sup>	5.4 <sup>[3]</sup>	12.1 <sup>[1,2]</sup>
Required Training	88.9	95.7 <sup>[3]</sup>	94.0 <sup>[3]</sup>	86.3 <sup>[1,2]</sup>
<b>4g. Use of radio communication devices</b>				
No Training	2.7	2.3	1.6	3.2
Optional Training	21.4	6.4 <sup>[2,3]</sup>	14.1 <sup>[1,3]</sup>	25.2 <sup>[1,2]</sup>
Required Training	76.2	92.1 <sup>[2,3]</sup>	84.4 <sup>[1,3]</sup>	71.9 <sup>[1,2]</sup>
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	84.9	97.7 <sup>[2,3]</sup>	89.3 <sup>[1,3]</sup>	82.4 <sup>[1,2]</sup>
Other officers within our department	82.8	96.6 <sup>[2,3]</sup>	89.9 <sup>[1,3]</sup>	79.1 <sup>[1,2]</sup>
State fire training agency	77.4	74.9 <sup>[2]</sup>	83.9 <sup>[1,3]</sup>	74.7 <sup>[2]</sup>
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	20.9	67.8 <sup>[2,3]</sup>	36.5 <sup>[1,3]</sup>	12.1 <sup>[1,2]</sup>
Conferences or regional meetings	51.7	77.6 <sup>[2,3]</sup>	61.9 <sup>[1,3]</sup>	46.1 <sup>[1,2]</sup>
Other	25.2	28.0	29.9 <sup>[3]</sup>	23.0 <sup>[2]</sup>
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	55.3	57.9	62.1 <sup>[3]</sup>	52.2 <sup>[2]</sup>
Scuba diving	7.5	21.4 <sup>[2,3]</sup>	10.5 <sup>[1,3]</sup>	5.6 <sup>[1,2]</sup>
Swift water rescue	11.2	48.2 <sup>[2,3]</sup>	17.2 <sup>[1,3]</sup>	7.0 <sup>[1,2]</sup>
Wildland fire fighting	47.0	38.7 <sup>[3]</sup>	40.0 <sup>[3]</sup>	50.5 <sup>[1,2]</sup>
HAZMAT	66.7	92.4 <sup>[2,3]</sup>	80.5 <sup>[1,3]</sup>	59.5 <sup>[1,2]</sup>
Other	31.2	43.6 <sup>[2,3]</sup>	34.0 <sup>[1]</sup>	29.4 <sup>[1]</sup>

(continued)

Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	8.3	0.3 <sup>[2,3,+]</sup>	3.6 <sup>[1,3]</sup>	10.7 <sup>[1,2]</sup>
Not very familiar	24.3	6.0 <sup>[2,3]</sup>	16.2 <sup>[1,3]</sup>	28.7 <sup>[1,2]</sup>
Somewhat familiar	58.1	54.3 <sup>[2]</sup>	64.9 <sup>[1,3]</sup>	55.3 <sup>[2]</sup>
Very familiar	9.3	39.3 <sup>[2,3]</sup>	15.3 <sup>[1,3]</sup>	5.3 <sup>[1,2]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	20.8	5.8 <sup>[2,3]</sup>	13.0 <sup>[1,3]</sup>	24.9 <sup>[1,2]</sup>
Not very familiar	33.5	19.7 <sup>[2,3]</sup>	28.4 <sup>[1,3]</sup>	36.4 <sup>[1,2]</sup>
Somewhat familiar	37.9	44.6 <sup>[3]</sup>	45.9 <sup>[3]</sup>	34.1 <sup>[1,2]</sup>
Very familiar	7.8	29.9 <sup>[2,3]</sup>	12.7 <sup>[1,3]</sup>	4.7 <sup>[1,2]</sup>
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	67.8	74.4 <sup>[3]</sup>	71.6 <sup>[3]</sup>	65.8 <sup>[1,2]</sup>
National conference presentations	3.6	24.1 <sup>[2,3]</sup>	6.8 <sup>[1,3]</sup>	1.4 <sup>[1,2]</sup>
State-level conference presentations	11.5	24.5 <sup>[2,3]</sup>	12.8 <sup>[1]</sup>	10.3 <sup>[1]</sup>
Other firefighters or departments	22.9	29.2 <sup>[2]</sup>	21.9 <sup>[1]</sup>	23.1
At seminars or other training opportunities (not conferences)	16.4	29.3 <sup>[2,3]</sup>	18.5 <sup>[1]</sup>	14.9 <sup>[1]</sup>
Trade publications (such as Firehouse and Fire Engineering)	47.2	66.6 <sup>[2,3]</sup>	57.0 <sup>[1,3]</sup>	42.0 <sup>[1,2]</sup>
NIOSH website	24.3	72.3 <sup>[2,3]</sup>	34.8 <sup>[1,3]</sup>	17.6 <sup>[1,2]</sup>
Links from other websites (such as NFPA and Firehouse)	28.2	53.4 <sup>[2,3]</sup>	35.2 <sup>[1,3]</sup>	24.0 <sup>[1,2]</sup>
Media reports—newspaper, television, radio	14.9	17.6	17.6	13.6
Other recommendations.	1.1	3.2 <sup>[3]</sup>	1.6	0.8 <sup>[1]</sup>
Does not apply. We have not received information about NIOSH recommendations.	11.1	1.1 <sup>[2,3,+]</sup>	4.3 <sup>[1,3]</sup>	14.6 <sup>[1,2]</sup>

(continued)

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	40.2	64.9 <sup>[2,3]</sup>	50.1 <sup>[1,3]</sup>	34.5 <sup>[1,2]</sup>
Developed new SOPs/SOGs	26.3	47.4 <sup>[2,3]</sup>	35.3 <sup>[1,3]</sup>	21.3 <sup>[1,2]</sup>
Made changes to SOPs/SOGs	34.9	67.3 <sup>[2,3]</sup>	47.8 <sup>[1,3]</sup>	27.6 <sup>[1,2]</sup>
Justified current budget/staffing	5.0	16.3 <sup>[2,3]</sup>	7.9 <sup>[1,3]</sup>	3.2 <sup>[1,2]</sup>
Made new budget/staffing requests	5.5	16.6 <sup>[2,3]</sup>	9.7 <sup>[1,3]</sup>	3.1 <sup>[1,2]</sup>
Justified grant applications	15.5	27.7 <sup>[3]</sup>	20.5 <sup>[3]</sup>	12.7 <sup>[1,2]</sup>
Does not apply. We have not used NIOSH recommendations.	30.1	13.3 <sup>[2,3]</sup>	24.6 <sup>[1,3]</sup>	33.3 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	11.7	1.2 <sup>[2,3,+]</sup>	4.4 <sup>[1,3]</sup>	15.5 <sup>[1,2]</sup>
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	29.3	42.1 <sup>[2,3]</sup>	34.0 <sup>[1,3]</sup>	26.6 <sup>[1,2]</sup>
Personal protective equipment and clothing	41.6	61.8 <sup>[2,3]</sup>	51.1 <sup>[1,3]</sup>	36.3 <sup>[1,2]</sup>
SCBA	40.1	63.4 <sup>[2,3]</sup>	52.2 <sup>[1,3]</sup>	33.4 <sup>[1,2]</sup>
PASS systems	32.6	44.5 <sup>[3]</sup>	42.9 <sup>[3]</sup>	27.3 <sup>[1,2]</sup>
Incident Command systems	32.1	48.1 <sup>[3]</sup>	41.1 <sup>[3]</sup>	27.2 <sup>[1,2]</sup>
Radio communications	23.0	37.7 <sup>[3]</sup>	29.8 <sup>[3]</sup>	19.3 <sup>[1,2]</sup>
Physical fitness and cardiovascular disease (CVD)	8.5	27.5 <sup>[2,3]</sup>	14.4 <sup>[1,3]</sup>	5.0 <sup>[1,2]</sup>
Building code compliance (e.g., warning against the use of wooden trusses)	6.9	13.1 <sup>[3]</sup>	8.4	6.0 <sup>[1]</sup>
Other	2.3	5.5 <sup>[3]</sup>	3.6	1.6 <sup>[1]</sup>
Does not apply. We have not used NIOSH recommendations for training purposes.	1.9	1.2 <sup>[+]</sup>	1.8	2.0
<i>Legitimately Skipped Question</i>	41.9	14.7 <sup>[2,3]</sup>	28.7 <sup>[1,3]</sup>	49.1 <sup>[1,2]</sup>

(continued)

Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	78.5	24.5 <sup>[2,3]</sup>	58.2 <sup>[1,3]</sup>	89.7 <sup>[1,2]</sup>
No Yes, it's optional	7.0	36.4 <sup>[2,3]</sup>	12.8 <sup>[1,3]</sup>	3.2 <sup>[1,2]</sup>
	14.5	39.1 <sup>[2,3]</sup>	29.0 <sup>[1,3]</sup>	7.1 <sup>[1,2]</sup>
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	18.7 <sup>[2,3]</sup>	25.8 <sup>[1,3]</sup>	9.4 <sup>[1,2]</sup>
Less frequently than once a year	7.1	14.2 <sup>[3]</sup>	9.2 <sup>[3]</sup>	5.9 <sup>[1,2]</sup>
One time a year	17.1	51.9 <sup>[2,3]</sup>	25.2 <sup>[1,3]</sup>	12.2 <sup>[1,2]</sup>
More than one time a year	0.3	1.2 <sup>[+]</sup>	0.6	0.1 <sup>[+]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	60.9	14.0 <sup>[2,3]</sup>	39.1 <sup>[1,3]</sup>	72.5 <sup>[1,2]</sup>
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	6.4	2.4 <sup>[3]</sup>	2.9 <sup>[3]</sup>	8.1 <sup>[1,2]</sup>
Yes, they receive training required by the department	84.0	93.5 <sup>[3]</sup>	92.0 <sup>[3]</sup>	80.1 <sup>[1,2]</sup>
Yes, they receive training required by the state	25.7	31.5 <sup>[3]</sup>	31.4 <sup>[3]</sup>	23.0 <sup>[1,2]</sup>
Yes, they receive optional training	13.8	9.8 <sup>[3]</sup>	12.1	14.6 <sup>[1]</sup>
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	14.2	11.3	11.7	15.4
Once every year	40.3	42.2	46.7 <sup>[3]</sup>	37.4 <sup>[2]</sup>
Less frequently than once a year	24.8	33.5 <sup>[3]</sup>	28.3 <sup>[3]</sup>	22.8 <sup>[1,2]</sup>
Does not apply. Firefighters are not required to receive continuing driver training.	20.7	12.9 <sup>[3]</sup>	13.3 <sup>[3]</sup>	24.4 <sup>[1,2]</sup>

(continued)

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
No	84.2	97.6 <sup>[2,3]</sup>	90.1 <sup>[1,3]</sup>	81.1 <sup>[1,2]</sup>
	15.8	2.4 <sup>[2,3,+]</sup>	9.9 <sup>[1,3]</sup>	18.9 <sup>[1,2]</sup>
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	6.9	5.3	6.2	7.2
Disagree	18.0	18.3	16.8	18.5
Neither agree nor disagree	30.8	13.2 <sup>[2,3]</sup>	26.6 <sup>[1,3]</sup>	33.5 <sup>[1,2]</sup>
Agree	32.1	41.3 <sup>[3]</sup>	34.8	30.6 <sup>[1]</sup>
Strongly agree	12.2	21.9 <sup>[3]</sup>	15.6 <sup>[3]</sup>	10.2 <sup>[1,2]</sup>
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	5.4	1.1 <sup>[3,+]</sup>	2.6 <sup>[3]</sup>	6.8 <sup>[1,2]</sup>
Never	22.7	10.6 <sup>[2,3]</sup>	21.7 <sup>[1]</sup>	23.7 <sup>[1]</sup>
About half the time	17.0	8.8 <sup>[2,3]</sup>	15.1 <sup>[1]</sup>	18.1 <sup>[1]</sup>
Most of the time	38.4	49.3 <sup>[2,3]</sup>	37.1 <sup>[1]</sup>	38.6 <sup>[1]</sup>
Always	16.5	30.2 <sup>[3]</sup>	23.5 <sup>[3]</sup>	12.8 <sup>[1,2]</sup>
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Rarely	2.3	0.7 <sup>[3,+]</sup>	0.4 <sup>[3,+]</sup>	3.2 <sup>[1,2]</sup>
Never	6.8	0.2 <sup>[2,3,+]</sup>	2.8 <sup>[1,3]</sup>	8.8 <sup>[1,2]</sup>
About half the time	6.7	2.1 <sup>[3,+]</sup>	3.1 <sup>[3]</sup>	8.5 <sup>[1,2]</sup>
Most of the time	27.6	9.5 <sup>[2,3]</sup>	21.6 <sup>[1,3]</sup>	31.0 <sup>[1,2]</sup>
Always	56.6	87.5 <sup>[2,3]</sup>	72.1 <sup>[1,3]</sup>	48.5 <sup>[1,2]</sup>

(continued)

Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	22.5	6.3 <sup>[2,3]</sup>	12.8 <sup>[1,3]</sup>	27.5 <sup>[1,2]</sup>
Not enough firefighters available at the scene of the fire	21.2	2.4 <sup>[2,3,+]</sup>	11.1 <sup>[1,3]</sup>	26.4 <sup>[1,2]</sup>
Other	6.2	3.2 <sup>[3]</sup>	5.5	6.7 <sup>[1]</sup>
Does not apply. My department always assigns an Incident Commander for structure fires.	3.6	2.3	3.6	3.7
<i>Legitimately Skipped Question</i>	56.6	87.8 <sup>[2,3]</sup>	72.1 <sup>[1,3]</sup>	48.5 <sup>[1,2]</sup>
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.0	90.3 <sup>[2]</sup>	95.0 <sup>[1,3]</sup>	89.2 <sup>[2]</sup>
Develop and coordinate the fire attack strategy	93.1	99.2 <sup>[2,3]</sup>	94.7 <sup>[1]</sup>	92.1 <sup>[1]</sup>
Develop and initiate a risk management plan	52.3	77.8 <sup>[2,3]</sup>	61.4 <sup>[1,3]</sup>	47.2 <sup>[1,2]</sup>
Document all assessments, plans and events related to the fire	38.8	53.2 <sup>[2,3]</sup>	40.2 <sup>[1]</sup>	37.5 <sup>[1]</sup>
Ensure that at least four (4) firefighters are on the scene before entering the building	68.6	81.1 <sup>[2,3]</sup>	69.0 <sup>[1]</sup>	67.8 <sup>[1]</sup>
Establish a collapse zone around the building	49.1	62.2 <sup>[3]</sup>	55.1 <sup>[3]</sup>	45.8 <sup>[1,2]</sup>
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	48.5	92.2 <sup>[2,3]</sup>	67.3 <sup>[1,3]</sup>	38.3 <sup>[1,2]</sup>
Identify and implement a communication strategy	64.7	71.8	64.4	64.6
Monitor location of all firefighters at the scene	76.2	87.5 <sup>[2,3]</sup>	77.0 <sup>[1]</sup>	75.4 <sup>[1]</sup>
Other	9.1	13.0 <sup>[3]</sup>	11.3	7.9 <sup>[1]</sup>

(continued)

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	13.3	3.3 <sup>[2,3]</sup>	7.8 <sup>[1,3]</sup>	16.2 <sup>[1,2]</sup>
Some of the time	26.5	33.1 <sup>[2]</sup>	24.3 <sup>[1]</sup>	27.2
About half the time	8.1	6.6	8.6	7.9
Most of the time	29.8	27.2 <sup>[2]</sup>	35.2 <sup>[1,3]</sup>	27.5 <sup>[2]</sup>
Always	22.3	29.8 <sup>[3]</sup>	24.1	21.2 <sup>[1]</sup>
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	32.3	27.4	28.9	34.0
Not enough firefighters are available at the scene of the fire	51.7	25.0 <sup>[2,3]</sup>	47.9 <sup>[1,3]</sup>	54.5 <sup>[1,2]</sup>
Other	13.1	34.6 <sup>[2,3]</sup>	17.7 <sup>[1,3]</sup>	10.1 <sup>[1,2]</sup>
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	2.1	2.6	2.1	2.0
<i>Legitimately Skipped Question</i>	22.6	29.9 <sup>[3]</sup>	24.4	21.6 <sup>[1]</sup>
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	29.4	3.0 <sup>[2,3]</sup>	12.7 <sup>[1,3]</sup>	37.8 <sup>[1,2]</sup>
Some of the time	21.8	5.5 <sup>[2,3]</sup>	20.7 <sup>[1]</sup>	23.0 <sup>[1]</sup>
About half the time	6.5	3.2 <sup>[2]</sup>	7.6 <sup>[1]</sup>	6.1
Most of the time	22.5	27.7 <sup>[3]</sup>	28.2 <sup>[3]</sup>	19.8 <sup>[1,2]</sup>
Always	19.9	60.6 <sup>[2,3]</sup>	30.8 <sup>[1,3]</sup>	13.3 <sup>[1,2]</sup>
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	9.3	7.4	10.4	8.9
When there are enough firefighters on and at the scene of the fire	32.3	20.0 <sup>[2,3]</sup>	35.6 <sup>[1]</sup>	31.3 <sup>[1]</sup>
Whenever firefighters enter a burning building	26.4	20.8	27.8	26.0
	4.9	6.9	7.5 <sup>[3]</sup>	3.7 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	49.3	63.6 <sup>[2,3]</sup>	43.7 <sup>[1,3]</sup>	51.2 <sup>[1,2]</sup>

Other

(continued)



**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	34.9	24.5 <sup>[3]</sup>	31.2 <sup>[3]</sup>	37.0 <sup>[1,2]</sup>
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	8.8	** <sup>[2,3]</sup>	4.3 <sup>[1,3]</sup>	11.2 <sup>[1,2]</sup>
We don't have enough firefighters available at the scene of the fire	53.5	18.2 <sup>[2,3]</sup>	45.7 <sup>[1,3]</sup>	58.5 <sup>[1,2]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	20.7	3.7 <sup>[2,3]</sup>	12.0 <sup>[1,3]</sup>	25.3 <sup>[1,2]</sup>
We have never established an RIT/RIC	17.7	1.5 <sup>[2,3]</sup>	8.3 <sup>[1,3]</sup>	22.5 <sup>[1,2]</sup>
We use other fire departments in the area for RITs/RICs	29.2	4.1 <sup>[2,3]</sup>	28.8 <sup>[1]</sup>	30.5 <sup>[1]</sup>
We use other safety practices and so we don't need them	4.2	2.4 <sup>[3]</sup>	1.3 <sup>[3]</sup>	5.6 <sup>[1,2]</sup>
Other	4.1	8.2 <sup>[2]</sup>	3.6 <sup>[1]</sup>	4.1
<i>Legitimately Skipped Question</i>	20.3	61.4 <sup>[2,3]</sup>	31.3 <sup>[1,3]</sup>	13.6 <sup>[1,2]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
No	78.8	98.6 <sup>[2,3]</sup>	92.2 <sup>[1,3]</sup>	72.0 <sup>[1,2]</sup>
	21.2	1.4 <sup>[2,3,+]</sup>	7.8 <sup>[1,3]</sup>	28.0 <sup>[1,2]</sup>
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
Some of the time	6.3	** <sup>[2,3]</sup>	1.4 <sup>[1,3]</sup>	8.7 <sup>[1,2]</sup>
Never	3.9	1.0 <sup>[3,+]</sup>	0.6 <sup>[3,+]</sup>	5.6 <sup>[1,2]</sup>
About half the time	1.8	** <sup>[2,3]</sup>	1.5 <sup>[1]</sup>	2.1 <sup>[1]</sup>
Most of the time	12.8	1.2 <sup>[2,3]</sup>	9.5 <sup>[1,3]</sup>	14.8 <sup>[1,2]</sup>
Always	75.2	97.8 <sup>[2,3]</sup>	87.0 <sup>[1,3]</sup>	68.9 <sup>[1,2]</sup>

(continued)

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	13.1	1.0 <sup>[2,3,+]</sup>	3.3 <sup>[1,3]</sup>	17.9 <sup>[1,2]</sup>
Situation doesn't require them	9.5	0.4 <sup>[2,3,+]</sup>	5.7 <sup>[1,3]</sup>	11.6 <sup>[1,2]</sup>
Firefighters think the devices do not always work reliably	0.3	**	0.1 <sup>[+]</sup>	0.4 <sup>[+]</sup>
Firefighters don't think they need them	4.6	1.0 <sup>[3,+]</sup>	2.7 <sup>[3]</sup>	5.6 <sup>[1,2]</sup>
Devices go off while firefighters are resting	3.7	0.6 <sup>[2,3,+]</sup>	3.7 <sup>[1]</sup>	3.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	75.5	97.8 <sup>[2,3]</sup>	88.0 <sup>[1,3]</sup>	69.1 <sup>[1,2]</sup>
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	99.2	99.7	99.7	99.0
	0.8	0.3 <sup>[+]</sup>	0.3 <sup>[+]</sup>	1.0
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No				
	49.7	10.4 <sup>[2,3]</sup>	37.4 <sup>[1,3]</sup>	56.5 <sup>[1,2]</sup>
No	49.5	89.2 <sup>[2,3]</sup>	62.3 <sup>[1,3]</sup>	42.5 <sup>[1,2]</sup>
Yes	0.8	0.3 <sup>[+]</sup>	0.3 <sup>[+]</sup>	1.0
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	4.8	** <sup>[2,3]</sup>	3.7 <sup>[1]</sup>	5.4 <sup>[1]</sup>
Firefighters don't like using the equipment	0.3	**	**	0.4 <sup>[+]</sup>
Have never needed them (e.g., we don't do interior attacks)	0.7	** <sup>[3]</sup>	** <sup>[3]</sup>	1.0 <sup>[1,2]</sup>
They cost too much, there is not enough money in the budget	31.8	5.7 <sup>[2,3]</sup>	23.0 <sup>[1,3]</sup>	36.5 <sup>[1,2]</sup>
We don't have enough equipment for all of our firefighters	24.6	2.3 <sup>[2,3,+]</sup>	13.3 <sup>[1,3]</sup>	30.2 <sup>[1,2]</sup>
Shared systems work fine for our needs	23.4	5.0 <sup>[2,3]</sup>	18.2 <sup>[1,3]</sup>	26.4 <sup>[1,2]</sup>
Other	5.0	4.7	7.5 <sup>[3]</sup>	3.9 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	50.3	89.8 <sup>[2,3]</sup>	62.5 <sup>[1,3]</sup>	43.6 <sup>[1,2]</sup>

(continued)

Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1.1	** [3]	** [3]	1.7 [1,2]
Some of the time	4.7	** [2,3]	1.4 [1,3]	6.3 [1,2]
About half the time	2.7	0.8 [3,+]	0.9 [3,+]	3.5 [1,2]
Most of the time	24.5	13.8 [3]	15.5 [3]	28.8 [1,2]
Always	66.1	85.1 [3]	81.9 [3]	58.6 [1,2]
<i>Legitimately Skipped Question</i>	0.8	0.3 [+]	0.3 [+]	1.0
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	25.9	10.3 [3]	12.9 [3]	32.1 [1,2]
Firefighters do not trust that the SCBAs will work reliably	**	**	**	0.1 [+]
Firefighters don't think they need them	10.3	6.3 [3]	6.9 [3]	12.0 [1,2]
Firefighters don't like sharing facepieces with others	1.0	** [3]	0.9 [+]	1.0 [1]
Firefighters are concerned that the SCBA may be or become contaminated	**	**	0.3 [+]	
Wearing SCBAs makes it more difficult to work	5.9	3.3 [3]	3.9 [3]	6.9 [1,2]
Firefighters don't have SCBAs to use	3.9	0.8 [3,+]	1.7 [3]	5.0 [1,2]
<i>Legitimately Skipped Question</i>	67.8	86.1 [3]	82.9 [3] **	60.5 [1,2]
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	43.0	52.6 [3]	46.6	41.0 [1]
Once a month or more	19.0	10.3 [2,3]	20.0 [1]	18.9 [1]
Several times a year	15.0	13.8	15.6	14.8
Once a year	16.4	20.6	15.8	16.6
Less than once a year	4.3	1.1 [3,+]	1.2 [3]	5.8 [1,2]
Never. Maintenance has not been done on our SCBAs.	1.4	1.3 [+]	0.5 [+]	1.8
Does not apply. My department does not have SCBAs.	**	**	**	**
<i>Legitimately Skipped Question</i>	1.0	0.4 [+]	0.4 [+]	1.3

(continued)

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	17.5	47.1 <sup>[2,3]</sup>	27.1 <sup>[1,3]</sup>	12.2 <sup>[1,2]</sup>
Zero	82.5	52.9 <sup>[2,3]</sup>	72.9 <sup>[1,3]</sup>	87.8 <sup>[1,2]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
CBRN SCBA devices are not needed in our department	20.9	10.4 <sup>[3]</sup>	13.1 <sup>[3]</sup>	24.7 <sup>[1,2]</sup>
We didn't know they were available	15.1	6.0 <sup>[2,3]</sup>	11.2 <sup>[1,3]</sup>	17.1 <sup>[1,2]</sup>
We don't have adequate technical information to purchase them	19.7	7.8 <sup>[2,3]</sup>	15.7 <sup>[1,3]</sup>	21.9 <sup>[1,2]</sup>
We don't have adequate funding to purchase them	60.3	33.4 <sup>[2,3]</sup>	55.1 <sup>[1,3]</sup>	63.6 <sup>[1,2]</sup>
Other	4.9	16.0 <sup>[2,3]</sup>	5.3 <sup>[1]</sup>	4.3 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.3	48.0 <sup>[2,3]</sup>	28.5 <sup>[1,3]</sup>	12.7 <sup>[1,2]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
Yes	77.4	95.2 <sup>[2,3]</sup>	85.1 <sup>[1,3]</sup>	73.3 <sup>[1,2]</sup>
No	22.6	4.8 <sup>[2,3]</sup>	14.9 <sup>[1,3]</sup>	26.7 <sup>[1,2]</sup>
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	2.8	0.8 <sup>[3,+]</sup>	0.8 <sup>[3,+]</sup>	3.7 <sup>[1,2]</sup>
On the emergency vehicles (or apparatus)	62.0	76.0 <sup>[3]</sup>	70.1 <sup>[3]</sup>	58.1 <sup>[1,2]</sup>
Both at the fire station(s) and on the vehicles (or apparatus)	10.4	17.5 <sup>[3]</sup>	12.1	9.4 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	24.9	5.7 <sup>[2,3]</sup>	17.1 <sup>[1,3]</sup>	28.8 <sup>[1,2]</sup>
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	13.9	33.4 <sup>[2,3]</sup>	15.1 <sup>[1]</sup>	12.4 <sup>[1]</sup>
Once a month or more	25.4	26.6	27.0	24.6
Several times a year	20.6	19.1	18.3	21.7
Once a year	22.3	16.6 <sup>[2]</sup>	26.7 <sup>[1,3]</sup>	20.5 <sup>[2]</sup>
Less frequently than once a year	7.4	3.2 <sup>[3]</sup>	6.7	8.0 <sup>[1]</sup>
Never. Maintenance on our AEDs has not been done.	10.4	1.2 <sup>[2,3,+]</sup>	6.3 <sup>[1,3]</sup>	12.8 <sup>[1,2]</sup>

(continued)

Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	1.6	0.3 <sup>[3,+]</sup>	1.6	1.7 <sup>[1]</sup>
About half the time	4.7	0.3 <sup>[2,3,+]</sup>	3.2 <sup>[1]</sup>	5.5 <sup>[1]</sup>
Never	2.6	0.7 <sup>[3,+]</sup>	1.4 <sup>[3]</sup>	3.2 <sup>[1,2]</sup>
Most of the time	20.6	3.9 <sup>[2,3]</sup>	15.1 <sup>[1,3]</sup>	23.8 <sup>[1,2]</sup>
Always	70.4	94.8 <sup>[2,3]</sup>	78.6 <sup>[1,3]</sup>	65.8 <sup>[1,2]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Some of the time	18.0	10.6 <sup>[2,3]</sup>	19.0 <sup>[1]</sup>	17.9 <sup>[1]</sup>
About half the time	64.5	80.2 <sup>[2,3]</sup>	67.4 <sup>[1]</sup>	62.6 <sup>[1]</sup>
Never	10.3	4.4 <sup>[2,3]</sup>	8.9 <sup>[1]</sup>	11.1 <sup>[1]</sup>
Most of the time	5.4	4.0	4.1	6.0
Always	1.8	0.8 <sup>[3,+]</sup>	0.5 <sup>[3,+]</sup>	2.4 <sup>[1,2]</sup>
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	48.6	31.7 <sup>[2,3]</sup>	40.3 <sup>[1,3]</sup>	53.0 <sup>[1,2]</sup>
Adequate	45.7	56.4 <sup>[3]</sup>	50.2 <sup>[3]</sup>	43.2 <sup>[1,2]</sup>
More than adequate	5.7	11.9 <sup>[3]</sup>	9.5 <sup>[3]</sup>	3.7 <sup>[1,2]</sup>
<b>42b. Training</b>				
Not adequate	39.1	46.6 <sup>[2]</sup>	35.8 <sup>[1]</sup>	40.3
Adequate	55.6	47.6 <sup>[2,3]</sup>	56.3 <sup>[1]</sup>	55.7 <sup>[1]</sup>
More than adequate	5.2	5.8	8.0 <sup>[3]</sup>	4.0 <sup>[2]</sup>

(continued)

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>42c. Personnel</b>				
Not adequate	51.5	59.9 <sup>[2,3]</sup>	51.0 <sup>[1]</sup>	51.4 <sup>[1]</sup>
Adequate	44.3	35.3 <sup>[2,3]</sup>	44.2 <sup>[1]</sup>	44.7 <sup>[1]</sup>
More than adequate	4.2	4.7	4.9	3.9
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
	26.8	7.3 <sup>[2,3]</sup>	16.3 <sup>[1,3]</sup>	32.2 <sup>[1,2]</sup>
One or two times per year	34.3	27.5	35.1	34.3
Never	33.2	49.3 <sup>[3]</sup>	41.9 <sup>[3]</sup>	28.7 <sup>[1,2]</sup>
Several times per year	5.7	15.9 <sup>[2,3]</sup>	6.7 <sup>[1]</sup>	4.8 <sup>[1]</sup>
Once a month or more				
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	56.0	55.1	56.7	55.7
On the Internet	24.7	63.4 <sup>[2,3]</sup>	35.8 <sup>[1,3]</sup>	18.2 <sup>[1,2]</sup>
From colleagues in other departments	10.0	18.6 <sup>[2,3]</sup>	11.4 <sup>[1]</sup>	8.9 <sup>[1]</sup>
At conferences or other meetings	6.9	22.5 <sup>[2,3]</sup>	8.6 <sup>[1]</sup>	5.6 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	26.8	7.3 <sup>[2,3]</sup>	16.3 <sup>[1,3]</sup>	32.2 <sup>[1,2]</sup>
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	53.3	83.7 <sup>[2,3]</sup>	65.5 <sup>[1,3]</sup>	46.8 <sup>[1,2]</sup>
No	20.0	9.1 <sup>[2,3]</sup>	18.1 <sup>[1]</sup>	21.3 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	26.6	7.3 <sup>[2,3]</sup>	16.4 <sup>[1,3]</sup>	31.9 <sup>[1,2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
No	60.7	79.8 <sup>[2,3]</sup>	71.1 <sup>[1,3]</sup>	55.2 <sup>[1,2]</sup>
Yes	12.1	12.9	12.2	12.0
<i>Legitimately Skipped Question</i>	27.3	7.3 <sup>[2,3]</sup>	16.7 <sup>[1,3]</sup>	32.9 <sup>[1,2]</sup>

(continued)

Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	23.5	27.0	23.9	23.2
Training sessions	44.2	57.7 <sup>[2,3]</sup>	48.7 <sup>[1,3]</sup>	41.7 <sup>[1,2]</sup>
Provide copies of NIOSH reports to firefighters	16.2	32.6 <sup>[2,3]</sup>	24.9 <sup>[1,3]</sup>	11.6 <sup>[1,2]</sup>
Provide copies of NIOSH report summaries to firefighters	6.2	8.8 <sup>[3]</sup>	10.2 <sup>[3]</sup>	4.3 <sup>[1,2]</sup>
Provide summaries prepared by department to firefighters	1.8	8.5 <sup>[2,3]</sup>	2.2 <sup>[1]</sup>	1.4 <sup>[1]</sup>
Postings on bulletin boards	38.5	37.7 <sup>[2]</sup>	48.1 <sup>[1,3]</sup>	34.2 <sup>[2]</sup>
Post report on the department website	1.1	7.0 <sup>[2,3]</sup>	1.8 <sup>[1]</sup>	0.6 <sup>[1]</sup>
Send message to firefighters by email	5.3	34.7 <sup>[2,3]</sup>	9.2 <sup>[1,3]</sup>	2.4 <sup>[1,2]</sup>
Other	1.3	8.6 <sup>[2,3]</sup>	1.7 <sup>[1]</sup>	0.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	39.1	20.5 <sup>[2,3]</sup>	28.7 <sup>[1,3]</sup>	44.4 <sup>[1,2]</sup>
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	34.2	78.4 <sup>[2,3]</sup>	47.8 <sup>[1,3]</sup>	26.4 <sup>[1,2]</sup>
Yes	38.4	14.1 <sup>[2,3]</sup>	35.4 <sup>[1]</sup>	40.7 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	27.4	7.6 <sup>[2,3]</sup>	16.7 <sup>[1,3]</sup>	33.0 <sup>[1,2]</sup>

(continued)

**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	0.5	1.5 <sup>[+]</sup>	0.5 <sup>[+]</sup>	0.4 <sup>[+]</sup>
Disagree	3.6	3.6	4.2	3.3
Neither Agree nor Disagree	18.7	18.4	17.8	19.1
Agree	45.6	59.6 <sup>[3]</sup>	56.3 <sup>[3]</sup>	40.3 <sup>[1,2]</sup>
Strongly Agree	3.7	9.4 <sup>[2,3]</sup>	4.0 <sup>[1]</sup>	3.3 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	28.0	7.5 <sup>[2,3]</sup>	17.1 <sup>[1,3]</sup>	33.6 <sup>[1,2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	0.4	2.2 <sup>[+]</sup>	0.3 <sup>[+]</sup>	0.4 <sup>[+]</sup>
Disagree	1.7	2.1	3.3 <sup>[3]</sup>	1.0 <sup>[2]</sup>
Neither Agree nor Disagree	19.8	13.2 <sup>[3]</sup>	18.0	20.9 <sup>[1]</sup>
Agree	45.4	62.8 <sup>[3]</sup>	56.2 <sup>[3]</sup>	39.9 <sup>[1,2]</sup>
Strongly Agree	4.6	12.1 <sup>[2,3]</sup>	5.0 <sup>[1]</sup>	4.1 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	28.1	7.6 <sup>[2,3]</sup>	17.2 <sup>[1,3]</sup>	33.7 <sup>[1,2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	0.4	2.9	0.5 <sup>[+]</sup>	0.3 <sup>[+]</sup>
Disagree	3.2	6.4 <sup>[3]</sup>	4.5	2.5 <sup>[1]</sup>
Neither Agree nor Disagree	26.6	21.4 <sup>[2]</sup>	28.9 <sup>[1]</sup>	25.8
Agree	37.9	52.4 <sup>[3]</sup>	44.9 <sup>[3]</sup>	34.2 <sup>[1,2]</sup>
Strongly Agree	3.8	9.3 <sup>[2,3]</sup>	4.0 <sup>[1]</sup>	3.6 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	28.0	7.6 <sup>[2,3]</sup>	17.2 <sup>[1,3]</sup>	33.6 <sup>[1,2]</sup>

(continued)



**Exhibit B-4a. Results from the Fire Department Survey, Percent Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	57.4	85.2 <sup>[2,3]</sup>	64.8 <sup>[1,3]</sup>	52.9 <sup>[1,2]</sup>
Respirator maintenance program guide	13.8	26.3 <sup>[2,3]</sup>	18.0 <sup>[1,3]</sup>	11.3 <sup>[1,2]</sup>
CDs of firefighter program materials	28.0	41.2 <sup>[2,3]</sup>	30.1 <sup>[1]</sup>	26.5 <sup>[1]</sup>
Alerts	31.7	62.9 <sup>[2,3]</sup>	41.3 <sup>[1,3]</sup>	26.0 <sup>[1,2]</sup>
Hazard IDs	16.6	23.9 <sup>[3]</sup>	17.7	15.8 <sup>[1]</sup>
Workplace Solutions	12.5	17.1 <sup>[3]</sup>	15.7 <sup>[3]</sup>	10.8 <sup>[1,2]</sup>
Other	0.8	2.9	1.0	0.6 <sup>[+]</sup>
None. I have not seen any NIOSH materials.	25.2	5.5 <sup>[2,3]</sup>	15.9 <sup>[1,3]</sup>	30.3 <sup>[1,2]</sup>
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.3	3.5	1.4	1.2
Dissatisfied	0.2	**	** <sup>[+]</sup>	0.3 <sup>[+]</sup>
Neither satisfied nor dissatisfied	21.2	15.5	21.8	21.2
Satisfied	47.1	60.4 <sup>[3]</sup>	55.5 <sup>[3]</sup>	42.8 <sup>[1,2]</sup>
Very satisfied	5.2	14.9 <sup>[2,3]</sup>	5.8 <sup>[1]</sup>	4.5 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	24.9	5.6 <sup>[2,3]</sup>	15.7 <sup>[1,3]</sup>	29.9 <sup>[1,2]</sup>
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	59.4	14.4 <sup>[2,3]</sup>	48.6 <sup>[1,3]</sup>	66.1 <sup>[1,2]</sup>
No	34.5	74.6 <sup>[2,3]</sup>	45.1 <sup>[1,3]</sup>	28.1 <sup>[1,2]</sup>
Yes, longer than one year ago	6.1	11.0 <sup>[3]</sup>	6.4	5.8 <sup>[1]</sup>

Note: The 0-4,999 column includes those records with a missing value for population protected.

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>1. Does your department have a Safety Officer?</b>	(67.5, 72.9) (27.1, 32.5)	(81.3, 90.8) (9.2, 18.7)	(67.6, 76.0) (24.0, 32.4)	(65.1, 72.3) (27.7, 34.9)
<b>2. Does your department have a Training Officer?</b>				
Yes	(86.4, 90.3)	(97.0, 99.7)	(88.6, 93.8)	(83.8, 89.1)
No	(9.7, 13.6)	(0.3, 3.0)	(6.2, 11.4)	(10.9, 16.2)
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	(81.3, 85.8)	(94.5, 99.1)	(90.3, 95.1)	(75.7, 82.0)
Maintenance of SCBAs	(66.9, 72.3)	(81.9, 91.5)	(72.8, 80.8)	(61.9, 69.2)
Motor vehicle safety	(76.3, 81.2)	(88.1, 95.1)	(79.0, 86.1)	(73.1, 79.6)
Participation in a personal physical fitness program	(9.6, 12.7)	(47.4, 60.6)	(16.3, 23.5)	(4.0, 7.5)
Participation in regular health screenings for cardiovascular disease (CVD)	(14.9, 18.9)	(43.5, 56.7)	(22.9, 31.1)	(8.9, 13.7)
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	(37.7, 43.2)	(85.0, 92.6)	(56.3, 65.2)	(26.0, 33.1)
Use of Personal Alert Safety System (PASS) devices	(72.7, 77.9)	(85.8, 93.6)	(81.1, 87.9)	(66.9, 74.0)
Use of personal protective equipment and protective clothing	(87.1, 90.9)	(93.7, 98.4)	(90.2, 95.1)	(84.3, 89.4)
Use of radio communications	(82.5, 86.8)	(91.3, 97.1)	(86.5, 92.0)	(79.2, 85.0)
	(7.2, 10.5)	(12.1, 22.8)	(10.5, 17.1)	(4.6, 8.5)
Does not apply. Our fire department does not use SOPs/SOGs.	(3.8, 6.5)	(**, **)	(1.1, 4.0)	(4.8, 8.6)

Other

(continued)

Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	(0.6, 2.0)	(0.1, 3.0)	(**, **)	(0.9, 2.9)
Optional Training	(14.6, 19.1)	(1.0, 6.2)	(5.4, 10.5)	(18.4, 24.7)
Required Training	(80.4, 85.0)	(93.3, 98.7)	(89.9, 94.8)	(74.4, 80.8)
<b>4b. Driving safety</b>				
No Training	(2.9, 5.3)	(0.6, 3.5)	(0.5, 2.6)	(3.8, 7.3)
Optional Training	(16.3, 21.1)	(2.0, 8.2)	(9.0, 15.2)	(19.1, 25.7)
Required Training	(75.1, 80.1)	(90.4, 96.9)	(83.9, 90.2)	(69.0, 76.0)
<b>4c. Incident Command systems</b>				
No Training	(2.0, 4.1)	(0.0, 0.9)	(0.4, 2.5)	(2.6, 5.7)
Optional Training	(24.8, 30.2)	(2.4, 9.2)	(11.2, 17.9)	(30.7, 38.1)
Required Training	(67.1, 72.6)	(90.7, 97.5)	(81.0, 87.9)	(58.2, 65.8)
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	(5.2, 8.3)	(1.4, 6.8)	(3.3, 7.4)	(5.5, 9.8)
Optional Training	(30.8, 36.5)	(6.9, 16.1)	(22.3, 30.6)	(34.1, 41.6)
Required Training	(57.3, 63.1)	(81.6, 91.4)	(64.5, 73.2)	(51.4, 59.1)
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	(25.8, 31.3)	(0.7, 3.9)	(9.6, 15.9)	(33.3, 41.1)
Optional Training	(33.3, 39.2)	(7.0, 16.6)	(30.2, 39.4)	(34.2, 41.9)
Required Training	(32.8, 38.3)	(81.7, 91.6)	(48.9, 58.2)	(21.5, 28.6)

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	(0.9, 2.4)	(0.3, 4.7)	(0.4, 2.1)	(0.9, 3.0)
Optional Training	(8.2, 11.8)	(1.6, 6.1)	(3.7, 7.9)	(9.8, 14.9)
Required Training	(86.9, 90.7)	(92.1, 97.7)	(91.5, 95.8)	(83.5, 88.8)
<b>4g. Use of radio communication devices</b>				
No Training	(1.9, 3.8)	(0.9, 5.9)	(0.9, 3.0)	(2.1, 4.9)
Optional Training	(19.0, 23.9)	(3.7, 10.8)	(11.1, 17.7)	(22.0, 28.7)
Required Training	(73.6, 78.6)	(87.4, 95.2)	(80.7, 87.5)	(68.3, 75.2)
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	(82.6, 86.9)	(94.6, 99.0)	(86.1, 91.8)	(79.2, 85.2)
Other officers within our department	(80.4, 85.0)	(93.9, 98.2)	(86.6, 92.5)	(75.8, 82.0)
State fire training agency	(74.8, 79.8)	(69.4, 79.7)	(80.1, 87.0)	(71.2, 77.9)
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	(18.9, 23.1)	(61.5, 73.5)	(32.3, 40.9)	(9.9, 14.8)
Conferences or regional meetings	(48.8, 54.6)	(71.9, 82.4)	(57.4, 66.3)	(42.3, 50.0)
Other	(22.7, 27.8)	(22.1, 34.7)	(25.8, 34.3)	(19.9, 26.3)
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	(52.4, 58.2)	(51.4, 64.1)	(57.5, 66.5)	(48.4, 56.0)
Scuba diving	(6.2, 9.1)	(16.5, 27.2)	(8.0, 13.6)	(4.1, 7.6)
Swift water rescue	(9.6, 13.0)	(41.6, 54.9)	(14.0, 21.0)	(5.4, 9.2)
Wildland fire fighting	(44.1, 49.9)	(32.4, 45.3)	(35.6, 44.5)	(46.7, 54.2)
HAZMAT	(63.8, 69.4)	(88.1, 95.2)	(76.6, 84.0)	(55.7, 63.2)
Other	(28.5, 33.9)	(37.1, 50.3)	(29.7, 38.6)	(26.0, 33.0)

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	(6.8, 10.2)	(0.0, 2.2)	(2.2, 5.8)	(8.6, 13.4)
Not very familiar	(21.8, 27.0)	(3.6, 9.9)	(13.0, 20.0)	(25.3, 32.3)
Somewhat familiar	(55.2, 61.0)	(47.6, 60.9)	(60.3, 69.3)	(51.4, 59.1)
Very familiar	(7.8, 10.9)	(33.1, 46.0)	(12.3, 19.0)	(3.9, 7.3)
<b>9. How familiar are you with NIOSH’s Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	(18.4, 23.3)	(3.6, 9.2)	(10.1, 16.5)	(21.7, 28.3)
Not very familiar	(30.8, 36.4)	(14.8, 25.7)	(24.4, 32.8)	(32.7, 40.1)
Somewhat familiar	(35.1, 40.7)	(38.0, 51.4)	(41.3, 50.6)	(30.5, 37.8)
Very familiar	(6.5, 9.4)	(24.3, 36.3)	(10.0, 16.1)	(3.3, 6.7)
<b>10. How does your department receive information about NIOSH’s firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	(64.9, 70.5)	(68.4, 79.6)	(67.1, 75.7)	(62.0, 69.3)
National conference presentations	(2.8, 4.7)	(18.7, 30.4)	(4.9, 9.4)	(0.7, 2.6)
State-level conference presentations	(9.7, 13.5)	(19.1, 30.7)	(10.0, 16.1)	(8.1, 13.0)
Other firefighters or departments	(20.5, 25.5)	(23.7, 35.3)	(18.3, 26.0)	(19.9, 26.5)
At seminars or other training opportunities (not conferences)	(14.3, 18.6)	(23.6, 35.9)	(15.1, 22.4)	(12.4, 17.8)
Trade publications (such as Firehouse and Fire Engineering)	(44.3, 50.1)	(60.1, 72.5)	(52.3, 61.5)	(38.2, 45.8)
NIOSH website	(22.0, 26.7)	(65.9, 78.0)	(30.5, 39.4)	(14.9, 20.7)
Links from other websites (such as NFPA and Firehouse)	(25.7, 30.9)	(46.7, 60.1)	(30.9, 39.9)	(20.9, 27.4)
Media reports—newspaper, television, radio	(12.9, 17.1)	(13.2, 23.0)	(14.3, 21.5)	(11.1, 16.5)
	(0.7, 1.9)	(1.6, 6.1)	(0.8, 3.4)	(0.4, 1.8)
Does not apply. We have not received information about NIOSH recommendations.	(9.3, 13.2)	(0.4, 3.1)	(2.8, 6.5)	(12.0, 17.6)
Other				

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	(37.3, 43.1)	(58.3, 71.1)	(45.4, 54.9)	(30.9, 38.4)
Developed new SOPs/SOGs	(23.8, 29.0)	(40.6, 54.3)	(30.9, 40.0)	(18.3, 24.8)
Made changes to SOPs/SOGs	(32.2, 37.7)	(60.6, 73.3)	(43.1, 52.5)	(24.3, 31.2)
Justified current budget/staffing	(4.0, 6.3)	(12.1, 21.6)	(5.8, 10.6)	(2.1, 4.9)
Made new budget/staffing requests	(4.4, 6.8)	(12.3, 22.0)	(7.3, 12.9)	(2.0, 4.7)
Justified grant applications	(13.5, 17.8)	(22.1, 34.1)	(16.9, 24.7)	(10.3, 15.6)
Does not apply. We have not used NIOSH recommendations.	(27.3, 32.9)	(9.6, 18.2)	(20.7, 29.0)	(29.6, 37.1)
<i>Legitimately Skipped Question</i>	(9.8, 13.9)	(0.4, 3.2)	(2.9, 6.7)	(12.8, 18.7)
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	(26.7, 32.1)	(35.6, 49.0)	(29.6, 38.6)	(23.2, 30.2)
Personal protective equipment and clothing	(38.7, 44.5)	(55.0, 68.2)	(46.4, 55.8)	(32.6, 40.2)
	(37.2, 43.0)	(56.9, 69.4)	(47.5, 56.9)	(29.8, 37.2)
PASS systems	(29.9, 35.5)	(37.9, 51.3)	(38.3, 47.6)	(23.9, 31.0)
SCBA Incident Command systems	(29.4, 34.9)	(41.3, 55.0)	(36.5, 45.8)	(23.8, 30.9)
Radio communications	(20.7, 25.6)	(31.2, 44.6)	(25.7, 34.3)	(16.3, 22.6)
Physical fitness and cardiovascular disease (CVD)	(7.1, 10.2)	(21.8, 34.0)	(11.4, 18.0)	(3.6, 6.9)
Building code compliance (e.g., warning against the use of wooden trusses)	(5.6, 8.5)	(9.1, 18.6)	(6.2, 11.2)	(4.3, 8.1)
	(1.6, 3.4)	(3.0, 9.9)	(2.2, 5.8)	(0.8, 3.1)
Does not apply. We have not used NIOSH recommendations for training purposes.	(1.3, 2.9)	(0.4, 3.4)	(0.9, 3.6)	(1.2, 3.4)
Other				
<i>Legitimately Skipped Question</i>	(38.9, 44.8)	(10.8, 19.7)	(24.6, 33.2)	(45.2, 53.1)

(continued)

Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	(76.4, 80.4)	(19.4, 30.6)	(53.8, 62.5)	(87.1, 91.7)
No Yes, it's optional	(5.9, 8.3)	(30.3, 43.0)	(10.3, 15.8)	(2.1, 4.9)
	(12.8, 16.4)	(33.1, 45.4)	(25.0, 33.3)	(5.4, 9.3)
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	(12.7, 16.6)	(13.9, 24.7)	(22.0, 30.1)	(7.4, 11.8)
Less frequently than once a year	(5.8, 8.6)	(10.2, 19.6)	(6.9, 12.2)	(4.4, 7.9)
One time a year	(15.2, 19.3)	(45.0, 58.7)	(21.5, 29.4)	(9.9, 14.9)
More than one time a year	(0.1, 0.7)	(0.3, 5.2)	(0.2, 1.4)	(0.0, 0.9)
Does not apply. Firefighters are not required to receive CVD screenings	(58.3, 63.5)	(10.2, 19.0)	(34.8, 43.7)	(69.0, 75.7)
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	(5.1, 8.0)	(0.9, 5.9)	(1.8, 4.8)	(6.2, 10.4)
Yes, they receive training required by the department	(81.7, 86.0)	(89.7, 96.0)	(89.2, 94.1)	(76.9, 82.9)
Yes, they receive training required by the state	(23.3, 28.3)	(25.7, 37.9)	(27.3, 35.9)	(19.9, 26.3)
Yes, they receive optional training	(11.8, 15.9)	(6.5, 14.5)	(9.4, 15.5)	(12.1, 17.6)
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	(12.2, 16.4)	(7.8, 16.2)	(9.1, 15.0)	(12.8, 18.4)
Once every year	(37.5, 43.2)	(35.7, 48.9)	(42.0, 51.5)	(33.8, 41.2)
Less frequently than once a year	(22.3, 27.3)	(27.4, 40.3)	(24.2, 32.7)	(19.8, 26.2)
Does not apply. Firefighters are not required to receive continuing driver training.	(18.4, 23.2)	(9.3, 17.8)	(10.4, 16.8)	(21.2, 27.8)

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>	(81.9, 86.3) (13.7, 18.1)	(92.9, 99.2) (0.8, 7.1)	(86.9, 92.7) (7.3, 13.1)	(77.9, 83.9) (16.1, 22.1)
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
No				
Strongly disagree	(5.5, 8.5)	(2.8, 9.7)	(4.2, 8.9)	(5.5, 9.4)
Disagree	(15.8, 20.4)	(13.7, 24.1)	(13.5, 20.7)	(15.7, 21.7)
Neither agree nor disagree	(28.2, 33.7)	(9.0, 18.8)	(22.6, 31.0)	(29.9, 37.2)
Agree	(29.5, 34.9)	(34.9, 48.1)	(30.5, 39.4)	(27.2, 34.2)
Strongly agree	(10.4, 14.2)	(17.0, 27.6)	(12.5, 19.3)	(8.1, 12.8)
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	(4.2, 6.9)	(0.2, 7.3)	(1.4, 4.6)	(5.2, 8.9)
About half the time	(20.3, 25.3)	(7.4, 14.8)	(18.0, 25.9)	(20.6, 27.1)
Never	(14.8, 19.4)	(6.1, 12.7)	(12.0, 18.9)	(15.3, 21.3)
Most of the time	(35.6, 41.3)	(42.6, 56.0)	(32.7, 41.7)	(34.9, 42.4)
Always	(14.6, 18.7)	(24.5, 36.6)	(19.9, 27.5)	(10.5, 15.6)
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Rarely	(1.5, 3.5)	(0.1, 4.7)	(0.1, 1.9)	(2.1, 5.0)
About half the time	(5.4, 8.5)	(0.0, 1.2)	(1.6, 4.7)	(6.9, 11.2)
Never	(5.3, 8.4)	(0.6, 6.8)	(1.9, 5.2)	(6.6, 10.9)
Most of the time	(25.0, 30.4)	(6.0, 14.7)	(18.0, 25.8)	(27.6, 34.7)
Always	(53.7, 59.4)	(81.7, 91.7)	(67.7, 76.1)	(44.6, 52.3)

(continued)



**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b> Fires are not usually big enough to require an Incident Commander Not enough firefighters available at the scene of the fire  Does not apply. My department always assigns an Incident Commander for structure fires. Other <i>Legitimately Skipped Question</i>	(20.1, 25.1) (18.8, 23.7) (5.0, 7.8) (2.7, 4.9) (53.7, 59.5)	(3.5, 11.2) (0.8, 7.2) (1.4, 7.2) (0.9, 5.6) (81.9, 91.9)	(9.9, 16.3) (8.5, 14.3) (3.7, 8.1) (2.2, 5.9) (67.7, 76.1)	(24.2, 31.0) (23.2, 30.0) (5.0, 8.8) (2.5, 5.4) (44.7, 52.4)
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander’s responsibilities? MARK ALL THAT APPLY.</b> Conduct an initial assessment before the other firefighters begin entering the building Develop and coordinate the fire attack strategy Develop and initiate a risk management plan Document all assessments, plans and events related to the fire Ensure that at least four (4) firefighters are on the scene before entering the building Establish a collapse zone around the building Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC) Identify and implement a communication strategy Monitor location of all firefighters at the scene	(89.1, 92.6) (91.4, 94.5) (49.4, 55.3) (36.0, 41.7) (65.7, 71.3) (46.1, 52.0) (45.7, 51.3) (61.9, 67.5) (73.6, 78.7) (7.6, 10.9)	(85.7, 93.5) (97.3, 99.7) (71.9, 82.8) (46.7, 59.6) (75.2, 85.8) (55.6, 68.4) (88.1, 95.0) (65.1, 77.5) (81.7, 91.7) (9.1, 18.2)	(92.7, 96.6) (92.0, 96.6) (56.7, 65.9) (35.8, 44.9) (64.5, 73.3) (50.4, 59.8) (62.9, 71.4) (59.7, 68.8) (72.7, 80.8) (8.6, 14.8)	(86.5, 91.4) (89.7, 93.9) (43.3, 51.1) (33.9, 41.3) (64.1, 71.3) (42.0, 49.7) (34.6, 42.1) (60.8, 68.2) (71.9, 78.6) (6.1, 10.3)
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b> Other Never Some of the time About half the time Most of the time	(11.4, 15.5) (24.0, 29.2) (6.6, 9.9) (27.2, 32.5) (19.9, 24.9)	(1.7, 6.5) (26.9, 39.9) (3.8, 11.0) (21.7, 33.5) (24.4, 35.9)	(5.7, 10.6) (20.5, 28.5) (6.3, 11.6) (30.8, 39.8) (20.3, 28.4)	(13.5, 19.2) (24.0, 30.8) (6.1, 10.3) (24.2, 31.0) (18.2, 24.5)

(continued)

Always

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	(29.5, 35.1)	(22.0, 33.5)	(24.7, 33.4)	(30.4, 37.8)
Not enough firefighters are available at the scene of the fire	(48.7, 54.6)	(19.6, 31.3)	(43.3, 52.6)	(50.6, 58.3)
Other	(11.3, 15.1)	(28.7, 41.0)	(14.4, 21.6)	(8.0, 12.7)
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	(1.4, 3.0)	(1.1, 6.1)	(1.1, 4.1)	(1.2, 3.3)
<i>Legitimately Skipped Question</i>	(20.3, 25.2)	(24.5, 36.0)	(20.5, 28.7)	(18.5, 25.0)
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	(26.7, 32.1)	(1.5, 6.0)	(9.9, 16.2)	(34.2, 41.6)
Some of the time	(19.5, 24.3)	(3.4, 8.9)	(17.2, 24.7)	(19.9, 26.3)
About half the time	(5.2, 8.0)	(1.3, 7.5)	(5.5, 10.4)	(4.5, 8.2)
Most of the time	(20.2, 25.0)	(21.9, 34.3)	(24.2, 32.6)	(16.9, 23.0)
Always	(17.8, 22.1)	(53.8, 67.0)	(26.7, 35.2)	(10.9, 16.2)
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	(7.8, 11.2)	(4.6, 11.6)	(7.9, 13.6)	(7.0, 11.4)
When there are enough firefighters on and at the scene of the fire	(29.6, 35.1)	(15.0, 26.3)	(31.3, 40.2)	(27.9, 35.0)
Whenever firefighters enter a burning building	(23.9, 29.1)	(15.6, 27.1)	(23.8, 32.2)	(22.8, 29.5)
	(3.8, 6.3)	(4.3, 11.0)	(5.4, 10.5)	(2.5, 5.4)
<i>Legitimately Skipped Question</i>	(46.4, 52.2)	(56.7, 69.9)	(39.1, 48.4)	(47.4, 55.0)

Other

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	(32.1, 37.8)	(18.9, 31.1)	(27.0, 35.7)	(33.3, 40.9)
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	(7.2, 10.8)	(**, **)	(2.7, 6.9)	(9.0, 13.9)
We don't have enough firefighters available at the scene of the fire	(50.6, 56.5)	(13.3, 24.5)	(41.1, 50.4)	(54.6, 62.3)
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	(18.3, 23.2)	(1.8, 7.4)	(9.2, 15.4)	(22.1, 28.8)
We have never established an RIT/RIC	(15.5, 20.1)	(0.7, 3.6)	(6.0, 11.4)	(19.4, 25.9)
We use other fire departments in the area for RITs/RICs	(26.6, 32.0)	(2.0, 8.3)	(24.6, 33.3)	(27.1, 34.2)
We use other safety practices and so we don't need them	(3.1, 5.7)	(1.0, 5.7)	(0.6, 3.0)	(4.0, 7.7)
<i>Legitimately Skipped Question</i>	(3.1, 5.4)	(4.9, 13.1)	(2.2, 5.9)	(2.8, 5.8)
	(18.1, 22.6)	(54.6, 67.9)	(27.2, 35.7)	(11.2, 16.5)
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	(76.2, 81.1)	(95.4, 99.6)	(89.3, 94.4)	(68.4, 75.3)
	(18.9, 23.8)	(0.4, 4.6)	(5.6, 10.7)	(24.7, 31.6)
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No	(4.9, 8.0)	(**, **)	(0.6, 3.4)	(6.7, 11.2)
Some of the time	(2.9, 5.3)	(0.2, 4.5)	(0.2, 1.9)	(4.0, 7.6)
Never	(1.2, 2.8)	(**, **)	(0.7, 3.2)	(1.2, 3.5)
About half the time	(10.9, 15.0)	(0.5, 2.9)	(7.1, 12.6)	(12.3, 17.7)
Most of the time	(72.5, 77.6)	(94.9, 99.1)	(83.6, 89.7)	(65.3, 72.4)
Always				

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	(11.2, 15.4)	(0.2, 4.5)	(2.0, 5.4)	(15.1, 21.2)
Situation doesn't require them	(7.9, 11.4)	(0.1, 1.8)	(3.8, 8.3)	(9.4, 14.2)
Firefighters think the devices do not always work reliably	(0.1, 1.0)	(**, **)	(0.0, 0.5)	(0.1, 1.4)
Firefighters don't think they need them	(3.5, 5.9)	(0.2, 4.5)	(1.5, 4.8)	(4.1, 7.4)
Devices go off while firefighters are resting	(2.7, 4.9)	(0.2, 2.0)	(2.3, 5.9)	(2.6, 5.4)
<i>Legitimately Skipped Question</i>	(72.9, 78.0)	(94.9, 99.1)	(84.7, 90.7)	(65.4, 72.6)
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	(98.4, 99.6)	(97.8, 100.0)	(98.7, 99.9)	(97.8, 99.6)
	(0.4, 1.6)	(0.0, 2.2)	(0.1, 1.3)	(0.4, 2.2)
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	(46.7, 52.7)	(6.7, 15.9)	(32.8, 42.1)	(52.6, 60.3)
	(46.5, 52.5)	(83.7, 93.1)	(57.5, 66.9)	(38.7, 46.4)
Yes <i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.0, 2.4)	(0.1, 1.4)	(0.5, 2.3)
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	(3.5, 6.3)	(**, **)	(2.2, 6.1)	(3.8, 7.6)
Firefighters don't like using the equipment	(0.1, 0.9)	(**, **)	(**, **)	(0.1, 1.2)
Have never needed them (e.g., we don't do interior attacks)	(0.3, 1.5)	(**, **)	(**, **)	(0.4, 2.1)
They cost too much, there is not enough money in the budget	(29.0, 34.7)	(3.0, 10.5)	(19.1, 27.4)	(32.8, 40.4)
We don't have enough equipment for all of our firefighters	(22.0, 27.3)	(0.8, 6.4)	(10.3, 17.1)	(26.8, 34.0)
Shared systems work fine for our needs	(20.9, 26.2)	(2.5, 9.9)	(14.7, 22.2)	(23.0, 30.0)
	(3.8, 6.5)	(2.2, 9.6)	(5.3, 10.6)	(2.6, 5.8)
<i>Legitimately Skipped Question</i>	(47.4, 53.3)	(84.2, 93.5)	(57.7, 67.0)	(39.8, 47.5)

Other

(continued)

Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	(0.6, 2.2)	(**, **)	(**, **)	(0.9, 3.2)
Some of the time	(3.6, 6.2)	(**, **)	(0.6, 3.2)	(4.7, 8.5)
About half the time	(1.8, 3.9)	(0.1, 5.3)	(0.3, 2.4)	(2.4, 5.2)
Most of the time	(22.0, 27.2)	(9.5, 19.5)	(12.3, 19.3)	(25.4, 32.5)
Always	(63.3, 68.9)	(79.3, 89.5)	(77.9, 85.3)	(54.8, 62.4)
<i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.0, 2.4)	(0.1, 1.3)	(0.5, 2.3)
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	(23.3, 28.6)	(6.7, 15.5)	(10.0, 16.5)	(28.5, 35.8)
Firefighters do not trust that the SCBAs will work reliably	(**, **)	(**, **)	(**, **)	(0.0, 0.9)
Firefighters don't think they need them	(8.6, 12.3)	(3.7, 10.5)	(4.8, 9.8)	(9.7, 14.7)
Firefighters don't like sharing facepieces with others	(0.5, 1.8)	(**, **)	(0.3, 2.6)	(0.5, 2.2)
Firefighters are concerned that the SCBA may be or become contaminated	(**, **)	(**, **)	(0.0, 1.9)	(**, **)
Wearing SCBAs makes it more difficult to work	(4.6, 7.5)	(1.4, 7.5)	(2.4, 6.2)	(5.2, 9.0)
Firefighters don't have SCBAs to use	(2.8, 5.4)	(0.1, 5.4)	(0.8, 3.8)	(3.5, 7.0)
<i>Legitimately Skipped Question</i>	(64.9, 70.5)	(80.4, 90.4)	(79.0, 86.3)	(56.6, 64.3)
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	(39.7, 46.3)	(45.1, 60.0)	(41.3, 51.8)	(36.7, 45.3)
Once a month or more	(16.5, 21.7)	(6.1, 16.9)	(16.0, 24.6)	(15.7, 22.5)
Several times a year	(12.8, 17.5)	(9.4, 19.6)	(12.2, 19.8)	(11.9, 18.2)
Once a year	(14.1, 19.1)	(15.1, 27.4)	(12.3, 20.0)	(13.6, 20.1)
Less than once a year	(3.1, 5.9)	(0.3, 3.7)	(0.5, 2.9)	(4.1, 8.1)
Never. Maintenance has not been done on our SCBAs.	(0.8, 2.5)	(0.3, 5.6)	(0.1, 2.1)	(0.9, 3.4)
Does not apply. My department does not have SCBAs.	(**, **)	(**, **)	(**, **)	(**, **)
<i>Legitimately Skipped Question</i>	(0.5, 2.0)	(0.1, 2.8)	(0.1, 1.6)	(0.6, 2.8)

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	(15.5, 19.8) (80.2, 84.5)	(40.2, 54.1) (45.9, 59.8)	(23.2, 31.5) (68.5, 76.8)	(9.8, 15.0) (85.0, 90.2)
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero				
CBRN SCBA devices are not needed in our department	(18.5, 23.6)	(6.5, 16.0)	(10.1, 16.9)	(21.4, 28.4)
We didn't know they were available	(12.9, 17.5)	(3.3, 10.8)	(8.4, 14.9)	(14.2, 20.3)
We don't have adequate technical information to purchase them	(17.3, 22.3)	(4.5, 13.2)	(12.3, 19.8)	(18.7, 25.4)
We don't have adequate funding to purchase them	(57.2, 63.2)	(27.1, 40.3)	(50.2, 59.8)	(59.6, 67.4)
<i>Legitimately Skipped Question</i>	(3.7, 6.4) (16.2, 20.6)	(11.1, 22.3) (41.0, 55.1)	(3.5, 7.9) (24.4, 33.0)	(2.9, 6.3) (10.2, 15.5)
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> Yes	(74.8, 79.9) (20.1, 25.2)	(91.4, 97.4) (2.6, 8.6)	(81.4, 88.2) (11.8, 18.6)	(69.8, 76.6) (23.4, 30.2)
<b>38a. At your fire department, where do you have AEDs?</b> No				
At the fire station(s)	(1.9, 4.1)	(0.2, 3.0)	(0.2, 2.3)	(2.5, 5.6)
On the emergency vehicles (or apparatus)	(58.9, 64.9)	(68.9, 81.9)	(65.3, 74.5)	(54.1, 61.9)
Both at the fire station(s) and on the vehicles (or apparatus)	(8.7, 12.3)	(12.4, 24.3)	(9.2, 15.6)	(7.4, 12.0)
<i>Legitimately Skipped Question</i>	(22.2, 27.7)	(3.1, 10.2)	(13.6, 21.3)	(25.3, 32.6)
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b> After every time they are used	(11.7, 16.4)	(27.4, 40.0)	(11.7, 19.3)	(9.6, 15.7)
Once a month or more	(22.6, 28.5)	(20.7, 33.5)	(22.5, 32.0)	(20.9, 28.8)
Several times a year	(18.0, 23.4)	(14.0, 25.5)	(14.5, 22.7)	(18.3, 25.6)
Once a year	(19.6, 25.3)	(12.1, 22.3)	(22.3, 31.6)	(17.1, 24.5)
Less frequently than once a year	(5.8, 9.5)	(1.4, 6.9)	(4.4, 9.9)	(5.9, 10.9)
Never. Maintenance on our AEDs has not been done.	(8.4, 12.8)	(0.4, 3.1)	(4.1, 9.7)	(10.0, 16.2)

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	(1.0, 2.6)	(0.0, 2.2)	(0.7, 3.6)	(1.0, 3.0)
Never	(3.6, 6.1)	(0.0, 2.1)	(1.9, 5.5)	(4.1, 7.5)
About half the time	(1.8, 3.8)	(0.2, 3.0)	(0.7, 3.1)	(2.1, 4.9)
Most of the time	(18.3, 23.1)	(2.1, 7.3)	(12.0, 18.8)	(20.7, 27.1)
Always	(67.7, 73.0)	(91.2, 96.9)	(74.5, 82.2)	(62.1, 69.3)
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Never	(15.9, 20.4)	(7.2, 15.4)	(15.5, 23.0)	(15.1, 21.0)
Some of the time	(61.6, 67.3)	(74.4, 85.0)	(62.8, 71.7)	(58.8, 66.2)
About half the time	(8.6, 12.2)	(2.3, 8.2)	(6.5, 12.1)	(8.9, 13.7)
Most of the time	(4.2, 6.9)	(2.0, 8.0)	(2.6, 6.4)	(4.4, 8.1)
	(1.1, 2.9)	(0.2, 3.1)	(0.1, 2.1)	(1.5, 4.0)
<b>42. How would you rate your department's budget in the following areas?</b>				
Always				
<b>42a. Equipment</b>				
Not adequate	(45.7, 51.6)	(25.8, 38.3)	(35.8, 45.0)	(49.2, 56.8)
Adequate	(42.8, 48.6)	(49.6, 62.9)	(45.4, 54.9)	(39.5, 47.1)
More than adequate	(4.5, 7.2)	(8.1, 17.3)	(7.0, 12.8)	(2.5, 5.6)

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>42b. Training</b>				
Not adequate	(36.3, 42.0)	(40.1, 53.2)	(31.5, 40.3)	(36.6, 44.2)
Adequate	(52.7, 58.6)	(41.0, 54.3)	(51.6, 60.8)	(51.8, 59.5)
More than adequate	(4.0, 6.8)	(3.4, 9.8)	(5.7, 11.0)	(2.6, 5.9)
<b>42c. Personnel</b>				
Not adequate	(48.5, 54.5)	(53.8, 65.8)	(46.3, 55.6)	(47.5, 55.4)
Adequate	(41.3, 47.3)	(29.6, 41.6)	(39.5, 48.9)	(40.8, 48.7)
More than adequate	(3.1, 5.7)	(2.7, 8.1)	(3.1, 7.5)	(2.5, 5.9)
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
Never	(24.2, 29.5)	(4.7, 11.2)	(13.1, 20.1)	(28.7, 36.0)
One or two times per year	(31.6, 37.2)	(21.7, 34.0)	(30.7, 39.7)	(30.8, 38.0)
Several times per year	(30.5, 35.9)	(42.6, 56.1)	(37.3, 46.5)	(25.3, 32.2)
Once a month or more	(4.5, 7.2)	(11.6, 21.3)	(4.8, 9.4)	(3.3, 6.9)
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	(53.1, 58.9)	(48.6, 61.5)	(52.0, 61.4)	(51.9, 59.5)
On the Internet	(22.4, 27.1)	(56.6, 69.8)	(31.5, 40.3)	(15.4, 21.3)
From colleagues in other departments	(8.3, 11.8)	(13.9, 24.4)	(8.8, 14.7)	(6.9, 11.4)
At conferences or other meetings	(5.7, 8.5)	(17.6, 28.4)	(6.4, 11.4)	(4.1, 7.6)
<i>Legitimately Skipped Question</i>	(24.2, 29.5)	(4.7, 11.3)	(13.1, 20.1)	(28.7, 35.9)

(continued)



Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	(50.4, 56.2)	(78.5, 87.8)	(60.9, 69.8)	(43.0, 50.6)
	(17.8, 22.5)	(6.0, 13.6)	(14.8, 22.0)	(18.3, 24.6)
<i>Legitimately Skipped Question</i>	(24.1, 29.4)	(4.6, 11.1)	(13.2, 20.2)	(28.4, 35.6)
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	(57.7, 63.5)	(74.1, 84.5)	(66.6, 75.3)	(51.3, 59.0)
	(10.2, 14.1)	(9.1, 18.0)	(9.4, 15.6)	(9.7, 14.7)
<i>Legitimately Skipped Question</i>	(24.7, 30.0)	(4.7, 11.2)	(13.4, 20.5)	(29.3, 36.6)
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	(21.1, 26.1)	(21.3, 33.6)	(20.1, 28.1)	(20.1, 26.7)
Training sessions	(41.3, 47.2)	(51.0, 64.2)	(43.9, 53.4)	(37.9, 45.5)
Provide copies of NIOSH reports to firefighters	(14.2, 18.3)	(26.5, 39.3)	(21.2, 29.1)	(9.4, 14.3)
Provide copies of NIOSH report summaries to firefighters	(5.0, 7.7)	(5.7, 13.2)	(7.7, 13.4)	(3.0, 6.2)
Provide summaries prepared by department to firefighters	(1.2, 2.7)	(5.6, 12.6)	(1.1, 4.2)	(0.7, 2.6)
Postings on bulletin boards	(35.6, 41.3)	(31.2, 44.6)	(43.4, 52.9)	(30.6, 37.9)
Post report on the department website	(0.7, 1.8)	(4.3, 11.4)	(0.9, 3.6)	(0.2, 1.5)
Send message to firefighters by email	(4.3, 6.5)	(28.5, 41.5)	(7.0, 12.1)	(1.5, 3.8)
	(0.8, 2.0)	(5.4, 13.5)	(0.8, 3.5)	(0.3, 1.8)
<i>Legitimately Skipped Question</i>	(36.2, 42.0)	(15.7, 26.2)	(24.6, 33.2)	(40.6, 48.3)
<b>51. Do the NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
Yes	(31.6, 36.9)	(72.5, 83.3)	(43.3, 52.4)	(23.2, 29.9)
	(35.5, 41.3)	(10.1, 19.3)	(31.0, 40.1)	(36.9, 44.5)
<i>Legitimately Skipped Question</i>	(24.8, 30.2)	(4.8, 11.6)	(13.5, 20.6)	(29.4, 36.7)

No

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	(0.2, 1.1)	(0.4, 5.9)	(0.2, 1.7)	(0.1, 1.4)
Disagree	(2.6, 4.8)	(1.7, 7.4)	(2.7, 6.6)	(2.1, 4.9)
Neither Agree nor Disagree	(16.5, 21.2)	(13.5, 24.6)	(14.4, 21.7)	(16.2, 22.4)
Agree	(42.7, 48.6)	(52.7, 66.2)	(51.5, 61.0)	(36.5, 44.2)
Strongly Agree	(2.7, 5.0)	(6.0, 14.3)	(2.5, 6.5)	(2.1, 5.1)
<i>Legitimately Skipped Question</i>	(25.3, 30.8)	(4.8, 11.5)	(13.8, 21.1)	(30.0, 37.4)
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	(0.2, 1.0)	(0.7, 6.8)	(0.1, 1.7)	(0.1, 1.4)
Disagree	(1.1, 2.6)	(0.8, 5.2)	(1.9, 5.6)	(0.4, 2.2)
Neither Agree nor Disagree	(17.5, 22.3)	(9.1, 18.7)	(14.6, 22.0)	(17.9, 24.2)
Agree	(42.4, 48.4)	(55.9, 69.3)	(51.4, 60.9)	(36.1, 43.8)
Strongly Agree	(3.5, 6.1)	(8.2, 17.6)	(3.2, 7.7)	(2.8, 6.1)
<i>Legitimately Skipped Question</i>	(25.4, 30.9)	(4.9, 11.7)	(13.8, 21.1)	(30.1, 37.6)
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	(0.2, 1.0)	(1.1, 7.7)	(0.2, 1.7)	(0.1, 1.4)
Disagree	(2.3, 4.4)	(3.7, 10.8)	(2.9, 7.0)	(1.5, 4.0)
Neither Agree nor Disagree	(24.0, 29.4)	(16.2, 27.7)	(24.7, 33.5)	(22.5, 29.4)
Agree	(35.0, 40.8)	(45.4, 59.2)	(40.1, 49.7)	(30.6, 38.0)
Strongly Agree	(2.8, 5.2)	(6.2, 13.8)	(2.4, 6.5)	(2.4, 5.4)
<i>Legitimately Skipped Question</i>	(25.4, 30.8)	(4.9, 11.7)	(13.9, 21.2)	(30.0, 37.4)

(continued)

**Exhibit B-4b. Results from the Fire Department Survey, Confidence Interval Estimates by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	(54.4, 60.4)	(79.6, 89.5)	(60.2, 69.2)	(48.9, 56.8)
Respirator maintenance program guide	(11.9, 15.9)	(20.6, 32.8)	(14.7, 21.9)	(9.1, 14.0)
CDs of firefighter program materials	(25.4, 30.7)	(34.7, 48.0)	(25.8, 34.7)	(23.2, 30.1)
Alerts	(29.1, 34.5)	(56.4, 69.0)	(36.7, 46.1)	(22.7, 29.6)
Hazard IDs	(14.5, 19.0)	(18.4, 30.4)	(14.3, 21.7)	(13.1, 18.9)
Workplace Solutions	(10.7, 14.6)	(12.5, 23.0)	(12.5, 19.6)	(8.6, 13.5)
	(0.4, 1.4)	(1.3, 6.5)	(0.4, 2.6)	(0.2, 1.5)
None. I have not seen any NIOSH materials.	(22.6, 27.9)	(3.0, 9.6)	(12.7, 19.7)	(26.7, 34.0)
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	(0.8, 2.2)	(1.6, 7.7)	(0.6, 2.9)	(0.6, 2.5)
Dissatisfied	(0.0, 0.7)	(**, **)	(**, **)	(0.1, 1.1)
Neither satisfied nor dissatisfied	(18.8, 23.8)	(10.8, 21.7)	(18.0, 26.0)	(18.1, 24.5)
Satisfied	(44.1, 50.1)	(53.4, 67.0)	(50.7, 60.1)	(39.0, 46.8)
Very satisfied	(4.0, 6.7)	(10.6, 20.6)	(3.9, 8.4)	(3.2, 6.5)
<i>Legitimately Skipped Question</i>	(22.4, 27.7)	(3.1, 9.8)	(12.5, 19.5)	(26.4, 33.7)
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	(56.5, 62.2)	(10.1, 20.1)	(44.0, 53.2)	(62.4, 69.7)
No Yes, longer than one year ago	(31.9, 37.3)	(68.1, 80.2)	(40.5, 49.7)	(24.8, 31.7)
	(4.9, 7.6)	(7.2, 16.3)	(4.5, 9.0)	(4.3, 7.8)

Note: The 0-4,999 column includes those records with a missing value for population protected.

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>1. Does your department have a Safety Officer?</b>	1,587	272	563	752
	1,587	272	563	752
<b>2. Does your department have a Training Officer?</b>				
Yes				
No	1,600	277	568	755
	1,600	277	568	755
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	1,600	276	564	760
Maintenance of SCBAs	1,600	276	564	760
Motor vehicle safety	1,600	276	564	760
Participation in a personal physical fitness program	1,600	276	564	760
Participation in regular health screenings for cardiovascular disease (CVD)	1,600	276	564	760
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	1,600	276	564	760
Use of Personal Alert Safety System (PASS) devices	1,600	276	564	760
Use of personal protective equipment and protective clothing	1,600	276	564	760
Use of radio communications	1,600	276	564	760
	1,600	276	564	760
Does not apply. Our fire department does not use SOPs/SOGs.	1,600	276	564	760

Other

(continued)

Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	1,607	275	570	762
Optional Training	1,607	275	570	762
Required Training	1,607	275	570	762
<b>4b. Driving safety</b>				
No Training	1,598	276	569	753
Optional Training	1,598	276	569	753
Required Training	1,598	276	569	753
<b>4c. Incident Command systems</b>				
No Training	1,584	274	565	745
Optional Training	1,584	274	565	745
Required Training	1,584	274	565	745
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	1,581	271	558	752
Optional Training	1,581	271	558	752
Required Training	1,581	271	558	752
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	1,511	271	544	696
Optional Training	1,511	271	544	696
Required Training	1,511	271	544	696

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1,611	275	571	765
Optional Training	1,611	275	571	765
Required Training	1,611	275	571	765
<b>4g. Use of radio communication devices</b>				
No Training	1,606	274	568	764
Optional Training	1,606	274	568	764
Required Training	1,606	274	568	764
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department’s Training Officer	1,611	275	569	767
Other officers within our department	1,611	275	569	767
State fire training agency	1,611	275	569	767
United States Fire Administration’s (USFA) National Fire Academy in Emmitsburg, MD	1,611	275	569	767
Conferences or regional meetings	1,611	275	569	767
	1,611	275	569	767
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Other				
Roadside incidents/Motor Vehicle Accidents (MVA)	1,622	279	572	771
Scuba diving	1,622	279	572	771
Swift water rescue	1,622	279	572	771
Wildland fire fighting	1,622	279	572	771
	1,622	279	572	771
	1,622	279	572	771

HAZMAT  
Other

(continued)

Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	1,610	277	568	765
Not very familiar	1,610	277	568	765
Somewhat familiar	1,610	277	568	765
Very familiar	1,610	277	568	765
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	1,611	275	570	766
Not very familiar	1,611	275	570	766
Somewhat familiar	1,611	275	570	766
Very familiar	1,611	275	570	766
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	1,609	277	569	763
National conference presentations	1,609	277	569	763
State-level conference presentations	1,609	277	569	763
Other firefighters or departments	1,609	277	569	763
At seminars or other training opportunities (not conferences)	1,609	277	569	763
Trade publications (such as Firehouse and Fire Engineering)	1,609	277	569	763
NIOSH website	1,609	277	569	763
Links from other websites (such as NFPA and Firehouse)	1,609	277	569	763
Media reports—newspaper, television, radio	1,609	277	569	763
Does not apply. We have not received information about NIOSH	1,609	277	569	763
Other recommendations.				

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	1,536	268	554	714
Developed new SOPs/SOGs	1,536	268	554	714
Made changes to SOPs/SOGs	1,536	268	554	714
Justified current budget/staffing	1,536	268	554	714
Made new budget/staffing requests	1,536	268	554	714
Justified grant applications	1,536	268	554	714
Does not apply. We have not used NIOSH recommendations.	1,536	268	554	714
<i>Legitimately Skipped Question</i>	1,536	268	554	714
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	1,530	265	557	708
Personal protective equipment and clothing	1,530	265	557	708
	1,530	265	557	708
PASS systems	1,530	265	557	708
SCBA Incident Command systems	1,530	265	557	708
Radio communications	1,530	265	557	708
Physical fitness and cardiovascular disease (CVD)	1,530	265	557	708
Building code compliance (e.g., warning against the use of wooden trusses)	1,530	265	557	708
	1,530	265	557	708
Does not apply. We have not used NIOSH recommendations for training purposes.	1,530	265	557	708
Other				
<i>Legitimately Skipped Question</i>	1,530	265	557	708

(continued)



Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	1,596	270	567	759
No Yes, it's optional	1,596	270	567	759
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	1,582	269	557	756
Less frequently than once a year	1,582	269	557	756
One time a year	1,582	269	557	756
More than one time a year	1,582	269	557	756
Does not apply. Firefighters are not required to receive CVD screenings	1,582	269	557	756
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	1,616	279	570	767
Yes, they receive training required by the department	1,616	279	570	767
Yes, they receive training required by the state	1,616	279	570	767
Yes, they receive optional training	1,616	279	570	767
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	1,611	276	569	766
Once every year	1,611	276	569	766
Less frequently than once a year	1,611	276	569	766
Does not apply. Firefighters are not required to receive continuing driver training.	1,611	276	569	766

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>	1,613	277	569	767
	1,613	277	569	767
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
No				
Strongly disagree	1,603	277	566	760
Disagree	1,603	277	566	760
Neither agree nor disagree	1,603	277	566	760
Agree	1,603	277	566	760
Strongly agree	1,603	277	566	760
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	1,616	279	570	767
Never	1,616	279	570	767
About half the time	1,616	279	570	767
Most of the time	1,616	279	570	767
	1,616	279	570	767
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Always	1,604	276	566	762
Rarely	1,604	276	566	762
Never	1,604	276	566	762
About half the time	1,604	276	566	762
Most of the time	1,604	276	566	762
	1,604	276	566	762

(continued)

Always

Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	1,600	275	565	760
Not enough firefighters available at the scene of the fire	1,600	275	565	760
	1,600	275	565	760
Does not apply. My department always assigns an Incident Commander for structure fires.	1,600	275	565	760
Other <i>Legitimately Skipped Question</i>	1,600	275	565	760
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	1,588	276	562	750
Develop and coordinate the fire attack strategy	1,588	276	562	750
Develop and initiate a risk management plan	1,588	276	562	750
Document all assessments, plans and events related to the fire	1,588	276	562	750
Ensure that at least four (4) firefighters are on the scene before entering the building	1,588	276	562	750
Establish a collapse zone around the building	1,588	276	562	750
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	1,588	276	562	750
Identify and implement a communication strategy	1,588	276	562	750
Monitor location of all firefighters at the scene	1,588	276	562	750
	1,588	276	562	750
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Other Never	1,605	278	567	760
Some of the time	1,605	278	567	760
About half the time	1,605	278	567	760
Most of the time	1,605	278	567	760
	1,605	278	567	760

(continued)

Always

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	1,588	277	563	748
Not enough firefighters are available at the scene of the fire	1,588	277	563	748
	1,588	277	563	748
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	1,588	277	563	748
Other <i>Legitimately Skipped Question</i>	1,588	277	563	748
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	1,602	277	565	760
Some of the time	1,602	277	565	760
About half the time	1,602	277	565	760
Most of the time	1,602	277	565	760
	1,602	277	565	760
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
Always				
When the building has more than one story/floor	1,600	278	564	758
When there are enough firefighters on and at the scene of the fire	1,600	278	564	758
Whenever firefighters enter a burning building	1,600	278	564	758
	1,600	278	564	758
<i>Legitimately Skipped Question</i>	1,600	278	564	758

Other

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	1,575	274	557	744
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	1,575	274	557	744
We don't have enough firefighters available at the scene of the fire	1,575	274	557	744
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	1,575	274	557	744
We have never established an RIT/RIC	1,575	274	557	744
We use other fire departments in the area for RITs/RICs	1,575	274	557	744
We use other safety practices and so we don't need them	1,575	274	557	744
<i>Legitimately Skipped Question</i>	1,575	274	557	744
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	1,606	279	568	759
	1,606	279	568	759
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No	1,600	278	567	755
Always	1,600	278	567	755
Some of the time	1,600	278	567	755
Never	1,600	278	567	755
About half the time	1,600	278	567	755
Most of the time	1,600	278	567	755

(continued)

Always

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	1,590	278	560	752
Situation doesn't require them	1,590	278	560	752
Firefighters think the devices do not always work reliably	1,590	278	560	752
Firefighters don't think they need them	1,590	278	560	752
Devices go off while firefighters are resting	1,590	278	560	752
<i>Legitimately Skipped Question</i>	1,590	278	560	752
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	1,606	278	567	761
	1,606	278	567	761
<del>33.</del> <b>Do your firefighters ever have to share facepieces for SCBAs?</b>				
No				
	1,521	257	530	734
	1,521	257	530	734
Yes <i>Legitimately Skipped Question</i>	1,521	257	530	734
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	1,517	256	530	731
Firefighters don't like using the equipment	1,517	256	530	731
Have never needed them (e.g., we don't do interior attacks)	1,517	256	530	731
They cost too much, there is not enough money in the budget	1,517	256	530	731
We don't have enough equipment for all of our firefighters	1,517	256	530	731
Shared systems work fine for our needs	1,517	256	530	731
	1,517	256	530	731
<i>Legitimately Skipped Question</i>	1,517	256	530	731

Other

(continued)

Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1,536	260	535	741
Some of the time	1,536	260	535	741
About half the time	1,536	260	535	741
Most of the time	1,536	260	535	741
<i>Legitimately Skipped Question</i>	1,536	260	535	741
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	1,525	259	532	734
Firefighters do not trust that the SCBAs will work reliably	1,525	259	532	734
Firefighters don't think they need them	1,525	259	532	734
Firefighters don't like sharing facepieces with others	1,525	259	532	734
Firefighters are concerned that the SCBA may be or become contaminated	1,525	259	532	734
Wearing SCBAs makes it more difficult to work	1,525	259	532	734
Firefighters don't have SCBAs to use	1,525	259	532	734
<i>Legitimately Skipped Question</i>	1,525	259	532	734
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	1,270	222	453	595
Once a month or more	1,270	222	453	595
Several times a year	1,270	222	453	595
Once a year	1,270	222	453	595
Less than once a year	1,270	222	453	595
Never. Maintenance has not been done on our SCBAs.	1,270	222	453	595
Does not apply. My department does not have SCBAs.	1,270	222	453	595
<i>Legitimately Skipped Question</i>	1,270	222	453	595

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	1,518 1,518	258 258	534 534	726 726
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero				
CBRN SCBA devices are not needed in our department	1,454	249	511	694
We didn't know they were available	1,454	249	511	694
We don't have adequate technical information to purchase them	1,454	249	511	694
We don't have adequate funding to purchase them	1,454	249	511	694
<i>Legitimately Skipped Question</i>	1,454	249	511	694
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> Yes	1,610 1,610	274 274	569 569	767 767
<b>38a. At your fire department, where do you have AEDs?</b> No				
At the fire station(s)	1,424	225	493	706
On the emergency vehicles (or apparatus)	1,424	225	493	706
Both at the fire station(s) and on the vehicles (or apparatus)	1,424	225	493	706
<i>Legitimately Skipped Question</i>	1,424	225	493	706
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b> After every time they are used	1,235	240	455	540
Once a month or more	1,235	240	455	540
Several times a year	1,235	240	455	540
Once a year	1,235	240	455	540
Less frequently than once a year	1,235	240	455	540
Never. Maintenance on our AEDs has not been done.	1,235	240	455	540

(continued)



**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?				
Some of the time	1,610	279	569	762
Never	1,610	279	569	762
About half the time	1,610	279	569	762
Most of the time	1,610	279	569	762
	1,610	279	569	762
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Always	1,612	279	567	766
Some of the time	1,612	279	567	766
Never	1,612	279	567	766
About half the time	1,612	279	567	766
Most of the time	1,612	279	567	766
	1,612	279	567	766
<b>42. How would you rate your department's budget in the following areas?</b>				
Always				
<b>42a. Equipment</b>				
Not adequate	1,608	277	569	762
Adequate	1,608	277	569	762
More than adequate	1,608	277	569	762

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>42b. Training</b>				
Not adequate	1,608	275	572	761
Adequate	1,608	275	572	761
More than adequate	1,608	275	572	761
<b>42c. Personnel</b>				
Not adequate	1,551	277	554	720
Adequate	1,551	277	554	720
More than adequate	1,551	277	554	720
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
	1,605	276	568	761
One or two times per year	1,605	276	568	761
Never	1,605	276	568	761
Several times per year	1,605	276	568	761
Once a month or more	1,605	276	568	761
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	1,605	275	567	763
On the Internet	1,605	275	567	763
From colleagues in other departments	1,605	275	567	763
At conferences or other meetings	1,605	275	567	763
<i>Legitimately Skipped Question</i>	1,605	275	567	763
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	1,611	277	566	768
	1,611	277	566	768
<i>Legitimately Skipped Question</i>	1,611	277	566	768

No

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
	1,583	276	560	747
Yes	1,583	276	560	747
<i>Legitimately Skipped Question</i>	1,583	276	560	747
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	1,585	273	558	754
Training sessions	1,585	273	558	754
Provide copies of NIOSH reports to firefighters	1,585	273	558	754
Provide copies of NIOSH report summaries to firefighters	1,585	273	558	754
Provide summaries prepared by department to firefighters	1,585	273	558	754
Postings on bulletin boards	1,585	273	558	754
Post report on the department website	1,585	273	558	754
Send message to firefighters by email	1,585	273	558	754
	1,585	273	558	754
<i>Legitimately Skipped Question</i>	1,585	273	558	754
<b>51. Whether The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
	1,564	265	554	745
Yes	1,564	265	554	745
<i>Legitimately Skipped Question</i>	1,564	265	554	745

No

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	1,547	268	547	732
Disagree	1,547	268	547	732
Neither Agree nor Disagree	1,547	268	547	732
Agree	1,547	268	547	732
Strongly Agree	1,547	268	547	732
<i>Legitimately Skipped Question</i>	1,547	268	547	732
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	1,537	265	545	727
Disagree	1,537	265	545	727
Neither Agree nor Disagree	1,537	265	545	727
Agree	1,537	265	545	727
Strongly Agree	1,537	265	545	727
<i>Legitimately Skipped Question</i>	1,537	265	545	727
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	1,537	265	542	730
Disagree	1,537	265	542	730
Neither Agree nor Disagree	1,537	265	542	730
Agree	1,537	265	542	730
Strongly Agree	1,537	265	542	730
<i>Legitimately Skipped Question</i>	1,537	265	542	730

(continued)

**Exhibit B-4c. Results from the Fire Department Survey, Sample Sizes by Jurisdiction Size (continued)**

Question	Population Protected			
	Total	50,000 + People	5,000–49,999 People	0–4,999 People
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	1,537	269	549	719
Respirator maintenance program guide	1,537	269	549	719
CDs of firefighter program materials	1,537	269	549	719
Alerts	1,537	269	549	719
Hazard IDs	1,537	269	549	719
Workplace Solutions	1,537	269	549	719
None. I have not seen any NIOSH materials.	1,537	269	549	719
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1,536	265	546	725
Dissatisfied	1,536	265	546	725
Neither satisfied nor dissatisfied	1,536	265	546	725
Satisfied	1,536	265	546	725
Very satisfied	1,536	265	546	725
<i>Legitimately Skipped Question</i>	1,536	265	546	725
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	1,589	274	567	748
No Yes, longer than one year ago	1,589	274	567	748

Note: The 0-4,999 column includes those records with a missing value for population protected.

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>1. Does your department have a Safety Officer?</b>	70.3	67.9	68.9	71.2
	29.7	32.1	31.1	28.8
<b>2. Does your department have a Training Officer?</b>				
Yes	88.5	87.7	88.4	88.6
No	11.5	12.3	11.6	11.4
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	83.7	91.5 <sup>[2,3]</sup>	84.8 <sup>[1]</sup>	82.5 <sup>[1]</sup>
Maintenance of SCBAs	69.7	81.4 <sup>[2,3]</sup>	72.6 <sup>[1]</sup>	67.1 <sup>[1]</sup>
Motor vehicle safety	78.8	83.3	79.3	78.2
Participation in a personal physical fitness program	11.0	47.8 <sup>[2,3]</sup>	14.1 <sup>[1,3]</sup>	6.4 <sup>[1,2]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	16.8	42.9 <sup>[2,3]</sup>	17.7 <sup>[1]</sup>	14.2 <sup>[1]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	40.4	70.4 <sup>[2,3]</sup>	45.6 <sup>[1,3]</sup>	35.1 <sup>[1,2]</sup>
Use of Personal Alert Safety System (PASS) devices	75.4	83.0 <sup>[2,3]</sup>	74.6 <sup>[1]</sup>	75.1 <sup>[1]</sup>
Use of personal protective equipment and protective clothing	89.1	94.1 <sup>[2,3]</sup>	89.1 <sup>[1]</sup>	88.7 <sup>[1]</sup>
Use of radio communications	84.8	88.1	85.0	84.4
	8.7	12.5 <sup>[3]</sup>	10.3	7.5 <sup>[1]</sup>
Does not apply. Our fire department does not use SOPs/SOGs.	5.0	2.2 <sup>[+]</sup>	5.6	4.9

Other

(continued)

Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.1	3.0 <sup>[+]</sup>	1.2 <sup>[+]</sup>	1.0
Optional Training	16.7	5.0 <sup>[2,3]</sup>	15.6 <sup>[1]</sup>	18.3 <sup>[1]</sup>
Required Training	82.8	93.3 <sup>[2,3]</sup>	83.5 <sup>[1]</sup>	81.6 <sup>[1]</sup>
<b>4b. Driving safety</b>				
No Training	3.9	2.5	4.1	4.0
Optional Training	18.6	7.1 <sup>[2,3]</sup>	17.4 <sup>[1]</sup>	20.1 <sup>[1]</sup>
Required Training	77.7	91.0 <sup>[2,3]</sup>	78.6 <sup>[1]</sup>	76.2 <sup>[1]</sup>
<b>4c. Incident Command systems</b>				
No Training	2.9	** <sup>[2,3,+]</sup>	2.8 <sup>[1]</sup>	3.2 <sup>[1]</sup>
Optional Training	27.4	5.7 <sup>[2,3]</sup>	27.6 <sup>[1]</sup>	29.0 <sup>[1]</sup>
Required Training	69.9	94.2 <sup>[2,3]</sup>	69.8 <sup>[1]</sup>	68.0 <sup>[1]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	6.6	5.7	7.2	6.3
Optional Training	33.6	14.8 <sup>[2,3]</sup>	31.6 <sup>[1]</sup>	36.2 <sup>[1]</sup>
Required Training	60.3	79.7 <sup>[2,3]</sup>	61.2 <sup>[1]</sup>	58.2 <sup>[1]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	28.5	11.1 <sup>[2,3]</sup>	26.8 <sup>[1]</sup>	31.0 <sup>[1]</sup>
Optional Training	36.2	14.7 <sup>[2,3]</sup>	30.0 <sup>[1,3]</sup>	41.4 <sup>[1,2]</sup>
Required Training	35.5	74.9 <sup>[2,3]</sup>	43.3 <sup>[1,3]</sup>	27.9 <sup>[1,2]</sup>

(continued)

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.5	3.2	1.7	1.2
Optional Training	9.9	4.3 <sup>[2,3]</sup>	10.9 <sup>[1]</sup>	9.7 <sup>[1]</sup>
Required Training	88.9	93.1 <sup>[2]</sup>	87.4 <sup>[1]</sup>	89.4
<b>4g. Use of radio communication devices</b>				
No Training	2.7	2.8	3.2	2.4
Optional Training	21.4	9.2 <sup>[2,3]</sup>	23.7 <sup>[1]</sup>	21.1 <sup>[1]</sup>
Required Training	76.2	88.7 <sup>[2,3]</sup>	73.4 <sup>[1]</sup>	76.7 <sup>[1]</sup>
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	84.9	88.0	85.0	84.5
Other officers within our department	82.8	94.6 <sup>[2,3]</sup>	80.6 <sup>[1]</sup>	83.1 <sup>[1]</sup>
State fire training agency	77.4	78.9	75.7	78.2
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	20.9	58.2 <sup>[2,3]</sup>	25.5 <sup>[1,3]</sup>	15.4 <sup>[1,2]</sup>
Conferences or regional meetings	51.7	70.6 <sup>[2,3]</sup>	54.2 <sup>[1]</sup>	48.8 <sup>[1]</sup>
Other	25.2	23.7	22.5	26.7
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	55.3	49.5 <sup>[3]</sup>	51.3 <sup>[3]</sup>	58.0 <sup>[1,2]</sup>
Scuba diving	7.5	19.8 <sup>[2,3]</sup>	7.1 <sup>[1]</sup>	6.7 <sup>[1]</sup>
Swift water rescue	11.2	30.4 <sup>[2,3]</sup>	11.5 <sup>[1]</sup>	9.5 <sup>[1]</sup>
Wildland fire fighting	47.0	28.7 <sup>[2,3]</sup>	48.8 <sup>[1]</sup>	47.5 <sup>[1]</sup>
HAZMAT	66.7	86.8 <sup>[2,3]</sup>	65.5 <sup>[1]</sup>	65.7 <sup>[1]</sup>
Other	31.2	41.1 <sup>[2,3]</sup>	30.3 <sup>[1]</sup>	30.8 <sup>[1]</sup>

(continued)



Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	8.3	3.4 <sup>[3]</sup>	6.6	9.6 <sup>[1]</sup>
Not very familiar	24.3	10.3 <sup>[2,3]</sup>	24.0 <sup>[1]</sup>	25.6 <sup>[1]</sup>
Somewhat familiar	58.1	65.3 <sup>[3]</sup>	57.8	57.7 <sup>[1]</sup>
Very familiar	9.3	21.0 <sup>[2,3]</sup>	11.6 <sup>[1,3]</sup>	7.0 <sup>[1,2]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	20.8	10.5 <sup>[2,3]</sup>	19.7 <sup>[1]</sup>	22.2 <sup>[1]</sup>
Not very familiar	33.5	19.1 <sup>[2,3]</sup>	34.3 <sup>[1]</sup>	34.3 <sup>[1]</sup>
Somewhat familiar	37.9	54.9 <sup>[2,3]</sup>	35.8 <sup>[1]</sup>	37.7 <sup>[1]</sup>
Very familiar	7.8	15.6 <sup>[2,3]</sup>	10.1 <sup>[1,3]</sup>	5.9 <sup>[1,2]</sup>
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	67.8	72.4	64.5	69.2
National conference presentations	3.6	14.3 <sup>[2,3]</sup>	5.3 <sup>[1,3]</sup>	1.9 <sup>[1,2]</sup>
State-level conference presentations	11.5	17.0 <sup>[3]</sup>	13.6	9.8 <sup>[1]</sup>
Other firefighters or departments	22.9	25.7	23.6	22.3
At seminars or other training opportunities (not conferences)	16.4	23.5 <sup>[2,3]</sup>	15.2 <sup>[1]</sup>	16.4 <sup>[1]</sup>
Trade publications (such as Firehouse and Fire Engineering)	47.2	60.3 <sup>[3]</sup>	52.6 <sup>[3]</sup>	43.1 <sup>[1,2]</sup>
NIOSH website	24.3	55.2 <sup>[2,3]</sup>	26.2 <sup>[1,3]</sup>	20.7 <sup>[1,2]</sup>
Links from other websites (such as NFPA and Firehouse)	28.2	43.2 <sup>[2,3]</sup>	26.5 <sup>[1]</sup>	27.9 <sup>[1]</sup>
Media reports—newspaper, television, radio	14.9	16.5	14.6	14.9
	1.1	3.0	1.0	1.1
Does not apply. We have not received information about NIOSH recommendations.	11.1	6.2 <sup>[2]</sup>	13.1 <sup>[1]</sup>	10.4
Other				

(continued)

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	40.2	54.1 <sup>[2,3]</sup>	38.4 <sup>[1]</sup>	40.0 <sup>[1]</sup>
Developed new SOPs/SOGs	26.3	38.2 <sup>[2,3]</sup>	28.2 <sup>[1]</sup>	24.3 <sup>[1]</sup>
Made changes to SOPs/SOGs	34.9	51.4 <sup>[2,3]</sup>	33.7 <sup>[1]</sup>	34.2 <sup>[1]</sup>
Justified current budget/staffing	5.0	14.8 <sup>[2,3]</sup>	6.2 <sup>[1]</sup>	3.6 <sup>[1]</sup>
Made new budget/staffing requests	5.5	14.8 <sup>[2,3]</sup>	5.4 <sup>[1]</sup>	4.7 <sup>[1]</sup>
Justified grant applications	15.5	22.8 <sup>[2,3]</sup>	13.1 <sup>[1]</sup>	16.3 <sup>[1]</sup>
Does not apply. We have not used NIOSH recommendations.	30.1	18.1 <sup>[2,3]</sup>	32.3 <sup>[1]</sup>	29.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	11.7	6.3 <sup>[2]</sup>	13.6 <sup>[1]</sup>	11.1
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	29.3	32.1	28.4	29.6
Personal protective equipment and clothing	41.6	51.7 <sup>[2,3]</sup>	39.8 <sup>[1]</sup>	41.8 <sup>[1]</sup>
SCBA	40.1	51.6 <sup>[2,3]</sup>	38.5 <sup>[1]</sup>	39.9 <sup>[1]</sup>
PASS systems	32.6	37.6	33.1	31.9
Incident Command systems	32.1	39.4	31.4	31.9
Radio communications	23.0	26.7	23.3	22.6
Physical fitness and cardiovascular disease (CVD)	8.5	23.1 <sup>[2,3]</sup>	7.8 <sup>[1]</sup>	7.7 <sup>[1]</sup>
Building code compliance (e.g., warning against the use of wooden trusses)	6.9	15.2 <sup>[2,3]</sup>	6.5 <sup>[1]</sup>	6.5 <sup>[1]</sup>
Other	2.3	4.0	2.6	2.0
Does not apply. We have not used NIOSH recommendations for training purposes.	1.9	2.3	1.1	2.3
<i>Legitimately Skipped Question</i>	41.9	24.8 <sup>[2,3]</sup>	45.4 <sup>[1]</sup>	41.2 <sup>[1]</sup>

(continued)

Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	78.5	27.6 <sup>[2,3]</sup>	69.9 <sup>[1,3]</sup>	87.3 <sup>[1,2]</sup>
No Yes, it's optional	7.0	36.6 <sup>[2,3]</sup>	11.1 <sup>[1,3]</sup>	2.4 <sup>[1,2]</sup>
	14.5	35.8 <sup>[2,3]</sup>	19.0 <sup>[1,3]</sup>	10.4 <sup>[1,2]</sup>
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	23.0 <sup>[3]</sup>	17.6 <sup>[3]</sup>	12.2 <sup>[1,2]</sup>
Less frequently than once a year	7.1	11.8 <sup>[3]</sup>	7.9	6.3 <sup>[1]</sup>
One time a year	17.1	48.7 <sup>[2,3]</sup>	17.6 <sup>[1]</sup>	14.4 <sup>[1]</sup>
More than one time a year	0.3	2.5 <sup>[3]</sup>	0.2 <sup>[+]</sup>	0.1 <sup>[1,+]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	60.9	13.9 <sup>[2,3]</sup>	56.7 <sup>[1,3]</sup>	67.0 <sup>[1,2]</sup>
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	6.4	4.4	5.9	6.8
Yes, they receive training required by the department	84.0	88.6 <sup>[3]</sup>	86.9 <sup>[3]</sup>	82.0 <sup>[1,2]</sup>
Yes, they receive training required by the state	25.7	30.4	26.9	24.7
Yes, they receive optional training	13.8	9.2 <sup>[2]</sup>	15.0 <sup>[1]</sup>	13.4
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	14.2	14.8	15.3	13.5
Once every year	40.3	39.0	41.5	39.8
Less frequently than once a year	24.8	31.7 <sup>[3]</sup>	24.8	24.2 <sup>[1]</sup>
Does not apply. Firefighters are not required to receive continuing driver training.	20.7	14.5 <sup>[3]</sup>	18.4	22.5 <sup>[1]</sup>

(continued)

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
No	84.2	94.3 <sup>[2,3]</sup>	86.9 <sup>[1,3]</sup>	82.0 <sup>[1,2]</sup>
	15.8	5.7 <sup>[2,3]</sup>	13.1 <sup>[1,3]</sup>	18.0 <sup>[1,2]</sup>
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	6.9	4.0 <sup>[3]</sup>	4.9 <sup>[3]</sup>	8.2 <sup>[1,2]</sup>
Disagree	18.0	21.0	17.0	18.3
Neither agree nor disagree	30.8	14.2 <sup>[2,3]</sup>	32.0 <sup>[1]</sup>	31.6 <sup>[1]</sup>
Agree	32.1	41.2 <sup>[2,3]</sup>	32.5 <sup>[1]</sup>	31.2 <sup>[1]</sup>
Strongly agree	12.2	19.7 <sup>[3]</sup>	13.6	10.8 <sup>[1]</sup>
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	5.4	2.4 <sup>[3]</sup>	3.5 <sup>[3]</sup>	6.7 <sup>[1,2]</sup>
Never	22.7	15.9 <sup>[3]</sup>	19.1 <sup>[3]</sup>	25.2 <sup>[1,2]</sup>
About half the time	17.0	10.6 <sup>[2,3]</sup>	17.0 <sup>[1]</sup>	17.5 <sup>[1]</sup>
Most of the time	38.4	38.3	39.6	37.8
	16.5	32.8 <sup>[2,3]</sup>	20.9 <sup>[1,3]</sup>	12.8 <sup>[1,2]</sup>
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Always	2.3	0.6 <sup>[2,+]</sup>	3.1 <sup>[1]</sup>	2.0
Rarely	6.8	3.4 <sup>[3]</sup>	6.6	7.2 <sup>[1]</sup>
Never	6.7	2.6 <sup>[3]</sup>	5.8	7.5 <sup>[1]</sup>
About half the time	27.6	14.4 <sup>[2,3]</sup>	25.6 <sup>[1]</sup>	29.8 <sup>[1]</sup>
Most of the time	56.6	79.0 <sup>[2,3]</sup>	58.9 <sup>[1]</sup>	53.5 <sup>[1]</sup>
Always				

(continued)

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	22.5	10.2 <sup>[2,3]</sup>	23.6 <sup>[1]</sup>	22.9 <sup>[1]</sup>
Not enough firefighters available at the scene of the fire	21.2	7.6 <sup>[2,3]</sup>	19.2 <sup>[1]</sup>	23.3 <sup>[1]</sup>
Other	6.2	6.7	5.2	6.8
Does not apply. My department always assigns an Incident Commander for structure fires.	3.6	1.1 <sup>[3,+]</sup>	2.5	4.5 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	56.6	79.1 <sup>[2,3]</sup>	59.0 <sup>[1]</sup>	53.5 <sup>[1]</sup>
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.0	87.0 <sup>[3]</sup>	88.5	92.6 <sup>[1]</sup>
Develop and coordinate the fire attack strategy	93.1	97.4 <sup>[3]</sup>	94.2	92.1 <sup>[1]</sup>
Develop and initiate a risk management plan	52.3	65.4 <sup>[2,3]</sup>	54.4 <sup>[1]</sup>	50.1 <sup>[1]</sup>
Document all assessments, plans and events related to the fire	38.8	40.3	36.5	39.9
Ensure that at least four (4) firefighters are on the scene before entering the building	68.6	78.3 <sup>[2,3]</sup>	70.7 <sup>[1]</sup>	66.6 <sup>[1]</sup>
Establish a collapse zone around the building	49.1	57.2 <sup>[2]</sup>	46.9 <sup>[1]</sup>	49.6
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	48.5	79.9 <sup>[2,3]</sup>	51.8 <sup>[1,3]</sup>	44.2 <sup>[1,2]</sup>
Identify and implement a communication strategy	64.7	65.4	65.9	64.1
Monitor location of all firefighters at the scene	76.2	83.5 <sup>[3]</sup>	77.8	74.8 <sup>[1]</sup>
Other	9.1	11.9	7.2	9.9
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	13.3	11.8	13.1	13.6
Some of the time	26.5	27.5	26.6	26.4
About half the time	8.1	6.3	8.3	8.1
Most of the time	29.8	27.6	30.8	29.4
	22.3	26.7	21.2	22.5

(continued)

Always

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	32.3	26.2	33.1	32.3
Not enough firefighters are available at the scene of the fire	51.7	35.3 <sup>[2,3]</sup>	54.2 <sup>[1]</sup>	51.6 <sup>[1]</sup>
Other	13.1	29.8 <sup>[2,3]</sup>	14.6 <sup>[1]</sup>	10.9 <sup>[1]</sup>
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	2.1	2.5	0.8 <sup>[3,+]</sup>	2.7 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	22.6	26.7	21.8	22.8
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	29.4	10.1 <sup>[2,3]</sup>	29.4 <sup>[1]</sup>	30.9 <sup>[1]</sup>
Some of the time	21.8	12.4 <sup>[2,3]</sup>	19.6 <sup>[1]</sup>	23.8 <sup>[1]</sup>
About half the time	6.5	3.9	6.3	6.7
Most of the time	22.5	28.4 <sup>[3]</sup>	23.6	21.5 <sup>[1]</sup>
Always	19.9	45.3 <sup>[2,3]</sup>	21.0 <sup>[1]</sup>	17.2 <sup>[1]</sup>
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	9.3	8.9	10.2	8.9
When there are enough firefighters on and at the scene of the fire	32.3	26.9	33.5	32.1
Whenever firefighters enter a burning building	26.4	20.9 <sup>[3]</sup>	24.6	27.9 <sup>[1]</sup>
Other	4.9	8.6	4.7	4.8
<i>Legitimately Skipped Question</i>	49.3	55.0	50.9	47.9

(continued)

Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	34.9	29.3 <sup>[2]</sup>	38.0 <sup>[1]</sup>	33.6
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	8.8	0.1 <sup>[2,3,+]</sup>	8.2 <sup>[1]</sup>	9.9 <sup>[1]</sup>
We don't have enough firefighters available at the scene of the fire	53.5	33.3 <sup>[2,3]</sup>	53.3 <sup>[1]</sup>	55.3 <sup>[1]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	20.7	8.3 <sup>[2,3]</sup>	18.1 <sup>[1]</sup>	23.1 <sup>[1]</sup>
We have never established an RIT/RIC	17.7	4.6 <sup>[2,3]</sup>	14.8 <sup>[1,3]</sup>	20.3 <sup>[1,2]</sup>
We use other fire departments in the area for RITs/RICs	29.2	12.4 <sup>[2,3]</sup>	24.7 <sup>[1,3]</sup>	33.1 <sup>[1,2]</sup>
We use other safety practices and so we don't need them	4.2	1.8 <sup>[2,+]</sup>	5.9 <sup>[1]</sup>	3.5
	4.1	6.4	2.8	4.6
<i>Legitimately Skipped Question</i>	20.3	45.4 <sup>[2,3]</sup>	21.5 <sup>[1]</sup>	17.5 <sup>[1]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
Yes	78.8	97.5 <sup>[2,3]</sup>	77.0 <sup>[1]</sup>	78.2 <sup>[1]</sup>
No	21.2	2.5 <sup>[2,3,+]</sup>	23.0 <sup>[1]</sup>	21.8 <sup>[1]</sup>
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
Never	6.3	1.5 <sup>[2,3,+]</sup>	8.8 <sup>[1]</sup>	5.2 <sup>[1]</sup>
Some of the time	3.9	0.8 <sup>[3,+]</sup>	3.1	4.6 <sup>[1]</sup>
About half the time	1.8	0.2 <sup>[3,+]</sup>	1.7	2.0 <sup>[1]</sup>
Most of the time	12.8	5.8 <sup>[3]</sup>	10.5	14.7 <sup>[1]</sup>
Always	75.2	91.8 <sup>[2,3]</sup>	75.9 <sup>[1]</sup>	73.4 <sup>[1]</sup>

(continued)

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	13.1	1.7 [2,3,+]	16.0 [1]	12.5 [1]
Situation doesn't require them	9.5	2.0 [2,3,+]	7.1 [1,3]	11.4 [1,2]
Firefighters think the devices do not always work reliably	0.3	0.7 [+]	0.6 [+]	0.1 [+]
Firefighters don't think they need them	4.6	1.4 [3,+]	2.3 [3]	6.1 [1,2]
Devices go off while firefighters are resting	3.7	2.8	2.0 [3]	4.6 [2]
<i>Legitimately Skipped Question</i>	75.5	92.8 [2,3]	76.2 [1]	73.8 [1]
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	99.2	97.7	99.2	99.4
	0.8	2.3 [+]	0.8 [+]	0.6
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No				
No	49.7	8.4 [2,3]	50.6 [1]	52.4 [1]
No	49.5	89.1 [2,3]	48.5 [1]	47.0 [1]
Yes	0.8	2.5 [+]	0.9 [+]	0.7
<i>Legitimately Skipped Question</i>				
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	4.8	** [2,3]	5.6 [1]	4.6 [1]
Firefighters don't like using the equipment	0.3	**	**	0.4 [+]
Have never needed them (e.g., we don't do interior attacks)	0.7	** [3]	0.7 [+]	0.7 [1]
They cost too much, there is not enough money in the budget	31.8	5.7 [2,3]	31.8 [1]	33.7 [1]
We don't have enough equipment for all of our firefighters	24.6	1.8 [2,3,+]	24.8 [1]	26.2 [1]
Shared systems work fine for our needs	23.4	4.2 [2,3]	24.3 [1]	24.5 [1]
Other	5.0	1.7 [2,3,+]	5.0 [1]	5.2 [1]
<i>Legitimately Skipped Question</i>	50.3	91.6 [2,3]	49.3 [1]	47.7 [1]

(continued)



Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1.1	** [2]	2.5 [1,3]	0.5 [2,+]
Some of the time	4.7	** [2,3]	3.2 [1]	5.9 [1]
About half the time	2.7	1.5 [+]	1.9	3.2
Most of the time	24.5	12.7 [2,3]	23.1 [1]	26.2 [1]
Always	66.1	83.3 [2,3]	68.4 [1]	63.6 [1]
<i>Legitimately Skipped Question</i>	0.8	2.5 [+]	0.8 [+]	0.6
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	25.9	8.2 [2,3]	23.8 [1]	28.4 [1]
Firefighters do not trust that the SCBAs will work reliably	**	**	**	0.1 [+]
Firefighters don't think they need them	10.3	7.6	7.4 [3]	12.1 [2]
Firefighters don't like sharing facepieces with others	1.0	** [3]	0.5 [+]	1.3 [1]
Firefighters are concerned that the SCBA may be or become contaminated	**	**	**	0.1 [+]
Wearing SCBAs makes it more difficult to work	5.9	4.6	4.2	6.9
Firefighters don't have SCBAs to use	3.9	** [2,3]	3.1 [1]	4.6 [1]
<i>Legitimately Skipped Question</i>	67.8	85.8 [2,3]	70.7 [1]	64.8 [1]
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	43.0	50.0 [3]	47.0	40.2 [1]
Once a month or more	19.0	12.0 [3]	16.7	20.8 [1]
Several times a year	15.0	17.3	15.1	14.8
Once a year	16.4	16.4	14.8	17.4
Less than once a year	4.3	1.3 [3,+]	3.7	4.9 [1]
Never. Maintenance has not been done on our SCBAs.	1.4	0.2 [3,+]	1.8	1.2 [1]
Does not apply. My department does not have SCBAs.	**	**	**	**
<i>Legitimately Skipped Question</i>	1.0	2.8 [+]	1.0 [+]	0.8

(continued)

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	17.5	43.7 <sup>[2,3]</sup>	20.1 <sup>[1,3]</sup>	14.0 <sup>[1,2]</sup>
Zero	82.5	56.3 <sup>[2,3]</sup>	79.9 <sup>[1,3]</sup>	86.0 <sup>[1,2]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
CBRN SCBA devices are not needed in our department	20.9	10.5 <sup>[2,3]</sup>	18.1 <sup>[1]</sup>	23.4 <sup>[1]</sup>
We didn't know they were available	15.1	9.6 <sup>[3]</sup>	15.0	15.5 <sup>[1]</sup>
We don't have adequate technical information to purchase them	19.7	7.8 <sup>[2,3]</sup>	20.1 <sup>[1]</sup>	20.4 <sup>[1]</sup>
We don't have adequate funding to purchase them	60.3	37.0 <sup>[2,3]</sup>	58.0 <sup>[1]</sup>	63.5 <sup>[1]</sup>
Other	4.9	8.3	5.0	4.6
<i>Legitimately Skipped Question</i>	18.3	44.7 <sup>[2,3]</sup>	20.5 <sup>[1,3]</sup>	14.8 <sup>[1,2]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
Yes	77.4	92.2 <sup>[2,3]</sup>	76.9 <sup>[1]</sup>	76.6 <sup>[1]</sup>
No	22.6	7.8 <sup>[2,3]</sup>	23.1 <sup>[1]</sup>	23.4 <sup>[1]</sup>
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	2.8	0.4 <sup>[2,3,+]</sup>	3.1 <sup>[1]</sup>	2.8 <sup>[1]</sup>
On the emergency vehicles (or apparatus)	62.0	77.0 <sup>[2,3]</sup>	60.5 <sup>[1]</sup>	61.7 <sup>[1]</sup>
Both at the fire station(s) and on the vehicles (or apparatus)	10.4	13.2	11.0	9.8
<i>Legitimately Skipped Question</i>	24.9	9.4 <sup>[2,3]</sup>	25.4 <sup>[1]</sup>	25.7 <sup>[1]</sup>
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	13.9	23.8 <sup>[2,3]</sup>	16.7 <sup>[1]</sup>	11.4 <sup>[1]</sup>
Once a month or more	25.4	25.5	26.5	24.9
Several times a year	20.6	17.3 <sup>[3]</sup>	14.6 <sup>[3]</sup>	24.1 <sup>[1,2]</sup>
Once a year	22.3	24.9	26.7 <sup>[3]</sup>	19.7 <sup>[2]</sup>
Less frequently than once a year	7.4	5.8	5.2	8.8
Never. Maintenance on our AEDs has not been done.	10.4	2.7 <sup>[2,3]</sup>	10.3 <sup>[1]</sup>	11.1 <sup>[1]</sup>

(continued)

Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	1.6	0.2 <sup>[3,+]</sup>	1.2 <sup>[+]</sup>	2.0 <sup>[1]</sup>
NeverAbout half the time	4.7	0.2 <sup>[2,3,+]</sup>	2.2 <sup>[1,3]</sup>	6.4 <sup>[1,2]</sup>
Most of the time	2.6	1.5 <sup>[+]</sup>	1.7	3.2
Always	20.6	6.6 <sup>[2,3]</sup>	16.2 <sup>[1,3]</sup>	24.2 <sup>[1,2]</sup>
	70.4	91.6 <sup>[2,3]</sup>	78.7 <sup>[1,3]</sup>	64.1 <sup>[1,2]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Some of the time	18.0	15.4	18.9	17.8
NeverAbout half the time	64.5	74.4 <sup>[2,3]</sup>	65.4 <sup>[1]</sup>	63.2 <sup>[1]</sup>
Most of the time	10.3	5.6 <sup>[3]</sup>	9.3	11.2 <sup>[1]</sup>
	5.4	4.1	5.4	5.5
	1.8	0.4 <sup>[3,+]</sup>	1.1 <sup>[+]</sup>	2.3 <sup>[1]</sup>
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	48.6	35.3 <sup>[2,3]</sup>	46.4 <sup>[1]</sup>	50.9 <sup>[1]</sup>
Adequate	45.7	58.2 <sup>[2,3]</sup>	46.8 <sup>[1]</sup>	44.1 <sup>[1]</sup>
More than adequate	5.7	6.5	6.8	5.0

(continued)

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>42b. Training</b>				
Not adequate	39.1	43.6	40.2	38.2
Adequate	55.6	50.8	53.6	57.1
More than adequate	5.2	5.6	6.3	4.6
<b>42c. Personnel</b>				
Not adequate	51.5	58.5 <sup>[3]</sup>	53.6	49.8 <sup>[1]</sup>
Adequate	44.3	38.0 <sup>[3]</sup>	42.1	46.0 <sup>[1]</sup>
More than adequate	4.2	3.6	4.3	4.2
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	26.8	15.9 <sup>[2,3]</sup>	23.5 <sup>[1,3]</sup>	29.4 <sup>[1,2]</sup>
Several times per year	34.3	33.1	34.8	34.2
Never	33.2	39.9 <sup>[3]</sup>	34.9	31.7 <sup>[1]</sup>
Once a month or more	5.7	11.2 <sup>[3]</sup>	6.9	4.6 <sup>[1]</sup>
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	56.0	52.1	54.8	57.0
On the Internet	24.7	48.4 <sup>[2,3]</sup>	27.8 <sup>[1,3]</sup>	21.0 <sup>[1,2]</sup>
From colleagues in other departments	10.0	13.1 <sup>[3]</sup>	13.0 <sup>[3]</sup>	8.0 <sup>[1,2]</sup>
At conferences or other meetings	6.9	17.8 <sup>[2,3]</sup>	8.4 <sup>[1,3]</sup>	5.2 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	26.8	15.8 <sup>[2,3]</sup>	23.4 <sup>[1,3]</sup>	29.5 <sup>[1,2]</sup>
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	53.3	69.2 <sup>[2,3]</sup>	56.5 <sup>[1]</sup>	50.3 <sup>[1]</sup>
No	20.0	14.9	20.4	20.2
<i>Legitimately Skipped Question</i>	26.6	15.8 <sup>[2,3]</sup>	23.1 <sup>[1,3]</sup>	29.5 <sup>[1,2]</sup>

(continued)

Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
No	60.7	72.0 <sup>[2,3]</sup>	63.2 <sup>[1]</sup>	58.4 <sup>[1]</sup>
Yes	12.1	12.2	13.1	11.5
<i>Legitimately Skipped Question</i>	27.3	15.8 <sup>[2,3]</sup>	23.7 <sup>[1,3]</sup>	30.2 <sup>[1,2]</sup>
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	23.5	22.8	23.1	23.8
Training sessions	44.2	48.2	46.3	42.7
Provide copies of NIOSH reports to firefighters	16.2	31.8 <sup>[2,3]</sup>	20.8 <sup>[1,3]</sup>	12.4 <sup>[1,2]</sup>
Provide copies of NIOSH report summaries to firefighters	6.2	11.4 <sup>[3]</sup>	7.9 <sup>[3]</sup>	4.8 <sup>[1,2]</sup>
Provide summaries prepared by department to firefighters	1.8	4.4 <sup>[2,3]</sup>	1.5 <sup>[1]</sup>	1.8 <sup>[1]</sup>
Postings on bulletin boards	38.5	39.1	37.4	39.0
Post report on the department website	1.1	3.1 <sup>[3]</sup>	1.4	0.8 <sup>[1]</sup>
Send message to firefighters by email	5.3	23.5 <sup>[2,3]</sup>	8.0 <sup>[1,3]</sup>	2.4 <sup>[1,2]</sup>
Other	1.3	2.9 <sup>[2]</sup>	0.6 <sup>[1]</sup>	1.5
<i>Legitimately Skipped Question</i>	39.1	28.8 <sup>[3]</sup>	36.6	41.3 <sup>[1]</sup>
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	34.2	62.8 <sup>[2,3]</sup>	36.5 <sup>[1,3]</sup>	30.7 <sup>[1,2]</sup>
Yes	38.4	20.9 <sup>[2,3]</sup>	39.6 <sup>[1]</sup>	39.1 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	27.4	16.3 <sup>[2,3]</sup>	23.9 <sup>[1,3]</sup>	30.2 <sup>[1,2]</sup>

(continued)

**Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	0.5	1.5 <sup>[+]</sup>	0.9 <sup>[+]</sup>	0.2 <sup>[+]</sup>
Disagree	3.6	2.5	3.2	3.8
Neither Agree nor Disagree	18.7	14.6	17.4	19.7
Agree	45.6	59.8 <sup>[2,3]</sup>	49.6 <sup>[1,3]</sup>	42.3 <sup>[1,2]</sup>
Strongly Agree	3.7	5.6	4.3	3.2
<i>Legitimately Skipped Question</i>	28.0	16.0 <sup>[2,3]</sup>	24.6 <sup>[1,3]</sup>	30.8 <sup>[1,2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	0.4	0.2 <sup>[+]</sup>	1.0 <sup>[+]</sup>	0.1 <sup>[+]</sup>
Disagree	1.7	1.4	1.5	1.8
Neither Agree nor Disagree	19.8	11.7 <sup>[2,3]</sup>	18.3 <sup>[1]</sup>	21.3 <sup>[1]</sup>
Agree	45.4	63.7 <sup>[2,3]</sup>	49.4 <sup>[1,3]</sup>	41.7 <sup>[1,2]</sup>
Strongly Agree	4.6	6.9	5.0	4.2
<i>Legitimately Skipped Question</i>	28.1	16.1 <sup>[2,3]</sup>	24.7 <sup>[1,3]</sup>	30.9 <sup>[1,2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	0.4	1.4 <sup>[+]</sup>	0.8 <sup>[+]</sup>	0.1 <sup>[+]</sup>
Disagree	3.2	2.7	3.0	3.4
Neither Agree nor Disagree	26.6	22.8	27.9	26.2
Agree	37.9	50.3 <sup>[2,3]</sup>	40.3 <sup>[1]</sup>	35.6 <sup>[1]</sup>
Strongly Agree	3.8	6.7	3.3	3.9
<i>Legitimately Skipped Question</i>	28.0	16.1 <sup>[2,3]</sup>	24.7 <sup>[1,3]</sup>	30.8 <sup>[1,2]</sup>

(continued)

## Exhibit B-5a. Results from the Fire Department Survey, Percent Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	57.4	77.1 [2,3]	59.0 [1]	54.9 [1]
Respirator maintenance program guide	13.8	20.1 [2]	11.3 [1]	14.6
CDs of firefighter program materials	28.0	34.5	27.5	27.7
Alerts	31.7	49.4 [2,3]	32.1 [1]	30.0 [1]
Hazard IDs	16.6	18.5	15.4	17.1
Workplace Solutions	12.5	13.6	13.0	12.1
	0.8	0.7	0.6 [+]	0.9
None. I have not seen any NIOSH materials.	25.2	14.1 [2,3]	25.0 [1]	26.2 [1]
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.3	2.7	1.1 [+]	1.4
Dissatisfied	0.2	**	** [+]	0.3 [+]
Neither satisfied nor dissatisfied	21.2	11.4 [2,3]	18.1 [1,3]	23.7 [1,2]
Satisfied	47.1	59.0 [2,3]	50.2 [1]	44.4 [1]
Very satisfied	5.2	12.4 [2,3]	6.0 [1]	4.2 [1]
<i>Legitimately Skipped Question</i>	24.9	14.4 [2,3]	24.6 [1]	26.0 [1]
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
	59.4	27.0 [2,3]	56.6 [1,3]	63.5 [1,2]
Yes, in the last year	34.5	64.0 [2,3]	37.0 [1,3]	30.7 [1,2]
No Yes, longer than one year ago	6.1	9.0	6.3	5.7

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>1. Does your department have a Safety Officer?</b>	(67.5, 72.9) (27.1, 32.5)	(61.0, 74.2) (25.8, 39.0)	(63.6, 73.7) (26.3, 36.4)	(67.7, 74.5) (25.5, 32.3)
<b>2. Does your department have a Training Officer?</b>				
Yes	(86.4, 90.3)	(82.3, 91.7)	(84.2, 91.6)	(86.0, 90.8)
No	(9.7, 13.6)	(8.3, 17.7)	(8.4, 15.8)	(9.2, 14.0)
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	(81.3, 85.8)	(85.4, 95.2)	(80.2, 88.5)	(79.4, 85.2)
Maintenance of SCBAs	(66.9, 72.3)	(75.2, 86.3)	(67.5, 77.1)	(63.5, 70.6)
Motor vehicle safety	(76.3, 81.2)	(77.2, 88.0)	(74.5, 83.4)	(74.9, 81.1)
Participation in a personal physical fitness program	(9.6, 12.7)	(41.0, 54.6)	(11.3, 17.6)	(4.8, 8.4)
Participation in regular health screenings for cardiovascular disease (CVD)	(14.9, 18.9)	(36.3, 49.8)	(14.4, 21.6)	(11.8, 17.0)
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	(37.7, 43.2)	(63.5, 76.6)	(40.8, 50.5)	(31.7, 38.7)
Use of Personal Alert Safety System (PASS) devices	(72.7, 77.9)	(76.5, 87.9)	(69.5, 79.2)	(71.7, 78.3)
Use of personal protective equipment and protective clothing	(87.1, 90.9)	(89.5, 96.8)	(85.2, 92.1)	(86.1, 90.9)
Use of radio communications	(82.5, 86.8)	(82.5, 92.0)	(80.8, 88.4)	(81.5, 87.0)
	(7.2, 10.5)	(8.8, 17.5)	(7.6, 14.0)	(5.8, 9.7)
Does not apply. Our fire department does not use SOPs/SOGs.	(3.8, 6.5)	(0.7, 6.8)	(3.4, 8.9)	(3.5, 6.8)

Other

(continued)



## Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	(0.6, 2.0)	(1.0, 8.9)	(0.4, 3.4)	(0.4, 2.1)
Optional Training	(14.6, 19.1)	(2.6, 9.1)	(12.0, 20.1)	(15.6, 21.4)
Required Training	(80.4, 85.0)	(88.0, 96.3)	(78.9, 87.2)	(78.5, 84.3)
<b>4b. Driving safety</b>				
No Training	(2.9, 5.3)	(1.1, 5.7)	(2.3, 7.2)	(2.7, 5.7)
Optional Training	(16.3, 21.1)	(4.3, 11.7)	(13.4, 22.3)	(17.3, 23.3)
Required Training	(75.1, 80.1)	(86.2, 94.2)	(73.5, 82.9)	(72.8, 79.2)
<b>4c. Incident Command systems</b>				
No Training	(2.0, 4.1)	(**, **)	(1.4, 5.6)	(2.1, 4.8)
Optional Training	(24.8, 30.2)	(3.2, 10.0)	(23.0, 32.8)	(25.7, 32.6)
Required Training	(67.1, 72.6)	(89.9, 96.7)	(64.6, 74.5)	(64.3, 71.4)
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	(5.2, 8.3)	(3.2, 10.1)	(4.7, 11.0)	(4.7, 8.4)
Optional Training	(30.8, 36.5)	(10.3, 20.8)	(26.7, 36.9)	(32.7, 39.9)
Required Training	(57.3, 63.1)	(73.2, 84.9)	(55.8, 66.3)	(54.5, 61.8)
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	(25.8, 31.3)	(7.1, 16.8)	(22.1, 32.0)	(27.5, 34.7)
Optional Training	(33.3, 39.2)	(10.1, 20.8)	(25.1, 35.3)	(37.7, 45.3)
Required Training	(32.8, 38.3)	(68.0, 80.7)	(38.3, 48.3)	(24.5, 31.5)

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	(0.9, 2.4)	(1.4, 7.0)	(0.7, 3.8)	(0.6, 2.4)
Optional Training	(8.2, 11.8)	(2.3, 7.9)	(7.9, 15.0)	(7.7, 12.2)
Required Training	(86.9, 90.7)	(88.7, 95.8)	(83.2, 90.7)	(86.8, 91.5)
<b>4g. Use of radio communication devices</b>				
No Training	(1.9, 3.8)	(1.2, 6.4)	(1.7, 5.7)	(1.5, 3.9)
Optional Training	(19.0, 23.9)	(5.9, 13.9)	(19.4, 28.7)	(18.2, 24.3)
Required Training	(73.6, 78.6)	(83.6, 92.3)	(68.3, 78.0)	(73.4, 79.7)
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	(82.6, 86.9)	(82.6, 91.9)	(80.5, 88.7)	(81.6, 87.1)
Other officers within our department	(80.4, 85.0)	(90.7, 96.9)	(75.9, 84.6)	(80.0, 85.7)
State fire training agency	(74.8, 79.8)	(73.5, 83.4)	(70.7, 80.1)	(75.0, 81.2)
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	(18.9, 23.1)	(51.4, 64.8)	(21.9, 29.5)	(12.9, 18.3)
Conferences or regional meetings	(48.8, 54.6)	(63.8, 76.6)	(49.0, 59.3)	(45.1, 52.6)
Other	(22.7, 27.8)	(18.4, 30.0)	(18.4, 27.3)	(23.6, 30.2)
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	(52.4, 58.2)	(42.7, 56.3)	(46.0, 56.5)	(54.3, 61.7)
Scuba diving	(6.2, 9.1)	(15.0, 25.7)	(4.8, 10.2)	(5.1, 8.8)
Swift water rescue	(9.6, 13.0)	(24.8, 36.6)	(9.0, 14.6)	(7.5, 11.9)
Wildland fire fighting	(44.1, 49.9)	(23.2, 34.8)	(43.6, 54.0)	(43.8, 51.2)
HAZMAT	(63.8, 69.4)	(81.4, 90.8)	(60.3, 70.5)	(62.1, 69.1)
Other	(28.5, 33.9)	(34.8, 47.8)	(25.6, 35.5)	(27.5, 34.4)

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	(6.8, 10.2)	(1.5, 7.4)	(4.2, 10.2)	(7.6, 12.1)
Not very familiar	(21.8, 27.0)	(6.4, 16.2)	(19.6, 29.1)	(22.5, 29.0)
Somewhat familiar	(55.2, 61.0)	(58.8, 71.3)	(52.4, 63.0)	(54.0, 61.4)
Very familiar	(7.8, 10.9)	(16.9, 25.9)	(8.9, 14.8)	(5.4, 9.2)
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	(18.4, 23.3)	(6.8, 15.8)	(15.7, 24.6)	(19.2, 25.4)
Not very familiar	(30.8, 36.4)	(14.3, 25.0)	(29.4, 39.6)	(30.8, 37.9)
Somewhat familiar	(35.1, 40.7)	(48.2, 61.3)	(31.0, 41.0)	(34.1, 41.4)
Very familiar	(6.5, 9.4)	(12.1, 19.7)	(7.6, 13.3)	(4.4, 7.9)
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	(64.9, 70.5)	(65.7, 78.1)	(59.2, 69.5)	(65.6, 72.6)
National conference presentations	(2.8, 4.7)	(10.5, 19.1)	(3.7, 7.5)	(1.1, 3.2)
State-level conference presentations	(9.7, 13.5)	(12.9, 22.1)	(10.3, 17.8)	(7.8, 12.3)
Other firefighters or departments	(20.5, 25.5)	(20.6, 31.5)	(19.3, 28.5)	(19.3, 25.6)
At seminars or other training opportunities (not conferences)	(14.3, 18.6)	(18.5, 29.3)	(11.9, 19.2)	(13.8, 19.4)
Trade publications (such as Firehouse and Fire Engineering)	(44.3, 50.1)	(53.7, 66.6)	(47.3, 57.8)	(39.4, 46.9)
NIOSH website	(22.0, 26.7)	(48.5, 61.7)	(22.2, 30.6)	(17.8, 23.9)
Links from other websites (such as NFPA and Firehouse)	(25.7, 30.9)	(36.8, 50.0)	(22.2, 31.2)	(24.7, 31.4)
Media reports—newspaper, television, radio	(12.9, 17.1)	(12.2, 21.8)	(11.2, 18.9)	(12.4, 17.8)
	(0.7, 1.9)	(1.2, 7.3)	(0.4, 2.2)	(0.5, 2.2)
Does not apply. We have not received information about NIOSH recommendations.	(9.3, 13.2)	(3.2, 11.9)	(9.6, 17.5)	(8.3, 13.0)
Other				

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	(37.3, 43.1)	(47.6, 60.6)	(33.6, 43.4)	(36.3, 43.9)
Developed new SOPs/SOGs	(23.8, 29.0)	(31.9, 44.9)	(23.8, 33.1)	(21.1, 27.8)
Made changes to SOPs/SOGs	(32.2, 37.7)	(44.6, 58.1)	(29.2, 38.4)	(30.7, 37.9)
Justified current budget/staffing	(4.0, 6.3)	(10.6, 20.2)	(4.3, 8.8)	(2.4, 5.3)
Made new budget/staffing requests	(4.4, 6.8)	(10.7, 20.1)	(3.7, 7.8)	(3.4, 6.6)
Justified grant applications	(13.5, 17.8)	(17.6, 28.8)	(10.0, 16.9)	(13.6, 19.4)
Does not apply. We have not used NIOSH recommendations.	(27.3, 32.9)	(13.6, 23.7)	(27.3, 37.6)	(26.4, 33.5)
<i>Legitimately Skipped Question</i>	(9.8, 13.9)	(3.2, 12.0)	(10.1, 18.2)	(8.9, 13.8)
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	(26.7, 32.1)	(26.1, 38.7)	(24.0, 33.4)	(26.1, 33.2)
Personal protective equipment and clothing	(38.7, 44.5)	(45.2, 58.2)	(34.9, 45.0)	(38.0, 45.6)
	(37.2, 43.0)	(44.7, 58.4)	(33.7, 43.6)	(36.2, 43.8)
PASS systems	(29.9, 35.5)	(31.3, 44.2)	(28.4, 38.2)	(28.4, 35.6)
SCBA Incident Command systems	(29.4, 34.9)	(33.0, 46.3)	(26.8, 36.4)	(28.4, 35.6)
Radio communications	(20.7, 25.6)	(21.5, 32.7)	(19.3, 27.9)	(19.5, 26.0)
Physical fitness and cardiovascular disease (CVD)	(7.1, 10.2)	(17.9, 29.4)	(5.7, 10.6)	(5.9, 10.0)
Building code compliance (e.g., warning against the use of wooden trusses)	(5.6, 8.5)	(11.0, 20.6)	(4.4, 9.5)	(4.8, 8.6)
	(1.6, 3.4)	(2.0, 7.8)	(1.4, 4.8)	(1.2, 3.5)
Does not apply. We have not used NIOSH recommendations for training purposes.	(1.3, 2.9)	(1.0, 5.3)	(0.5, 2.6)	(1.4, 3.9)
Other				
<i>Legitimately Skipped Question</i>	(38.9, 44.8)	(19.3, 31.3)	(40.3, 50.7)	(37.5, 45.1)

(continued)

## Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	(76.4, 80.4)	(21.9, 34.1)	(65.8, 73.7)	(84.7, 89.5)
No Yes, it's optional	(5.9, 8.3)	(30.1, 43.7)	(8.5, 14.3)	(1.5, 3.7)
	(12.8, 16.4)	(29.9, 42.2)	(15.8, 22.7)	(8.3, 12.8)
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	(12.7, 16.6)	(17.7, 29.4)	(14.2, 21.5)	(10.0, 14.8)
Less frequently than once a year	(5.8, 8.6)	(8.2, 16.8)	(5.7, 10.9)	(4.7, 8.3)
One time a year	(15.2, 19.3)	(42.1, 55.3)	(14.2, 21.5)	(12.0, 17.2)
More than one time a year	(0.1, 0.7)	(1.0, 6.2)	(0.1, 1.1)	(0.0, 1.0)
Does not apply. Firefighters are not required to receive CVD screenings	(58.3, 63.5)	(10.0, 19.0)	(52.1, 61.2)	(63.4, 70.3)
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	(5.1, 8.0)	(2.3, 8.4)	(3.8, 9.1)	(5.1, 8.9)
Yes, they receive training required by the department	(81.7, 86.0)	(83.2, 92.4)	(82.8, 90.2)	(79.0, 84.7)
Yes, they receive training required by the state	(23.3, 28.3)	(24.5, 36.9)	(22.7, 31.7)	(21.6, 28.1)
Yes, they receive optional training	(11.8, 15.9)	(6.2, 13.6)	(11.5, 19.4)	(11.1, 16.2)
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	(12.2, 16.4)	(10.7, 20.2)	(11.7, 19.7)	(11.1, 16.3)
Once every year	(37.5, 43.2)	(32.6, 45.8)	(36.4, 46.8)	(36.2, 43.5)
Less frequently than once a year	(22.3, 27.3)	(25.6, 38.4)	(20.6, 29.6)	(21.1, 27.5)
Does not apply. Firefighters are not required to receive continuing driver training.	(18.4, 23.2)	(10.4, 19.7)	(14.5, 23.1)	(19.5, 25.8)

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>	(81.9, 86.3) (13.7, 18.1)	(89.8, 96.9) (3.1, 10.2)	(82.7, 90.2) (9.8, 17.3)	(78.9, 84.7) (15.3, 21.1)
<del>17.</del> <b>To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
No				
Strongly disagree	(5.5, 8.5)	(2.1, 7.4)	(3.1, 7.7)	(6.3, 10.5)
Disagree	(15.8, 20.4)	(15.9, 27.1)	(13.3, 21.6)	(15.5, 21.4)
Neither agree nor disagree	(28.2, 33.7)	(10.2, 19.5)	(27.1, 37.3)	(28.2, 35.2)
Agree	(29.5, 34.9)	(34.7, 48.0)	(27.8, 37.7)	(27.8, 34.8)
Strongly agree	(10.4, 14.2)	(14.8, 25.6)	(10.4, 17.5)	(8.7, 13.3)
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	(4.2, 6.9) (20.3, 25.3)	(0.9, 6.2) (11.9, 21.0)	(1.9, 6.3) (15.1, 23.8)	(5.0, 8.8) (22.1, 28.6)
NeverAbout half the time	(14.8, 19.4)	(7.3, 15.2)	(13.2, 21.6)	(14.8, 20.5)
Most of the time	(35.6, 41.3)	(32.3, 44.6)	(34.4, 44.9)	(34.2, 41.5)
Always	(14.6, 18.7)	(26.9, 39.4)	(17.1, 25.2)	(10.5, 15.5)
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Rarely	(1.5, 3.5) (5.4, 8.5)	(0.1, 4.3) (1.6, 7.2)	(1.5, 6.1) (4.2, 10.0)	(1.2, 3.4) (5.5, 9.4)
NeverAbout half the time	(5.3, 8.4)	(1.0, 6.2)	(3.7, 9.1)	(5.7, 9.8)
Most of the time	(25.0, 30.4)	(10.1, 20.2)	(21.1, 30.7)	(26.5, 33.3)
Always	(53.7, 59.4)	(72.6, 84.2)	(53.7, 64.0)	(49.8, 57.2)

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<p><b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b></p> <p>Fires are not usually big enough to require an Incident Commander</p> <p>Not enough firefighters available at the scene of the fire</p> <p>Does not apply. My department always assigns an Incident Commander for structure fires.</p> <p>Other <i>Legitimately Skipped Question</i></p>	<p>(20.1, 25.1)</p> <p>(18.8, 23.7)</p> <p>(5.0, 7.8)</p> <p>(2.7, 4.9)</p> <p>(53.7, 59.5)</p>	<p>(6.6, 15.2)</p> <p>(4.4, 12.9)</p> <p>(4.0, 11.2)</p> <p>(0.3, 3.7)</p> <p>(72.7, 84.3)</p>	<p>(19.2, 28.6)</p> <p>(15.2, 24.0)</p> <p>(3.3, 8.2)</p> <p>(1.3, 4.9)</p> <p>(53.8, 64.1)</p>	<p>(20.0, 26.2)</p> <p>(20.3, 26.7)</p> <p>(5.1, 8.9)</p> <p>(3.1, 6.3)</p> <p>(49.8, 57.2)</p>
<p><b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b></p> <p>Conduct an initial assessment before the other firefighters begin entering the building</p> <p>Develop and coordinate the fire attack strategy</p> <p>Develop and initiate a risk management plan</p> <p>Document all assessments, plans and events related to the fire</p> <p>Ensure that at least four (4) firefighters are on the scene before entering the building</p> <p>Establish a collapse zone around the building</p> <p>Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)</p> <p>Identify and implement a communication strategy</p> <p>Monitor location of all firefighters at the scene</p>	<p>(89.1, 92.6)</p> <p>(91.4, 94.5)</p> <p>(49.4, 55.3)</p> <p>(36.0, 41.7)</p> <p>(65.7, 71.3)</p> <p>(46.1, 52.0)</p> <p>(45.7, 51.3)</p> <p>(61.9, 67.5)</p> <p>(73.6, 78.7)</p> <p>(7.6, 10.9)</p>	<p>(81.2, 91.2)</p> <p>(91.5, 99.2)</p> <p>(58.5, 71.7)</p> <p>(34.0, 46.9)</p> <p>(72.1, 83.5)</p> <p>(50.3, 63.9)</p> <p>(73.6, 85.0)</p> <p>(58.5, 71.7)</p> <p>(77.1, 88.4)</p> <p>(7.9, 17.5)</p>	<p>(84.3, 91.7)</p> <p>(90.8, 96.4)</p> <p>(49.0, 59.7)</p> <p>(31.6, 41.7)</p> <p>(65.5, 75.5)</p> <p>(41.6, 52.3)</p> <p>(46.7, 56.8)</p> <p>(60.6, 70.8)</p> <p>(72.8, 82.1)</p> <p>(4.8, 10.6)</p>	<p>(90.4, 94.3)</p> <p>(89.8, 93.9)</p> <p>(46.4, 53.9)</p> <p>(36.3, 43.6)</p> <p>(62.9, 70.1)</p> <p>(45.8, 53.3)</p> <p>(40.6, 47.9)</p> <p>(60.4, 67.6)</p> <p>(71.4, 78.0)</p> <p>(7.9, 12.3)</p>
<p><b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b></p> <p>Other</p> <p>Never</p> <p>Some of the time</p> <p>About half the time</p> <p>Most of the time</p> <p>Always</p>	<p>(11.4, 15.5)</p> <p>(24.0, 29.2)</p> <p>(6.6, 9.9)</p> <p>(27.2, 32.5)</p> <p>(19.9, 24.9)</p>	<p>(7.9, 17.3)</p> <p>(22.3, 33.5)</p> <p>(3.8, 10.3)</p> <p>(22.3, 33.7)</p> <p>(21.4, 32.7)</p>	<p>(9.7, 17.4)</p> <p>(22.1, 31.6)</p> <p>(5.8, 11.7)</p> <p>(26.2, 35.8)</p> <p>(17.1, 26.1)</p>	<p>(11.2, 16.3)</p> <p>(23.2, 29.8)</p> <p>(6.3, 10.4)</p> <p>(26.1, 32.9)</p> <p>(19.5, 25.8)</p>

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b> Fires are not big enough to require an Incident Safety Officer Not enough firefighters are available at the scene of the fire Other Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires. <i>Legitimately Skipped Question</i>	(29.5, 35.1) (48.7, 54.6) (11.3, 15.1) (1.4, 3.0) (20.3, 25.2)	(20.9, 32.2) (29.1, 42.0) (24.1, 36.2) (1.1, 5.9) (21.5, 32.7)	(28.1, 38.5) (48.8, 59.6) (11.4, 18.6) (0.3, 2.1) (17.5, 26.7)	(28.9, 36.0) (47.9, 55.4) (8.8, 13.5) (1.7, 4.2) (19.8, 26.1)
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b> Never Some of the time About half the time Most of the time Always	(26.7, 32.1) (19.5, 24.3) (5.2, 8.0) (20.2, 25.0) (17.8, 22.1)	(6.4, 15.7) (8.6, 17.5) (1.9, 7.9) (22.9, 34.5) (39.2, 51.4)	(24.8, 34.5) (15.7, 24.2) (4.3, 9.3) (19.5, 28.3) (17.3, 25.3)	(27.5, 34.4) (20.7, 27.1) (5.1, 8.9) (18.5, 24.7) (14.6, 20.1)
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b> When the building has more than one story/floor When there are enough firefighters on and at the scene of the fire Whenever firefighters enter a burning building <i>Legitimately Skipped Question</i>	(7.8, 11.2) (29.6, 35.1) (23.9, 29.1) (3.8, 6.3) (46.4, 52.2)	(5.8, 13.6) (21.4, 33.2) (15.9, 26.8) (5.5, 13.2) (48.6, 61.3)	(7.4, 13.7) (28.7, 38.6) (20.2, 29.5) (2.9, 7.4) (45.6, 56.2)	(7.0, 11.3) (28.7, 35.7) (24.6, 31.4) (3.4, 6.6) (44.2, 51.7)

Other

(continued)



**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<p><b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b></p> <p>The structure fire may not be large enough to need an RIT/RIC (32.1, 37.8)</p> <p>We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC (7.2, 10.8)</p> <p>We don't have enough firefighters available at the scene of the fire (50.6, 56.5)</p> <p>We don't have enough training or trained personnel at the scene to establish an RIT/RIC (18.3, 23.2)</p> <p>We have never established an RIT/RIC (15.5, 20.1)</p> <p>We use other fire departments in the area for RITs/RICs (26.6, 32.0)</p> <p>We use other safety practices and so we don't need them (3.1, 5.7)</p> <p>(3.1, 5.4)</p> <p><i>Legitimately Skipped Question</i> (18.1, 22.6)</p>				
<p><b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b></p> <p>(76.2, 81.1)</p> <p>(18.9, 23.8)</p>				
<p><b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b></p> <p>No (4.9, 8.0)</p> <p>Some of the time (2.9, 5.3)</p> <p>Never About half the time (1.2, 2.8)</p> <p>Most of the time (10.9, 15.0)</p> <p>Always (72.5, 77.6)</p>				

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	(11.2, 15.4)	(0.3, 9.1)	(12.2, 20.7)	(10.2, 15.2)
Situation doesn't require them	(7.9, 11.4)	(0.7, 5.4)	(4.8, 10.5)	(9.2, 14.0)
Firefighters think the devices do not always work reliably	(0.1, 1.0)	(0.1, 3.1)	(0.1, 2.7)	(0.0, 0.9)
Firefighters don't think they need them	(3.5, 5.9)	(0.4, 4.7)	(1.3, 4.1)	(4.5, 8.1)
Devices go off while firefighters are resting	(2.7, 4.9)	(1.2, 6.4)	(0.9, 4.2)	(3.3, 6.4)
<i>Legitimately Skipped Question</i>	(72.9, 78.0)	(87.3, 96.0)	(71.2, 80.6)	(70.3, 76.9)
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	(98.4, 99.6)	(91.4, 99.4)	(96.7, 99.8)	(98.4, 99.8)
	(0.4, 1.6)	(0.6, 8.6)	(0.2, 3.3)	(0.2, 1.6)
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	(46.7, 52.7)	(5.2, 13.2)	(45.2, 56.0)	(48.6, 56.2)
	(46.5, 52.5)	(83.1, 93.2)	(43.2, 53.9)	(43.2, 50.8)
Yes <i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.6, 9.3)	(0.2, 3.4)	(0.3, 1.7)
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	(3.5, 6.3)	(**, **)	(3.4, 9.2)	(3.2, 6.6)
Firefighters don't like using the equipment	(0.1, 0.9)	(**, **)	(**, **)	(0.1, 1.4)
Have never needed them (e.g., we don't do interior attacks)	(0.3, 1.5)	(**, **)	(0.2, 2.8)	(0.3, 1.8)
They cost too much, there is not enough money in the budget	(29.0, 34.7)	(3.2, 9.9)	(26.8, 37.3)	(30.2, 37.4)
We don't have enough equipment for all of our firefighters	(22.0, 27.3)	(0.6, 5.1)	(20.3, 30.0)	(22.9, 29.7)
Shared systems work fine for our needs	(20.9, 26.2)	(2.2, 7.8)	(19.7, 29.5)	(21.3, 27.9)
	(3.8, 6.5)	(0.5, 5.0)	(3.1, 7.9)	(3.8, 7.2)
<i>Legitimately Skipped Question</i>	(47.4, 53.3)	(86.8, 94.8)	(43.9, 54.7)	(43.9, 51.6)

Other

(continued)

## Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	(0.6, 2.2)	(**, **)	(1.2, 5.5)	(0.2, 1.5)
Some of the time	(3.6, 6.2)	(**, **)	(1.6, 6.2)	(4.3, 8.0)
About half the time	(1.8, 3.9)	(0.4, 5.4)	(0.8, 4.6)	(2.1, 4.8)
Most of the time	(22.0, 27.2)	(8.5, 18.6)	(18.7, 28.1)	(23.0, 29.7)
Always	(63.3, 68.9)	(76.6, 88.4)	(63.1, 73.3)	(59.9, 67.2)
<i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.6, 9.4)	(0.2, 3.4)	(0.2, 1.7)
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	(23.3, 28.6)	(5.1, 12.9)	(19.3, 28.9)	(25.0, 31.9)
Firefighters do not trust that the SCBAs will work reliably	(**, **)	(**, **)	(**, **)	(0.0, 1.0)
Firefighters don't think they need them	(8.6, 12.3)	(4.4, 12.8)	(4.9, 11.0)	(9.8, 14.9)
Firefighters don't like sharing facepieces with others	(0.5, 1.8)	(**, **)	(0.1, 3.0)	(0.7, 2.4)
Firefighters are concerned that the SCBA may be or become contaminated	(**, **)	(**, **)	(**, **)	(0.0, 0.9)
Wearing SCBAs makes it more difficult to work	(4.6, 7.5)	(2.4, 8.7)	(2.5, 7.0)	(5.2, 9.1)
Firefighters don't have SCBAs to use	(2.8, 5.4)	(**, **)	(1.5, 6.3)	(3.3, 6.5)
<i>Legitimately Skipped Question</i>	(64.9, 70.5)	(79.6, 90.3)	(65.4, 75.5)	(61.1, 68.4)
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	(39.7, 46.3)	(43.0, 57.1)	(41.0, 53.0)	(36.1, 44.4)
Once a month or more	(16.5, 21.7)	(7.9, 17.8)	(12.7, 21.7)	(17.6, 24.4)
Several times a year	(12.8, 17.5)	(12.4, 23.5)	(11.3, 19.9)	(12.0, 18.1)
Once a year	(14.1, 19.1)	(12.3, 21.5)	(10.9, 19.7)	(14.4, 20.9)
Less than once a year	(3.1, 5.9)	(0.4, 4.1)	(2.0, 6.7)	(3.3, 7.1)
Never. Maintenance has not been done on our SCBAs.	(0.8, 2.5)	(0.0, 1.3)	(0.7, 4.5)	(0.6, 2.6)
Does not apply. My department does not have SCBAs.	(**, **)	(**, **)	(**, **)	(**, **)
<i>Legitimately Skipped Question</i>	(0.5, 2.0)	(0.7, 10.5)	(0.2, 4.1)	(0.3, 2.1)

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	(15.5, 19.8) (80.2, 84.5)	(36.9, 50.7) (49.3, 63.1)	(16.4, 24.4) (75.6, 83.6)	(11.6, 16.9) (83.1, 88.4)
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero				
CBRN SCBA devices are not needed in our department	(18.5, 23.6)	(6.7, 16.2)	(14.0, 23.1)	(20.2, 26.9)
We didn't know they were available	(12.9, 17.5)	(6.0, 14.8)	(11.3, 19.6)	(12.8, 18.7)
We don't have adequate technical information to purchase them	(17.3, 22.3)	(4.8, 12.5)	(15.8, 25.2)	(17.4, 23.8)
We don't have adequate funding to purchase them	(57.2, 63.2)	(30.5, 44.0)	(52.4, 63.4)	(59.6, 67.2)
	(3.7, 6.4)	(5.4, 12.6)	(3.0, 8.1)	(3.2, 6.6)
<i>Legitimately Skipped Question</i>	(16.2, 20.6)	(37.8, 51.8)	(16.7, 24.8)	(12.2, 17.8)
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> Yes	(74.8, 79.9) (20.1, 25.2)	(87.0, 95.4) (4.6, 13.0)	(71.9, 81.2) (18.8, 28.1)	(73.2, 79.6) (20.4, 26.8)
<b>38a. At your fire department, where do you have AEDs?</b> No				
At the fire station(s)	(1.9, 4.1)	(0.1, 1.7)	(1.6, 5.7)	(1.8, 4.6)
On the emergency vehicles (or apparatus)	(58.9, 64.9)	(70.1, 82.7)	(54.9, 65.9)	(57.8, 65.4)
Both at the fire station(s) and on the vehicles (or apparatus)	(8.7, 12.3)	(9.1, 18.8)	(8.1, 14.7)	(7.7, 12.4)
<i>Legitimately Skipped Question</i>	(22.2, 27.7)	(5.5, 15.4)	(20.8, 30.8)	(22.4, 29.3)
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b> After every time they are used	(11.7, 16.4)	(19.0, 29.5)	(12.6, 21.9)	(8.9, 14.6)
Once a month or more	(22.6, 28.5)	(19.8, 32.1)	(21.3, 32.4)	(21.2, 28.9)
Several times a year	(18.0, 23.4)	(12.6, 23.2)	(10.8, 19.5)	(20.5, 28.0)
Once a year	(19.6, 25.3)	(19.0, 31.9)	(21.6, 32.6)	(16.5, 23.5)
Less frequently than once a year	(5.8, 9.5)	(3.0, 11.1)	(2.9, 9.1)	(6.6, 11.6)
Never. Maintenance on our AEDs has not been done.	(8.4, 12.8)	(1.1, 6.5)	(6.8, 15.2)	(8.6, 14.3)

(continued)

Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	(1.0, 2.6)	(0.0, 1.2)	(0.4, 3.4)	(1.2, 3.4)
Never About half the time	(3.6, 6.1)	(0.0, 1.2)	(1.0, 4.6)	(4.8, 8.5)
Most of the time	(1.8, 3.8)	(0.5, 4.4)	(0.7, 4.1)	(2.1, 4.9)
Always	(18.3, 23.1)	(3.8, 11.1)	(12.6, 20.7)	(21.1, 27.5)
	(67.7, 73.0)	(86.9, 94.7)	(73.9, 82.8)	(60.5, 67.7)
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Some of the time	(15.9, 20.4)	(11.0, 21.2)	(15.0, 23.5)	(15.1, 20.8)
Never About half the time	(61.6, 67.3)	(67.9, 80.0)	(60.1, 70.4)	(59.5, 66.8)
Most of the time	(8.6, 12.2)	(3.2, 9.9)	(6.5, 13.0)	(9.0, 13.8)
	(4.2, 6.9)	(2.2, 7.4)	(3.3, 8.6)	(4.0, 7.5)
	(1.1, 2.9)	(0.1, 1.7)	(0.3, 3.5)	(1.4, 3.9)
<b>42. How would you rate your department's budget in the following areas?</b>				
Always				
<b>42a. Equipment</b>				
Not adequate	(45.7, 51.6)	(29.1, 42.1)	(41.1, 51.8)	(47.2, 54.6)
Adequate	(42.8, 48.6)	(51.4, 64.8)	(41.5, 52.1)	(40.4, 47.8)
More than adequate	(4.5, 7.2)	(4.1, 10.1)	(4.7, 9.9)	(3.6, 6.9)
<b>42b. Training</b>				
Not adequate	(36.3, 42.0)	(37.3, 50.1)	(35.0, 45.5)	(34.6, 41.9)
Adequate	(52.7, 58.6)	(44.2, 57.3)	(48.2, 58.9)	(53.4, 60.8)
More than adequate	(4.0, 6.8)	(3.3, 9.5)	(4.0, 9.7)	(3.3, 6.5)

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>42c. Personnel</b>				
Not adequate	(48.5, 54.5)	(51.9, 64.8)	(48.1, 59.0)	(45.9, 53.6)
Adequate	(41.3, 47.3)	(31.8, 44.6)	(36.7, 47.6)	(42.2, 49.9)
More than adequate	(3.1, 5.7)	(1.9, 6.6)	(2.4, 7.6)	(2.9, 6.0)
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	(24.2, 29.5)	(11.2, 22.0)	(19.1, 28.6)	(26.1, 33.0)
Several times per year	(31.6, 37.2)	(27.3, 39.5)	(29.9, 40.0)	(30.7, 37.8)
Never	(30.5, 35.9)	(33.5, 46.6)	(30.2, 39.9)	(28.4, 35.3)
Once a month or more	(4.5, 7.2)	(7.9, 15.6)	(4.5, 10.3)	(3.3, 6.5)
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	(53.1, 58.9)	(45.6, 58.5)	(49.4, 60.1)	(53.2, 60.7)
On the Internet	(22.4, 27.1)	(41.8, 55.0)	(23.8, 32.3)	(18.1, 24.2)
From colleagues in other departments	(8.3, 11.8)	(9.4, 17.8)	(9.8, 17.0)	(6.2, 10.4)
At conferences or other meetings	(5.7, 8.5)	(13.5, 23.1)	(6.1, 11.6)	(3.8, 7.2)
<i>Legitimately Skipped Question</i>	(24.2, 29.5)	(11.2, 22.0)	(19.0, 28.4)	(26.2, 33.1)
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	(50.4, 56.2)	(62.4, 75.3)	(51.3, 61.6)	(46.6, 54.0)
	(17.8, 22.5)	(10.7, 20.5)	(16.4, 25.1)	(17.4, 23.4)
<i>Legitimately Skipped Question</i>	(24.1, 29.4)	(11.2, 22.0)	(18.7, 28.1)	(26.2, 33.0)

No

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>	(57.7, 63.5)	(65.3, 77.8)	(57.8, 68.2)	(54.6, 62.0)
Yes	(10.2, 14.1)	(8.6, 17.1)	(9.9, 17.2)	(9.3, 14.1)
<i>Legitimately Skipped Question</i>	(24.7, 30.0)	(11.1, 21.9)	(19.3, 28.8)	(26.8, 33.8)
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	(21.1, 26.1)	(17.7, 28.7)	(18.9, 28.0)	(20.7, 27.2)
Training sessions	(41.3, 47.2)	(41.4, 55.1)	(41.0, 51.7)	(39.0, 46.5)
Provide copies of NIOSH reports to firefighters	(14.2, 18.3)	(26.0, 38.2)	(17.2, 25.0)	(10.1, 15.0)
Provide copies of NIOSH report summaries to firefighters	(5.0, 7.7)	(7.7, 16.4)	(5.7, 11.0)	(3.5, 6.7)
Provide summaries prepared by department to firefighters	(1.2, 2.7)	(2.8, 6.8)	(0.7, 3.0)	(1.0, 3.1)
Postings on bulletin boards	(35.6, 41.3)	(32.6, 46.1)	(32.4, 42.7)	(35.4, 42.7)
Post report on the department website	(0.7, 1.8)	(1.6, 5.9)	(0.8, 2.8)	(0.3, 1.9)
Send message to firefighters by email	(4.3, 6.5)	(18.3, 29.7)	(5.9, 10.7)	(1.5, 3.8)
<i>Legitimately Skipped Question</i>	(0.8, 2.0)	(1.6, 5.3)	(0.3, 1.3)	(0.8, 2.8)
<i>Legitimately Skipped Question</i>	(36.2, 42.0)	(22.9, 35.7)	(31.5, 41.9)	(37.6, 45.0)
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
Yes	(31.6, 36.9)	(55.8, 69.3)	(32.1, 41.2)	(27.3, 34.2)
<i>Legitimately Skipped Question</i>	(35.5, 41.3)	(15.9, 27.0)	(34.3, 45.0)	(35.5, 42.9)
No	(24.8, 30.2)	(11.5, 22.5)	(19.4, 29.0)	(26.8, 33.8)

(continued)

**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	(0.2, 1.1)	(0.4, 5.1)	(0.3, 2.8)	(0.0, 0.8)
Disagree	(2.6, 4.8)	(1.2, 5.2)	(1.9, 5.4)	(2.6, 5.6)
Neither Agree nor Disagree	(16.5, 21.2)	(10.6, 19.9)	(13.6, 22.0)	(16.8, 22.9)
Agree	(42.7, 48.6)	(52.9, 66.4)	(44.2, 54.9)	(38.6, 46.1)
Strongly Agree	(2.7, 5.0)	(3.4, 8.9)	(2.5, 7.2)	(2.1, 4.9)
<i>Legitimately Skipped Question</i>	(25.3, 30.8)	(11.3, 22.2)	(20.0, 29.8)	(27.4, 34.4)
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	(0.2, 1.0)	(0.0, 1.3)	(0.3, 2.8)	(0.0, 0.9)
Disagree	(1.1, 2.6)	(0.5, 3.6)	(0.7, 3.4)	(1.0, 3.2)
Neither Agree nor Disagree	(17.5, 22.3)	(8.2, 16.6)	(14.5, 22.9)	(18.3, 24.6)
Agree	(42.4, 48.4)	(56.8, 70.0)	(44.0, 54.9)	(38.0, 45.5)
Strongly Agree	(3.5, 6.1)	(4.5, 10.6)	(3.1, 8.1)	(2.9, 6.1)
<i>Legitimately Skipped Question</i>	(25.4, 30.9)	(11.3, 22.3)	(20.1, 29.9)	(27.5, 34.5)
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	(0.2, 1.0)	(0.4, 4.6)	(0.3, 2.6)	(0.0, 0.9)
Disagree	(2.3, 4.4)	(1.5, 4.8)	(1.7, 5.0)	(2.2, 5.0)
Neither Agree nor Disagree	(24.0, 29.4)	(17.6, 28.9)	(23.2, 33.1)	(23.0, 29.7)
Agree	(35.0, 40.8)	(43.5, 57.1)	(35.2, 45.6)	(32.0, 39.3)
Strongly Agree	(2.8, 5.2)	(4.3, 10.3)	(1.8, 6.1)	(2.6, 5.7)
<i>Legitimately Skipped Question</i>	(25.4, 30.8)	(11.4, 22.4)	(20.1, 29.9)	(27.4, 34.4)

(continued)



**Exhibit B-5b. Results from the Fire Department Survey, Confidence Interval Estimates by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	(54.4, 60.4)	(70.8, 82.5)	(53.5, 64.3)	(51.0, 58.7)
Respirator maintenance program guide	(11.9, 15.9)	(15.5, 25.6)	(8.7, 14.6)	(12.1, 17.6)
CDs of firefighter program materials	(25.4, 30.7)	(28.3, 41.3)	(23.0, 32.5)	(24.4, 31.3)
Alerts	(29.1, 34.5)	(43.0, 55.9)	(27.6, 37.0)	(26.6, 33.6)
Hazard IDs	(14.5, 19.0)	(14.0, 24.0)	(11.9, 19.8)	(14.4, 20.2)
Workplace Solutions	(10.7, 14.6)	(9.7, 18.7)	(9.9, 16.8)	(9.8, 14.9)
	(0.4, 1.4)	(0.3, 1.9)	(0.2, 1.6)	(0.4, 2.0)
None. I have not seen any NIOSH materials.	(22.6, 27.9)	(9.7, 20.2)	(20.5, 30.1)	(22.9, 29.8)
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	(0.8, 2.2)	(1.3, 5.9)	(0.4, 3.0)	(0.7, 2.6)
Dissatisfied	(0.0, 0.7)	(**, **)	(**, **)	(0.1, 1.2)
Neither satisfied nor dissatisfied	(18.8, 23.8)	(7.8, 16.4)	(14.3, 22.7)	(20.6, 27.2)
Satisfied	(44.1, 50.1)	(52.3, 65.4)	(44.8, 55.6)	(40.6, 48.3)
Very satisfied	(4.0, 6.7)	(8.7, 17.4)	(3.9, 9.0)	(2.9, 6.1)
<i>Legitimately Skipped Question</i>	(22.4, 27.7)	(9.9, 20.6)	(20.1, 29.7)	(22.7, 29.5)
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	(56.5, 62.2)	(21.3, 33.6)	(51.6, 61.6)	(59.8, 67.1)
No	(31.9, 37.3)	(57.1, 70.4)	(32.3, 42.0)	(27.3, 34.4)
Yes, longer than one year ago	(4.9, 7.6)	(5.7, 13.7)	(4.4, 9.0)	(4.2, 7.8)

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>1. Does your department have a Safety Officer?</b>	1,587	323	487	777
	1,587	323	487	777
<b>2. Does your department have a Training Officer?</b>				
Yes				
No	1,600	329	489	782
	1,600	329	489	782
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	1,600	329	489	782
Maintenance of SCBAs	1,600	329	489	782
Motor vehicle safety	1,600	329	489	782
Participation in a personal physical fitness program	1,600	329	489	782
Participation in regular health screenings for cardiovascular disease (CVD)	1,600	329	489	782
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	1,600	329	489	782
Use of Personal Alert Safety System (PASS) devices	1,600	329	489	782
Use of personal protective equipment and protective clothing	1,600	329	489	782
Use of radio communications	1,600	329	489	782
	1,600	329	489	782
Does not apply. Our fire department does not use SOPs/SOGs.	1,600	329	489	782

Other

(continued)

## Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	1,607	331	486	790
Optional Training	1,607	331	486	790
Required Training	1,607	331	486	790
<b>4b. Driving safety</b>				
No Training	1,598	331	486	781
Optional Training	1,598	331	486	781
Required Training	1,598	331	486	781
<b>4c. Incident Command systems</b>				
No Training	1,584	327	488	769
Optional Training	1,584	327	488	769
Required Training	1,584	327	488	769
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	1,581	325	479	777
Optional Training	1,581	325	479	777
Required Training	1,581	325	479	777
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	1,511	324	461	726
Optional Training	1,511	324	461	726
Required Training	1,511	324	461	726

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1,611	330	491	790
Optional Training	1,611	330	491	790
Required Training	1,611	330	491	790
<b>4g. Use of radio communication devices</b>				
No Training	1,606	329	488	789
Optional Training	1,606	329	488	789
Required Training	1,606	329	488	789
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	1,611	330	490	791
Other officers within our department	1,611	330	490	791
State fire training agency	1,611	330	490	791
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	1,611	330	490	791
Conferences or regional meetings	1,611	330	490	791
	1,611	330	490	791
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Other				
Roadside incidents/Motor Vehicle Accidents (MVA)	1,622	332	496	794
Scuba diving	1,622	332	496	794
Swift water rescue	1,622	332	496	794
Wildland fire fighting	1,622	332	496	794
	1,622	332	496	794
	1,622	332	496	794

HAZMAT

Other

(continued)

Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	1,610	329	492	789
Not very familiar	1,610	329	492	789
Somewhat familiar	1,610	329	492	789
Very familiar	1,610	329	492	789
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	1,611	328	495	788
Not very familiar	1,611	328	495	788
Somewhat familiar	1,611	328	495	788
Very familiar	1,611	328	495	788
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	1,609	330	494	785
National conference presentations	1,609	330	494	785
State-level conference presentations	1,609	330	494	785
Other firefighters or departments	1,609	330	494	785
At seminars or other training opportunities (not conferences)	1,609	330	494	785
Trade publications (such as Firehouse and Fire Engineering)	1,609	330	494	785
NIOSH website	1,609	330	494	785
Links from other websites (such as NFPA and Firehouse)	1,609	330	494	785
Media reports—newspaper, television, radio	1,609	330	494	785
Does not apply. We have not received information about NIOSH recommendations.	1,609	330	494	785
Other				

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	1,536	321	474	741
Developed new SOPs/SOGs	1,536	321	474	741
Made changes to SOPs/SOGs	1,536	321	474	741
Justified current budget/staffing	1,536	321	474	741
Made new budget/staffing requests	1,536	321	474	741
Justified grant applications	1,536	321	474	741
Does not apply. We have not used NIOSH recommendations.	1,536	321	474	741
<i>Legitimately Skipped Question</i>	1,536	321	474	741
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	1,530	317	476	737
Personal protective equipment and clothing	1,530	317	476	737
	1,530	317	476	737
PASS systems	1,530	317	476	737
SCBA Incident Command systems	1,530	317	476	737
Radio communications	1,530	317	476	737
Physical fitness and cardiovascular disease (CVD)	1,530	317	476	737
Building code compliance (e.g., warning against the use of wooden trusses)	1,530	317	476	737
	1,530	317	476	737
Does not apply. We have not used NIOSH recommendations for training purposes.	1,530	317	476	737
Other	1,530	317	476	737
<i>Legitimately Skipped Question</i>	1,530	317	476	737

(continued)

Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	1,596	324	489	783
No Yes, it's optional	1,596	324	489	783
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	1,582	321	479	782
Less frequently than once a year	1,582	321	479	782
One time a year	1,582	321	479	782
More than one time a year	1,582	321	479	782
Does not apply. Firefighters are not required to receive CVD screenings	1,582	321	479	782
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	1,616	332	494	790
Yes, they receive training required by the department	1,616	332	494	790
Yes, they receive training required by the state	1,616	332	494	790
Yes, they receive optional training	1,616	332	494	790
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	1,611	329	494	788
Once every year	1,611	329	494	788
Less frequently than once a year	1,611	329	494	788
Does not apply. Firefighters are not required to receive continuing driver training.	1,611	329	494	788

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>	1,613	330	495	788
	1,613	330	495	788
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
No				
Strongly disagree	1,603	330	489	784
Disagree	1,603	330	489	784
Neither agree nor disagree	1,603	330	489	784
Agree	1,603	330	489	784
Strongly agree	1,603	330	489	784
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	1,616	332	493	791
Never	1,616	332	493	791
About half the time	1,616	332	493	791
Most of the time	1,616	332	493	791
	1,616	332	493	791
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Always	1,604	328	491	785
Rarely	1,604	328	491	785
Never	1,604	328	491	785
About half the time	1,604	328	491	785
Most of the time	1,604	328	491	785
	1,604	328	491	785

(continued)

Always



## Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	1,600	327	490	783
Not enough firefighters available at the scene of the fire	1,600	327	490	783
Does not apply. My department always assigns an Incident Commander for structure fires.	1,600	327	490	783
Other <i>Legitimately Skipped Question</i>	1,600	327	490	783
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	1,588	327	480	781
Develop and coordinate the fire attack strategy	1,588	327	480	781
Develop and initiate a risk management plan	1,588	327	480	781
Document all assessments, plans and events related to the fire	1,588	327	480	781
Ensure that at least four (4) firefighters are on the scene before entering the building	1,588	327	480	781
Establish a collapse zone around the building	1,588	327	480	781
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	1,588	327	480	781
Identify and implement a communication strategy	1,588	327	480	781
Monitor location of all firefighters at the scene	1,588	327	480	781
Other	1,588	327	480	781
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	1,605	330	488	787
Some of the time	1,605	330	488	787
About half the time	1,605	330	488	787
Most of the time	1,605	330	488	787
Other	1,605	330	488	787

(continued)

Always

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	1,588	329	481	778
Not enough firefighters are available at the scene of the fire	1,588	329	481	778
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	1,588	329	481	778
Other <i>Legitimately Skipped Question</i>	1,588	329	481	778
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	1,602	328	491	783
Some of the time	1,602	328	491	783
About half the time	1,602	328	491	783
Most of the time	1,602	328	491	783
<i>Legitimately Skipped Question</i>	1,602	328	491	783
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
Always				
When the building has more than one story/floor	1,600	330	487	783
When there are enough firefighters on and at the scene of the fire	1,600	330	487	783
Whenever firefighters enter a burning building	1,600	330	487	783
<i>Legitimately Skipped Question</i>	1,600	330	487	783

Other

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	1,575	326	481	768
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	1,575	326	481	768
We don't have enough firefighters available at the scene of the fire	1,575	326	481	768
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	1,575	326	481	768
We have never established an RIT/RIC	1,575	326	481	768
We use other fire departments in the area for RITs/RICs	1,575	326	481	768
We use other safety practices and so we don't need them	1,575	326	481	768
<i>Legitimately Skipped Question</i>	1,575	326	481	768
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	1,606	332	488	786
	1,606	332	488	786
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No	1,600	330	486	784
Some of the time	1,600	330	486	784
Never About half the time	1,600	330	486	784
Most of the time	1,600	330	486	784
Always	1,600	330	486	784

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	1,590	328	483	779
Situation doesn't require them	1,590	328	483	779
Firefighters think the devices do not always work reliably	1,590	328	483	779
Firefighters don't think they need them	1,590	328	483	779
Devices go off while firefighters are resting	1,590	328	483	779
<i>Legitimately Skipped Question</i>	1,590	328	483	779
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	1,606	331	487	788
	1,606	331	487	788
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No				
	1,521	302	465	754
	1,521	302	465	754
Yes <i>Legitimately Skipped Question</i>	1,521	302	465	754
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	1,517	302	463	752
Firefighters don't like using the equipment	1,517	302	463	752
Have never needed them (e.g., we don't do interior attacks)	1,517	302	463	752
They cost too much, there is not enough money in the budget	1,517	302	463	752
We don't have enough equipment for all of our firefighters	1,517	302	463	752
Shared systems work fine for our needs	1,517	302	463	752
	1,517	302	463	752
<i>Legitimately Skipped Question</i>	1,517	302	463	752

Other

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1,536	305	469	762
Some of the time	1,536	305	469	762
About half the time	1,536	305	469	762
Most of the time	1,536	305	469	762
	1,536	305	469	762
<i>Legitimately Skipped Question</i>	1,536	305	469	762
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	1,525	305	463	757
Firefighters do not trust that the SCBAs will work reliably	1,525	305	463	757
Firefighters don't think they need them	1,525	305	463	757
Firefighters don't like sharing facepieces with others	1,525	305	463	757
Firefighters are concerned that the SCBA may be or become contaminated	1,525	305	463	757
Wearing SCBAs makes it more difficult to work	1,525	305	463	757
Firefighters don't have SCBAs to use	1,525	305	463	757
<i>Legitimately Skipped Question</i>	1,525	305	463	757
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	1,270	270	389	611
Once a month or more	1,270	270	389	611
Several times a year	1,270	270	389	611
Once a year	1,270	270	389	611
Less than once a year	1,270	270	389	611
Never. Maintenance has not been done on our SCBAs.	1,270	270	389	611
Does not apply. My department does not have SCBAs.	1,270	270	389	611
<i>Legitimately Skipped Question</i>	1,270	270	389	611

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	1,518	311	461	746
	1,518	311	461	746
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero				
CBRN SCBA devices are not needed in our department	1,454	302	449	703
We didn't know they were available	1,454	302	449	703
We don't have adequate technical information to purchase them	1,454	302	449	703
We don't have adequate funding to purchase them	1,454	302	449	703
<i>Legitimately Skipped Question</i>	1,454	302	449	703
	1,454	302	449	703
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> Yes	1,610	326	495	789
	1,610	326	495	789
<b>38a. At your fire department, where do you have AEDs?</b> No				
At the fire station(s)	1,424	270	441	713
On the emergency vehicles (or apparatus)	1,424	270	441	713
Both at the fire station(s) and on the vehicles (or apparatus)	1,424	270	441	713
<i>Legitimately Skipped Question</i>	1,424	270	441	713
	1,424	270	441	713
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b> After every time they are used	1,235	289	368	578
Once a month or more	1,235	289	368	578
Several times a year	1,235	289	368	578
Once a year	1,235	289	368	578
Less frequently than once a year	1,235	289	368	578
Never. Maintenance on our AEDs has not been done.	1,235	289	368	578

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	1,610	332	492	786
Never About half the time	1,610	332	492	786
Most of the time	1,610	332	492	786
	1,610	332	492	786
	1,610	332	492	786
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Always	1,612	332	493	787
Some of the time	1,612	332	493	787
Never About half the time	1,612	332	493	787
Most of the time	1,612	332	493	787
	1,612	332	493	787
	1,612	332	493	787
<b>42. How would you rate your department's budget in the following areas?</b>				
Always				
<b>42a. Equipment</b>				
Not adequate	1,608	328	493	787
Adequate	1,608	328	493	787
More than adequate	1,608	328	493	787

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>42b. Training</b>				
Not adequate	1,608	329	491	788
Adequate	1,608	329	491	788
More than adequate	1,608	329	491	788
<b>42c. Personnel</b>				
Not adequate	1,551	330	476	745
Adequate	1,551	330	476	745
More than adequate	1,551	330	476	745
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	1,605	329	489	787
Several times per year	1,605	329	489	787
Never	1,605	329	489	787
Once a month or more	1,605	329	489	787
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	1,605	328	492	785
On the Internet	1,605	328	492	785
From colleagues in other departments	1,605	328	492	785
At conferences or other meetings	1,605	328	492	785
<i>Legitimately Skipped Question</i>	1,605	328	492	785

(continued)



Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	1,611	329	495	787
<i>Legitimately Skipped Question</i>	1,611	329	495	787
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	1,583	329	487	767
<i>Legitimately Skipped Question</i>	1,583	329	487	767
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	1,585	323	489	773
Training sessions	1,585	323	489	773
Provide copies of NIOSH reports to firefighters	1,585	323	489	773
Provide copies of NIOSH report summaries to firefighters	1,585	323	489	773
Provide summaries prepared by department to firefighters	1,585	323	489	773
Postings on bulletin boards	1,585	323	489	773
Post report on the department website	1,585	323	489	773
Send message to firefighters by email	1,585	323	489	773
<i>Legitimately Skipped Question</i>	1,585	323	489	773
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
Yes	1,564	318	479	767
<i>Legitimately Skipped Question</i>	1,564	318	479	767
No	1,564	318	479	767

(continued)

**Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	1,547	324	472	751
Disagree	1,547	324	472	751
Neither Agree nor Disagree	1,547	324	472	751
Agree	1,547	324	472	751
Strongly Agree	1,547	324	472	751
<i>Legitimately Skipped Question</i>	1,547	324	472	751
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	1,537	321	469	747
Disagree	1,537	321	469	747
Neither Agree nor Disagree	1,537	321	469	747
Agree	1,537	321	469	747
Strongly Agree	1,537	321	469	747
<i>Legitimately Skipped Question</i>	1,537	321	469	747
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	1,537	321	467	749
Disagree	1,537	321	467	749
Neither Agree nor Disagree	1,537	321	467	749
Agree	1,537	321	467	749
Strongly Agree	1,537	321	467	749
<i>Legitimately Skipped Question</i>	1,537	321	467	749

(continued)

## Exhibit B-5c. Results from the Fire Department Survey, Sample Sizes by Department Type (continued)

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	1,537	322	472	743
Respirator maintenance program guide	1,537	322	472	743
CDs of firefighter program materials	1,537	322	472	743
Alerts	1,537	322	472	743
Hazard IDs	1,537	322	472	743
Workplace Solutions	1,537	322	472	743
	1,537	322	472	743
None. I have not seen any NIOSH materials.	1,537	322	472	743
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1,536	317	473	746
Dissatisfied	1,536	317	473	746
Neither satisfied nor dissatisfied	1,536	317	473	746
Satisfied	1,536	317	473	746
Very satisfied	1,536	317	473	746
<i>Legitimately Skipped Question</i>	1,536	317	473	746
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
	1,589	328	489	772
Yes, in the last year	1,589	328	489	772
No Yes, longer than one year ago	1,589	328	489	772

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>1. Does your department have a Safety Officer?</b>	70.3 29.7	78.6 <sup>[3]</sup> 21.4 <sup>[3]</sup>	73.3 26.7	70.2 <sup>[1]</sup> 29.8 <sup>[1]</sup>
<b>2. Does your department have a Training Officer?</b>				
Yes	88.5	93.8 <sup>[3]</sup>	90.4	88.4 <sup>[1]</sup>
No	11.5	6.2 <sup>[3]</sup>	9.6	11.6 <sup>[1]</sup>
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	83.7	92.0 <sup>[3]</sup>	92.7 <sup>[3]</sup>	83.6 <sup>[1,2]</sup>
Maintenance of SCBAs	69.7	80.8 <sup>[2,3]</sup>	68.7 <sup>[1]</sup>	69.6 <sup>[1]</sup>
Motor vehicle safety	78.8	90.3 <sup>[3]</sup>	82.7	78.7 <sup>[1]</sup>
Participation in a personal physical fitness program	11.0	24.3 <sup>[3]</sup>	18.1	10.9 <sup>[1]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	16.8	32.0 <sup>[3]</sup>	24.5	16.6 <sup>[1]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	40.4	64.0 <sup>[3]</sup>	55.5 <sup>[3]</sup>	40.1 <sup>[1,2]</sup>
Use of Personal Alert Safety System (PASS) devices	75.4	83.2 <sup>[2,3]</sup>	71.7 <sup>[1]</sup>	75.3 <sup>[1]</sup>
Use of personal protective equipment and protective clothing	89.1	96.3 <sup>[3]</sup>	90.2	89.1 <sup>[1]</sup>
Use of radio communications	84.8	91.2 <sup>[3]</sup>	88.9	84.7 <sup>[1]</sup>
Other	8.7	9.5	9.5	8.7
Does not apply. Our fire department does not use SOPs/SOGs.	5.0	** <sup>[3]</sup>	1.0 <sup>[3,+]</sup>	5.1 <sup>[1,2]</sup>

(continued)

Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.1	1.9 <sup>[+]</sup>	3.5 <sup>[+]</sup>	1.1
Optional Training	16.7	7.7 <sup>[2,3]</sup>	20.2 <sup>[1]</sup>	16.8 <sup>[1]</sup>
Required Training	82.8	90.4 <sup>[2,3]</sup>	76.3 <sup>[1]</sup>	82.8 <sup>[1]</sup>
<b>4b. Driving safety</b>				
No Training	3.9	2.2 <sup>[+]</sup>	3.7 <sup>[+]</sup>	3.9
Optional Training	18.6	5.8 <sup>[2,3]</sup>	16.0 <sup>[1]</sup>	18.7 <sup>[1]</sup>
Required Training	77.7	92.0 <sup>[2,3]</sup>	80.3 <sup>[1]</sup>	77.6 <sup>[1]</sup>
<b>4c. Incident Command systems</b>				
No Training	2.9	1.4 <sup>[+]</sup>	3.3 <sup>[+]</sup>	2.9
Optional Training	27.4	12.3 <sup>[2,3]</sup>	23.1 <sup>[1]</sup>	27.5 <sup>[1]</sup>
Required Training	69.9	86.3 <sup>[2,3]</sup>	73.6 <sup>[1]</sup>	69.7 <sup>[1]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	6.6	5.3	6.0	6.6
Optional Training	33.6	21.4 <sup>[3]</sup>	32.9	33.7 <sup>[1]</sup>
Required Training	60.3	73.4 <sup>[3]</sup>	61.1	60.2 <sup>[1]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	28.5	9.9 <sup>[3]</sup>	17.7 <sup>[3]</sup>	28.8 <sup>[1,2]</sup>
Optional Training	36.2	29.6 <sup>[2]</sup>	46.1 <sup>[1]</sup>	36.1
Required Training	35.5	60.5 <sup>[2,3]</sup>	36.1 <sup>[1]</sup>	35.4 <sup>[1]</sup>

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.5	0.8 <sup>[+]</sup>	** <sup>[3]</sup>	1.5 <sup>[2]</sup>
Optional Training	9.9	6.5	11.9	9.9
Required Training	88.9	92.7	88.7	88.9
<b>4g. Use of radio communication devices</b>				
No Training	2.7	2.0 <sup>[+]</sup>	0.4 <sup>[3,+]</sup>	2.7 <sup>[2]</sup>
Optional Training	21.4	13.4 <sup>[3]</sup>	21.1	21.4 <sup>[1]</sup>
Required Training	76.2	84.7 <sup>[3]</sup>	78.5	76.1 <sup>[1]</sup>
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	84.9	91.3 <sup>[3]</sup>	88.1	84.8 <sup>[1]</sup>
Other officers within our department	82.8	91.8 <sup>[3]</sup>	89.1 <sup>[3]</sup>	82.7 <sup>[1,2]</sup>
State fire training agency	77.4	82.2	85.3 <sup>[3]</sup>	77.3 <sup>[2]</sup>
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	20.9	42.9 <sup>[3]</sup>	32.4 <sup>[3]</sup>	20.7 <sup>[1,2]</sup>
Conferences or regional meetings	51.7	66.5 <sup>[3]</sup>	63.6 <sup>[3]</sup>	51.5 <sup>[1,2]</sup>
Other	25.2	24.8	27.0	25.2
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	55.3	60.0	52.7	55.3
Scuba diving	7.5	14.4 <sup>[3]</sup>	6.8	7.4 <sup>[1]</sup>
Swift water rescue	11.2	29.8 <sup>[2,3]</sup>	9.8 <sup>[1]</sup>	11.1 <sup>[1]</sup>
Wildland fire fighting	47.0	40.3	41.3	47.1
HAZMAT	66.7	82.6 <sup>[3]</sup>	78.3 <sup>[3]</sup>	66.4 <sup>[1,2]</sup>
Other	31.2	36.6	28.4	31.2

(continued)

Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	8.3	2.5 <sup>[3,+]</sup>	2.5 <sup>[3,+]</sup>	8.4 <sup>[1,2]</sup>
Not very familiar	24.3	6.8 <sup>[2,3]</sup>	18.1 <sup>[1]</sup>	24.5 <sup>[1]</sup>
Somewhat familiar	58.1	48.5 <sup>[3]</sup>	60.7	58.2 <sup>[1]</sup>
Very familiar	9.3	42.2 <sup>[2,3]</sup>	18.7 <sup>[1,3]</sup>	8.9 <sup>[1,2]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	20.8	6.8 <sup>[3]</sup>	9.5 <sup>[3]</sup>	21.0 <sup>[1,2]</sup>
Not very familiar	33.5	11.7 <sup>[2,3]</sup>	22.9 <sup>[1,3]</sup>	33.8 <sup>[1,2]</sup>
Somewhat familiar	37.9	38.7	51.0 <sup>[3]</sup>	37.8 <sup>[2]</sup>
Very familiar	7.8	42.9 <sup>[2,3]</sup>	16.5 <sup>[1,3]</sup>	7.5 <sup>[1,2]</sup>
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	67.8	84.7 <sup>[3]</sup>	74.0	67.6 <sup>[1]</sup>
National conference presentations	3.6	9.1 <sup>[3]</sup>	6.5	3.6 <sup>[1]</sup>
State-level conference presentations	11.5	15.1	9.1	11.5
Other firefighters or departments	22.9	24.6	26.2	22.8
At seminars or other training opportunities (not conferences)	16.4	23.0	25.9 <sup>[3]</sup>	16.2 <sup>[2]</sup>
Trade publications (such as Firehouse and Fire Engineering)	47.2	60.7 <sup>[3]</sup>	57.9 <sup>[3]</sup>	47.0 <sup>[1,2]</sup>
NIOSH website	24.3	56.7 <sup>[2,3]</sup>	33.6 <sup>[1,3]</sup>	23.9 <sup>[1,2]</sup>
Links from other websites (such as NFPA and Firehouse)	28.2	47.5 <sup>[3]</sup>	35.1	28.0 <sup>[1]</sup>
Media reports—newspaper, television, radio	14.9	19.2	17.3	14.8
Other	1.1	1.9 <sup>[+]</sup>	5.1	1.1
Does not apply. We have not received information about NIOSH recommendations.	11.1	2.9 <sup>[3]</sup>	4.0 <sup>[3,+]</sup>	11.3 <sup>[1,2]</sup>

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	40.2	68.0 <sup>[3]</sup>	56.3 <sup>[3]</sup>	39.8 <sup>[1,2]</sup>
Developed new SOPs/SOGs	26.3	50.1 <sup>[3]</sup>	37.4 <sup>[3]</sup>	26.1 <sup>[1,2]</sup>
Made changes to SOPs/SOGs	34.9	66.2 <sup>[2,3]</sup>	51.3 <sup>[1,3]</sup>	34.5 <sup>[1,2]</sup>
Justified current budget/staffing	5.0	15.3 <sup>[3]</sup>	9.1	4.9 <sup>[1]</sup>
Made new budget/staffing requests	5.5	20.2 <sup>[3]</sup>	11.4	5.3 <sup>[1]</sup>
Justified grant applications	15.5	30.1 <sup>[3]</sup>	22.0	15.4 <sup>[1]</sup>
Does not apply. We have not used NIOSH recommendations.	30.1	10.0 <sup>[3]</sup>	17.1 <sup>[3]</sup>	30.3 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	11.7	3.0 <sup>[3]</sup>	4.2 <sup>[3,+]</sup>	11.9 <sup>[1,2]</sup>
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	29.3	49.9 <sup>[3]</sup>	45.8 <sup>[3]</sup>	29.0 <sup>[1,2]</sup>
Personal protective equipment and clothing	41.6	59.8 <sup>[3]</sup>	51.0	41.4 <sup>[1]</sup>
SCBA	40.1	56.6 <sup>[3]</sup>	50.0	39.8 <sup>[1]</sup>
PASS systems	32.6	46.1 <sup>[3]</sup>	39.4	32.5 <sup>[1]</sup>
Incident Command systems	32.1	46.1 <sup>[3]</sup>	50.0 <sup>[3]</sup>	31.8 <sup>[1,2]</sup>
Radio communications	23.0	40.3 <sup>[3]</sup>	38.9 <sup>[3]</sup>	22.8 <sup>[1,2]</sup>
Physical fitness and cardiovascular disease (CVD)	8.5	28.8 <sup>[2,3]</sup>	16.3 <sup>[1,3]</sup>	8.3 <sup>[1,2]</sup>
Building code compliance (e.g., warning against the use of wooden trusses)	6.9	15.2 <sup>[3]</sup>	7.4	6.8 <sup>[1]</sup>
Other	2.3	6.5	2.2 <sup>[+]</sup>	2.3
Does not apply. We have not used NIOSH recommendations for training purposes.	1.9	2.4 <sup>[+]</sup>	6.2	1.9
<i>Legitimately Skipped Question</i>	41.9	13.1 <sup>[3]</sup>	21.6 <sup>[3]</sup>	42.3 <sup>[1,2]</sup>

(continued)



Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	78.5	59.6 <sup>[3]</sup>	71.5	78.7 <sup>[1]</sup>
No Yes, it's optional	7.0	18.5 <sup>[3]</sup>	11.9	6.9 <sup>[1]</sup>
	14.5	21.8 <sup>[3]</sup>	16.7	14.5 <sup>[1]</sup>
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	13.8	15.6	14.5
Less frequently than once a year	7.1	10.0	8.6	7.1
One time a year	17.1	32.6 <sup>[3]</sup>	24.4	17.0 <sup>[1]</sup>
More than one time a year	0.3	** <sup>[3]</sup>	** <sup>[3]</sup>	0.3 <sup>[1,2]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	60.9	43.6 <sup>[3]</sup>	51.4	61.2 <sup>[1]</sup>
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	6.4	2.2 <sup>[3,+]</sup>	5.2	6.4 <sup>[1]</sup>
Yes, they receive training required by the department	84.0	92.2 <sup>[3]</sup>	84.7	83.9 <sup>[1]</sup>
Yes, they receive training required by the state	25.7	28.3	20.5	25.8
Yes, they receive optional training	13.8	8.0 <sup>[3]</sup>	15.0	13.8 <sup>[1]</sup>
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	14.2	14.3	13.1	14.2
Once every year	40.3	43.8	36.5	40.4
Less frequently than once a year	24.8	26.7	28.7	24.7
Does not apply. Firefighters are not required to receive continuing driver training.	20.7	15.2	21.7	20.8

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
No	84.2	92.1 <sup>[3]</sup>	88.0	84.1 <sup>[1]</sup>
	15.8	7.9 <sup>[3]</sup>	12.0	15.9 <sup>[1]</sup>
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	6.9	9.1	4.1 <sup>[+]</sup>	6.9
Disagree	18.0	20.5	13.7	18.0
Neither agree nor disagree	30.8	21.7 <sup>[2,3]</sup>	34.9 <sup>[1]</sup>	30.9 <sup>[1]</sup>
Agree	32.1	37.0 <sup>[2]</sup>	23.9 <sup>[1]</sup>	32.2
Strongly agree	12.2	11.7 <sup>[2]</sup>	23.4 <sup>[1,3]</sup>	12.0 <sup>[2]</sup>
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	5.4	3.8	1.1 <sup>[3,+]</sup>	5.4 <sup>[2]</sup>
Never	22.7	18.9 <sup>[2]</sup>	31.9 <sup>[1]</sup>	22.6
About half the time	17.0	13.4	14.9	17.0
Most of the time	38.4	38.4	31.5	38.5
	16.5	25.6 <sup>[3]</sup>	20.5	16.4 <sup>[1]</sup>
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Always	2.3	** <sup>[3]</sup>	1.9 <sup>[+]</sup>	2.3 <sup>[1]</sup>
Rarely	6.8	3.6	3.7	6.8
Never	6.7	2.6 <sup>[3,+]</sup>	1.0 <sup>[3,+]</sup>	6.8 <sup>[1,2]</sup>
About half the time	27.6	17.6 <sup>[3]</sup>	19.0 <sup>[3]</sup>	27.8 <sup>[1,2]</sup>
Most of the time	56.6	76.1 <sup>[3]</sup>	74.4 <sup>[3]</sup>	56.3 <sup>[1,2]</sup>
Always				

(continued)

Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	22.5	8.0 <sup>[3]</sup>	10.4 <sup>[3]</sup>	22.7 <sup>[1,2]</sup>
Not enough firefighters available at the scene of the fire	21.2	10.8 <sup>[3]</sup>	13.8 <sup>[3]</sup>	21.3 <sup>[1,2]</sup>
Other	6.2	6.2	5.5	6.2
Does not apply. My department always assigns an Incident Commander for structure fires.	3.6	2.9	1.2 <sup>[3,+]</sup>	3.7 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	56.6	76.7 <sup>[3]</sup>	75.7 <sup>[3]</sup>	56.3 <sup>[1,2]</sup>
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.0	91.0	91.9	91.0
Develop and coordinate the fire attack strategy	93.1	95.5	92.6	93.1
Develop and initiate a risk management plan	52.3	65.4 <sup>[3]</sup>	63.3 <sup>[3]</sup>	52.1 <sup>[1,2]</sup>
Document all assessments, plans and events related to the fire	38.8	47.1	40.2	38.7
Ensure that at least four (4) firefighters are on the scene before entering the building	68.6	74.2	67.0	68.5
Establish a collapse zone around the building	49.1	55.9	53.7	49.0
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	48.5	69.1 <sup>[3]</sup>	60.0 <sup>[3]</sup>	48.2 <sup>[1,2]</sup>
Identify and implement a communication strategy	64.7	65.2	64.9	64.7
Monitor location of all firefighters at the scene	76.2	83.9 <sup>[3]</sup>	82.3	76.1 <sup>[1]</sup>
Other	9.1	9.9	11.4	9.1

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	13.3	5.0 <sup>[3]</sup>	8.4	13.4 <sup>[1]</sup>
Some of the time	26.5	28.6	28.1	26.5
About half the time	8.1	11.9	7.0	8.1
Most of the time	29.8	25.4	26.8	29.8
	22.3	29.1	29.7	22.2
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Always				
Fires are not big enough to require an Incident Safety Officer	32.3	20.5 <sup>[3]</sup>	15.9 <sup>[3]</sup>	32.5 <sup>[1,2]</sup>
Not enough firefighters are available at the scene of the fire	51.7	43.0	51.6	51.7
	13.1	20.0 <sup>[3]</sup>	16.2	13.0 <sup>[1]</sup>
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	2.1	2.9	0.8 <sup>[+]</sup>	2.1
Other				
<i>Legitimately Skipped Question</i>	22.6	29.1	30.1	22.5
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	29.4	13.4 <sup>[3]</sup>	18.0 <sup>[3]</sup>	29.6 <sup>[1,2]</sup>
Some of the time	21.8	13.8 <sup>[3]</sup>	18.2	21.9 <sup>[1]</sup>
About half the time	6.5	8.4	4.7	6.5
Most of the time	22.5	27.5	19.5	22.5
	19.9	36.9 <sup>[3]</sup>	39.6 <sup>[3]</sup>	19.5 <sup>[1,2]</sup>

(continued)

Always

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	9.3	7.6	5.9	9.4
When there are enough firefighters on and at the scene of the fire	32.3	28.7	28.2	32.4
Whenever firefighters enter a burning building	26.4	28.2	19.5	26.5
<i>Legitimately Skipped Question</i>	4.9	5.9	3.2	4.9
	49.3	50.8	58.1	49.2
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	34.9	25.4 <sup>[3]</sup>	23.4 <sup>[3]</sup>	35.1 <sup>[1,2]</sup>
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	8.8	2.3 <sup>[3,+]</sup>	3.8 <sup>[3,+]</sup>	8.9 <sup>[1,2]</sup>
We don't have enough firefighters available at the scene of the fire	53.5	41.5 <sup>[3]</sup>	38.5 <sup>[3]</sup>	53.8 <sup>[1,2]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	20.7	10.8 <sup>[3]</sup>	15.3	20.8 <sup>[1]</sup>
We have never established an RIT/RIC	17.7	7.0 <sup>[3]</sup>	11.5	17.8 <sup>[1]</sup>
We use other fire departments in the area for RITs/RICs	29.2	21.8	19.3 <sup>[3]</sup>	29.4 <sup>[2]</sup>
We use other safety practices and so we don't need them	4.2	1.8 <sup>[+]</sup>	1.1 <sup>[3,+]</sup>	4.2 <sup>[2]</sup>
Other	4.1	7.8	5.7	4.0
<i>Legitimately Skipped Question</i>	20.3	37.4 <sup>[3]</sup>	39.8 <sup>[3]</sup>	19.9 <sup>[1,2]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
Yes	78.8	93.4 <sup>[2,3]</sup>	81.3 <sup>[1]</sup>	78.6 <sup>[1]</sup>
No	21.2	6.6 <sup>[2,3]</sup>	18.7 <sup>[1]</sup>	21.4 <sup>[1]</sup>

Yes

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
Some of the time	6.3	2.7 [2,3,+]	11.4 [1]	6.2 [1]
Never	3.9	1.0 [3,+]	** [3]	4.0 [1,2]
About half the time	1.8	0.7 [+]	1.6 [+]	1.8
Most of the time	12.8	4.6 [2,3]	12.6 [1]	12.9 [1]
Always	75.2	91.0 [2,3]	74.4 [1]	75.1 [1]
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	13.1	3.4 [2,3]	16.1 [1]	13.2 [1]
Situation doesn't require them	9.5	3.0 [3,+]	9.9	9.5 [1]
Firefighters think the devices do not always work reliably	0.3	0.6 [+]	0.9 [+]	0.3 [+]
Firefighters don't think they need them	4.6	0.8 [3,+]	2.6 [+]	4.6 [1]
Devices go off while firefighters are resting	3.7	1.9 [+]	2.6 [+]	3.7
<i>Legitimately Skipped Question</i>	75.5	91.6 [2,3]	75.4 [1]	75.4 [1]
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	99.2	98.6	97.3	99.3
	0.8	1.4 [+]	2.7 [+]	0.7
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	49.7	34.5 [2,3]	52.8 [1]	49.8 [1]
No	49.5	64.1 [2,3]	44.2 [1]	49.4 [1]
Yes <i>Legitimately Skipped Question</i>	0.8	1.4 [+]	3.0 [+]	0.8

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	4.8	1.4 <sup>[3,+]</sup>	2.1 <sup>[+]</sup>	4.8 <sup>[1]</sup>
Firefighters don't like using the equipment	0.3	**	**	0.3 <sup>[+]</sup>
Have never needed them (e.g., we don't do interior attacks)	0.7	** <sup>[3]</sup>	1.6 <sup>[+]</sup>	0.7 <sup>[1]</sup>
They cost too much, there is not enough money in the budget	31.8	20.4 <sup>[3]</sup>	30.1	31.9 <sup>[1]</sup>
We don't have enough equipment for all of our firefighters	24.6	19.4	25.8	24.6
Shared systems work fine for our needs	23.4	14.5 <sup>[2,3]</sup>	27.1 <sup>[1]</sup>	23.5 <sup>[1]</sup>
Other	5.0	4.7	9.0	5.0
<i>Legitimately Skipped Question</i>	50.3	67.5 <sup>[2,3]</sup>	47.3 <sup>[1]</sup>	50.3 <sup>[1]</sup>
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1.1	** <sup>[3]</sup>	** <sup>[3]</sup>	1.2 <sup>[1,2]</sup>
Some of the time	4.7	3.0 <sup>[+]</sup>	5.2 <sup>[+]</sup>	4.7
About half the time	2.7	** <sup>[3]</sup>	** <sup>[3]</sup>	2.7 <sup>[1,2]</sup>
Most of the time	24.5	15.8 <sup>[3]</sup>	20.3	24.6 <sup>[1]</sup>
Always	66.1	79.8 <sup>[3]</sup>	71.6	66.0 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	0.8	1.5 <sup>[+]</sup>	2.9 <sup>[+]</sup>	0.8
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	25.9	18.1 <sup>[3]</sup>	17.1 <sup>[3]</sup>	26.0 <sup>[1,2]</sup>
Firefighters do not trust that the SCBAs will work reliably	**	**	**	** <sup>[+]</sup>
Firefighters don't think they need them	10.3	6.6	11.4	10.4
Firefighters don't like sharing facepieces with others	1.0	** <sup>[3]</sup>	1.0 <sup>[+]</sup>	1.0 <sup>[1]</sup>
Firefighters are concerned that the SCBA may be or become contaminated	**	**	**	** <sup>[+]</sup>
Wearing SCBAs makes it more difficult to work	5.9	4.6	9.6	5.9
Firefighters don't have SCBAs to use	3.9	** <sup>[3]</sup>	<sup>[3]</sup>	4.0 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	67.8	80.6 <sup>[3]</sup>	74.5	67.6 <sup>[1]</sup>

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	43.0	59.7 <sup>[3]</sup>	54.7 <sup>[3]</sup>	42.7 <sup>[1,2]</sup>
Once a month or more	19.0	16.0	14.8	19.0
Several times a year	15.0	8.1 <sup>[3]</sup>	9.8	15.1 <sup>[1]</sup>
Once a year	16.4	13.3	13.4	16.5
Less than once a year	4.3	** <sup>[3]</sup>	2.8 <sup>[+]</sup>	4.3 <sup>[1]</sup>
Never. Maintenance has not been done on our SCBAs.	1.4	1.3 <sup>[+]</sup>	1.0 <sup>[+]</sup>	1.4
Does not apply. My department does not have SCBAs.	**	**	**	**
<i>Legitimately Skipped Question</i>	1.0	1.7 <sup>[+]</sup>	3.6 <sup>[+]</sup>	0.9
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	17.5	35.9 <sup>[3]</sup>	24.4	17.3 <sup>[1]</sup>
Zero	82.5	64.1 <sup>[3]</sup>	75.6	82.7 <sup>[1]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
CBRN SCBA devices are not needed in our department	20.9	8.9 <sup>[3]</sup>	17.6	21.1 <sup>[1]</sup>
We didn't know they were available	15.1	7.1 <sup>[3]</sup>	7.9 <sup>[3]</sup>	15.2 <sup>[1,2]</sup>
We don't have adequate technical information to purchase them	19.7	11.3 <sup>[3]</sup>	12.6 <sup>[3]</sup>	19.8 <sup>[1,2]</sup>
We don't have adequate funding to purchase them	60.3	46.5 <sup>[3]</sup>	54.0	60.4 <sup>[1]</sup>
Other	4.9	8.9	12.3 <sup>[3]</sup>	4.8 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	18.3	37.0 <sup>[3]</sup>	26.7	18.1 <sup>[1]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
Yes	77.4	88.8 <sup>[3]</sup>	85.9 <sup>[3]</sup>	77.3 <sup>[1,2]</sup>
No	22.6	11.2 <sup>[3]</sup>	14.1 <sup>[3]</sup>	22.7 <sup>[1,2]</sup>

(continued)



**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	2.8	1.3 <sup>[+]</sup>	5.2	2.8
On the emergency vehicles (or apparatus)	62.0	74.7 <sup>[3]</sup>	68.6	61.8 <sup>[1]</sup>
Both at the fire station(s) and on the vehicles (or apparatus)	10.4	11.2	9.2	10.4
<i>Legitimately Skipped Question</i>	24.9	12.8 <sup>[3]</sup>	17.1	25.0 <sup>[1]</sup>
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	13.9	23.9 <sup>[3]</sup>	17.5	13.8 <sup>[1]</sup>
Once a month or more	25.4	22.5	19.6	25.5
Several times a year	20.6	20.5	17.4	20.6
Once a year	22.3	24.5	36.0 <sup>[3]</sup>	22.2 <sup>[2]</sup>
Less frequently than once a year	7.4	3.2 <sup>[3,+]</sup>	3.8	7.5 <sup>[1]</sup>
Never. Maintenance on our AEDs has not been done.	10.4	5.5 <sup>[3]</sup>	5.6	10.5 <sup>[1]</sup>
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Always	1.6	1.1 <sup>[+]</sup>	** <sup>[3]</sup>	1.7 <sup>[2]</sup>
Some of the time	4.7	** <sup>[2,3]</sup>	5.8 <sup>[1]</sup>	4.7 <sup>[1]</sup>
Never	2.6	0.6 <sup>[3,+]</sup>	** <sup>[3]</sup>	2.7 <sup>[1,2]</sup>
About half the time	20.6	15.8 <sup>[2]</sup>	27.5 <sup>[1]</sup>	20.6
Most of the time	70.4	82.5 <sup>[2,3]</sup>	66.6 <sup>[1]</sup>	70.4 <sup>[1]</sup>

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Some of the time	18.0	10.5 <sup>[3]</sup>	16.2	18.1 <sup>[1]</sup>
Never	64.5	75.0 <sup>[3]</sup>	68.7	64.4 <sup>[1]</sup>
About half the time	10.3	9.3	9.0	10.3
Most of the time	5.4	5.2	5.7	5.4
	1.8	** <sup>[3]</sup>	0.4 <sup>[3,+]</sup>	1.9 <sup>[1,2]</sup>
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	48.6	52.0	49.5	48.6
Adequate	45.7	42.6	45.9	45.7
More than adequate	5.7	5.5	4.6	5.7
<b>42b. Training</b>				
Not adequate	39.1	40.1	41.4	39.1
Adequate	55.6	53.7	54.9	55.7
More than adequate	5.2	6.2	3.6	5.2
<b>42c. Personnel</b>				
Not adequate	51.5	56.7	55.9	51.4
Adequate	44.3	39.0	42.5	44.3
More than adequate	4.2	4.3	1.6 <sup>[3,+]</sup>	4.2 <sup>[2]</sup>

(continued)

Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	26.8	8.2 <sup>[3]</sup>	11.1 <sup>[3]</sup>	27.1 <sup>[1,2]</sup>
Several times per year	34.3	22.9 <sup>[2,3]</sup>	42.4 <sup>[1]</sup>	34.3 <sup>[1]</sup>
Never	33.2	52.0 <sup>[3]</sup>	40.5	33.0 <sup>[1]</sup>
Once a month or more	5.7	16.9 <sup>[2,3]</sup>	6.0 <sup>[1]</sup>	5.6 <sup>[1]</sup>
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	56.0	65.7 <sup>[3]</sup>	66.4 <sup>[3]</sup>	55.8 <sup>[1,2]</sup>
On the Internet	24.7	51.6 <sup>[2,3]</sup>	35.5 <sup>[1,3]</sup>	24.4 <sup>[1,2]</sup>
From colleagues in other departments	10.0	15.5	11.6	9.9
At conferences or other meetings	6.9	13.5 <sup>[3]</sup>	11.5	6.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	26.8	8.2 <sup>[3]</sup>	11.0 <sup>[3]</sup>	27.1 <sup>[1,2]</sup>
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	53.3	83.1 <sup>[2,3]</sup>	68.6 <sup>[1,3]</sup>	53.0 <sup>[1,2]</sup>
No	20.0	8.6 <sup>[2,3]</sup>	20.5 <sup>[1]</sup>	20.1 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	26.6	8.3 <sup>[3]</sup>	10.9 <sup>[3]</sup>	26.9 <sup>[1,2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
No	60.7	82.4 <sup>[3]</sup>	79.8 <sup>[3]</sup>	60.3 <sup>[1,2]</sup>
Yes	12.1	9.3	8.9	12.1
<i>Legitimately Skipped Question</i>	27.3	8.3 <sup>[3]</sup>	11.3 <sup>[3]</sup>	27.6 <sup>[1,2]</sup>

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	23.5	26.6	23.4	23.5
Training sessions	44.2	56.1 <sup>[3]</sup>	58.4 <sup>[3]</sup>	44.0 <sup>[1,2]</sup>
Provide copies of NIOSH reports to firefighters	16.2	33.8 <sup>[2,3]</sup>	21.0 <sup>[1]</sup>	16.0 <sup>[1]</sup>
Provide copies of NIOSH report summaries to firefighters	6.2	12.9 <sup>[3]</sup>	12.1	6.1 <sup>[1]</sup>
Provide summaries prepared by department to firefighters	1.8	5.6 <sup>[3]</sup>	3.1 <sup>[+]</sup>	1.8 <sup>[1]</sup>
Postings on bulletin boards	38.5	51.2 <sup>[3]</sup>	47.6	38.3 <sup>[1]</sup>
Post report on the department website	1.1	4.4 <sup>[3]</sup>	1.2 <sup>[+]</sup>	1.1 <sup>[1]</sup>
Send message to firefighters by email	5.3	14.6 <sup>[3]</sup>	11.9 <sup>[3]</sup>	5.2 <sup>[1,2]</sup>
Other	1.3	3.2	3.4 <sup>[+]</sup>	1.2
<i>Legitimately Skipped Question</i>	39.1	17.7 <sup>[3]</sup>	20.0 <sup>[3]</sup>	39.4 <sup>[1,2]</sup>
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	34.2	54.3 <sup>[3]</sup>	49.8 <sup>[3]</sup>	33.9 <sup>[1,2]</sup>
Yes	38.4	37.2	38.9	38.4
<i>Legitimately Skipped Question</i>	27.4	8.5 <sup>[3]</sup>	11.3 <sup>[3]</sup>	27.7 <sup>[1,2]</sup>

(continued)

Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	0.5	3.4 <sup>[2]</sup>	** <sup>[1,3]</sup>	0.5 <sup>[2]</sup>
Disagree	3.6	5.2	4.0	3.5
Neither Agree nor Disagree	18.7	17.1	25.2	18.6
Agree	45.6	61.3 <sup>[3]</sup>	55.1	45.4 <sup>[1]</sup>
Strongly Agree	3.7	4.6	4.1	3.7
<i>Legitimately Skipped Question</i>	28.0	8.4 <sup>[3]</sup>	11.5 <sup>[3]</sup>	28.3 <sup>[1,2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	0.4	1.9 <sup>[+]</sup>	** <sup>[3]</sup>	0.4 <sup>[2]</sup>
Disagree	1.7	1.4 <sup>[+]</sup>	3.0 <sup>[+]</sup>	1.7
Neither Agree nor Disagree	19.8	16.9	18.7	19.8
Agree	45.4	63.4 <sup>[3]</sup>	63.1 <sup>[3]</sup>	45.1 <sup>[1,2]</sup>
Strongly Agree	4.6	7.6	3.6	4.6
<i>Legitimately Skipped Question</i>	28.1	8.7 <sup>[3]</sup>	11.5 <sup>[3]</sup>	28.4 <sup>[1,2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	0.4	1.9 <sup>[+]</sup>	** <sup>[3]</sup>	0.4 <sup>[2]</sup>
Disagree	3.2	8.8 <sup>[2,3]</sup>	2.0 <sup>[1,+]</sup>	3.2 <sup>[1]</sup>
Neither Agree nor Disagree	26.6	20.3	31.1	26.6
Agree	37.9	53.2 <sup>[3]</sup>	49.9 <sup>[3]</sup>	37.7 <sup>[1,2]</sup>
Strongly Agree	3.8	7.1	5.5	3.8
<i>Legitimately Skipped Question</i>	28.0	8.6 <sup>[3]</sup>	11.5 <sup>[3]</sup>	28.3 <sup>[1,2]</sup>

(continued)

**Exhibit B-6a. Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	57.4	68.3 <sup>[3]</sup>	67.4 <sup>[3]</sup>	57.2 <sup>[1,2]</sup>
Respirator maintenance program guide	13.8	21.1 <sup>[3]</sup>	19.1	13.7 <sup>[1]</sup>
CDs of firefighter program materials	28.0	47.9 <sup>[2,3]</sup>	32.8 <sup>[1]</sup>	27.8 <sup>[1]</sup>
Alerts	31.7	48.4 <sup>[3]</sup>	41.7 <sup>[3]</sup>	31.5 <sup>[1,2]</sup>
Hazard IDs	16.6	22.9	19.6	16.5
Workplace Solutions	12.5	17.1	17.0	12.4
	0.8	** <sup>[3]</sup>	0.8 <sup>[+]</sup>	0.8 <sup>[1]</sup>
None. I have not seen any NIOSH materials.	25.2	10.2 <sup>[3]</sup>	14.0 <sup>[3]</sup>	25.4 <sup>[1,2]</sup>
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.3	0.7 <sup>[+]</sup>	2.0 <sup>[+]</sup>	1.3
Dissatisfied	0.2	0.7 <sup>[+]</sup>	**	0.2 <sup>[+]</sup>
Neither satisfied nor dissatisfied	21.2	7.9 <sup>[2,3]</sup>	22.5 <sup>[1]</sup>	21.3 <sup>[1]</sup>
Satisfied	47.1	70.0 <sup>[2,3]</sup>	54.6 <sup>[1]</sup>	46.9 <sup>[1]</sup>
Very satisfied	5.2	10.4	7.5	5.1
<i>Legitimately Skipped Question</i>	24.9	10.4 <sup>[3]</sup>	13.3 <sup>[3]</sup>	25.2 <sup>[1,2]</sup>
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	59.4	24.2 <sup>[2,3]</sup>	44.7 <sup>[1,3]</sup>	59.8 <sup>[1,2]</sup>
No Yes, longer than one year ago	34.5	66.6 <sup>[2,3]</sup>	46.1 <sup>[1,3]</sup>	34.2 <sup>[1,2]</sup>
	6.1	9.2	9.2	6.0

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>1. Does your department have a Safety Officer?</b>				
Yes	(67.5, 72.9)	(70.9, 84.7)	(63.2, 81.4)	(67.3, 72.9)
No	(27.1, 32.5)	(15.3, 29.1)	(18.6, 36.8)	(27.1, 32.7)
<b>2. Does your department have a Training Officer?</b>				
Yes	(86.4, 90.3)	(88.4, 96.8)	(81.8, 95.2)	(86.3, 90.3)
	(9.7, 13.6)	(3.2, 11.6)	(4.8, 18.2)	(9.7, 13.7)
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
No				
Incident Command Systems	(81.3, 85.8)	(85.8, 95.6)	(86.5, 96.2)	(81.1, 85.7)
Maintenance of SCBAs	(66.9, 72.3)	(73.0, 86.8)	(58.4, 77.4)	(66.7, 72.3)
Motor vehicle safety	(76.3, 81.2)	(84.1, 94.2)	(73.8, 89.1)	(76.1, 81.1)
Participation in a personal physical fitness program	(9.6, 12.7)	(18.0, 32.1)	(11.8, 26.7)	(9.4, 12.6)
Participation in regular health screenings for cardiovascular disease (CVD)	(14.9, 18.9)	(24.7, 40.3)	(17.0, 34.1)	(14.6, 18.8)
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	(37.7, 43.2)	(55.3, 71.8)	(45.3, 65.2)	(37.4, 42.9)
Use of Personal Alert Safety System (PASS) devices	(72.7, 77.9)	(75.7, 88.7)	(61.9, 79.8)	(72.6, 77.9)
Use of personal protective equipment and protective clothing	(87.1, 90.9)	(91.2, 98.5)	(82.4, 94.8)	(87.0, 90.8)
Use of radio communications	(82.5, 86.8)	(84.9, 95.1)	(82.2, 93.3)	(82.4, 86.7)
Other	(7.2, 10.5)	(5.6, 15.7)	(5.1, 16.9)	(7.2, 10.5)
Does not apply. Our fire department does not use SOPs/SOGs.	(3.8, 6.5)	(**, **)	(0.3, 4.0)	(3.9, 6.6)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	(0.6, 2.0)	(0.5, 7.4)	(1.1, 10.3)	(0.6, 2.0)
Optional Training	(14.6, 19.1)	(4.1, 13.8)	(12.9, 30.1)	(14.6, 19.2)
Required Training	(80.4, 85.0)	(83.8, 94.6)	(66.1, 84.2)	(80.4, 85.0)
<b>4b. Driving safety</b>				
No Training	(2.9, 5.3)	(0.7, 6.8)	(1.3, 10.2)	(2.9, 5.4)
Optional Training	(16.3, 21.1)	(2.9, 11.3)	(9.8, 25.0)	(16.4, 21.2)
Required Training	(75.1, 80.1)	(86.0, 95.5)	(70.9, 87.2)	(74.9, 80.0)
<b>4c. Incident Command systems</b>				
No Training	(2.0, 4.1)	(0.4, 5.7)	(1.1, 9.5)	(2.0, 4.2)
Optional Training	(24.8, 30.2)	(7.5, 19.5)	(15.5, 32.9)	(24.9, 30.4)
Required Training	(67.1, 72.6)	(78.9, 91.4)	(63.7, 81.7)	(66.9, 72.4)
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	(5.2, 8.3)	(2.2, 12.1)	(2.7, 12.9)	(5.2, 8.3)
Optional Training	(30.8, 36.5)	(15.0, 29.4)	(24.3, 42.8)	(30.9, 36.6)
Required Training	(57.3, 63.1)	(64.8, 80.5)	(51.0, 70.2)	(57.2, 63.1)
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	(25.8, 31.3)	(5.6, 16.8)	(11.0, 27.2)	(26.0, 31.6)
Optional Training	(33.3, 39.2)	(22.1, 38.4)	(36.3, 56.3)	(33.2, 39.1)
Required Training	(32.8, 38.3)	(51.6, 68.8)	(27.3, 46.0)	(32.6, 38.2)

(continued)



**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	(0.9, 2.4)	(0.1, 5.3)	(**, **)	(0.9, 2.4)
Optional Training	(8.2, 11.8)	(3.3, 12.2)	(6.7, 20.1)	(8.2, 11.9)
Required Training	(86.9, 90.7)	(86.8, 96.1)	(80.6, 93.8)	(86.8, 90.7)
<b>4g. Use of radio communication devices</b>				
No Training	(1.9, 3.8)	(0.6, 5.9)	(0.1, 2.7)	(1.9, 3.9)
Optional Training	(19.0, 23.9)	(8.5, 20.4)	(14.1, 30.4)	(19.0, 24.0)
Required Training	(73.6, 78.6)	(77.4, 89.9)	(69.2, 85.5)	(73.4, 78.6)
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	(82.6, 86.9)	(85.4, 94.9)	(79.4, 93.4)	(82.5, 86.9)
Other officers within our department	(80.4, 85.0)	(85.6, 95.5)	(81.6, 93.8)	(80.2, 84.9)
State fire training agency	(74.8, 79.8)	(74.8, 87.8)	(76.7, 91.1)	(74.7, 79.7)
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	(18.9, 23.1)	(34.9, 51.4)	(24.0, 42.1)	(18.6, 22.9)
Conferences or regional meetings	(48.8, 54.6)	(58.0, 74.1)	(53.5, 72.7)	(48.5, 54.4)
Other	(22.7, 27.8)	(18.0, 33.1)	(19.1, 36.6)	(22.7, 27.8)
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	(52.4, 58.2)	(51.6, 67.8)	(42.9, 62.4)	(52.4, 58.3)
Scuba diving	(6.2, 9.1)	(9.5, 21.4)	(3.2, 13.9)	(6.1, 9.1)
Swift water rescue	(9.6, 13.0)	(22.7, 38.0)	(5.6, 16.4)	(9.5, 12.9)
Wildland fire fighting	(44.1, 49.9)	(32.4, 48.7)	(32.0, 51.4)	(44.2, 50.1)
HAZMAT	(63.8, 69.4)	(75.0, 88.3)	(69.4, 85.2)	(63.6, 69.2)
Other	(28.5, 33.9)	(28.8, 45.0)	(20.6, 37.8)	(28.5, 34.0)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	(6.8, 10.2)	(0.8, 7.8)	(0.8, 7.9)	(6.8, 10.3)
Not very familiar	(21.8, 27.0)	(3.7, 12.1)	(11.6, 27.2)	(22.0, 27.2)
Somewhat familiar	(55.2, 61.0)	(40.0, 57.1)	(50.7, 69.8)	(55.2, 61.1)
Very familiar	(7.8, 10.9)	(34.0, 50.7)	(12.3, 27.3)	(7.5, 10.6)
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	(18.4, 23.3)	(3.5, 12.6)	(4.9, 17.5)	(18.6, 23.6)
Not very familiar	(30.8, 36.4)	(7.1, 18.7)	(16.0, 31.8)	(31.0, 36.7)
Somewhat familiar	(35.1, 40.7)	(30.8, 47.3)	(41.2, 60.7)	(34.9, 40.6)
Very familiar	(6.5, 9.4)	(34.8, 51.4)	(10.4, 25.3)	(6.1, 9.1)
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	(64.9, 70.5)	(77.8, 89.8)	(64.0, 82.0)	(64.7, 70.3)
National conference presentations	(2.8, 4.7)	(5.4, 14.9)	(3.3, 12.2)	(2.8, 4.6)
State-level conference presentations	(9.7, 13.5)	(10.1, 21.9)	(5.1, 15.7)	(9.7, 13.5)
Other firefighters or departments	(20.5, 25.5)	(18.0, 32.5)	(18.4, 35.8)	(20.4, 25.5)
At seminars or other training opportunities (not conferences)	(14.3, 18.6)	(16.7, 30.8)	(18.3, 35.3)	(14.2, 18.5)
Trade publications (such as Firehouse and Fire Engineering)	(44.3, 50.1)	(52.1, 68.7)	(48.0, 67.2)	(44.0, 49.9)
NIOSH website	(22.0, 26.7)	(48.0, 65.0)	(25.1, 43.3)	(21.6, 26.4)
Links from other websites (such as NFPA and Firehouse)	(25.7, 30.9)	(39.2, 56.0)	(26.4, 44.9)	(25.4, 30.7)
Media reports—newspaper, television, radio	(12.9, 17.1)	(13.3, 26.8)	(11.0, 26.2)	(12.8, 17.1)
Other	(0.7, 1.9)	(0.6, 5.9)	(2.1, 12.0)	(0.6, 1.8)
Does not apply. We have not received information about NIOSH recommendations.	(9.3, 13.2)	(1.1, 7.5)	(1.2, 12.1)	(9.4, 13.4)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	(37.3, 43.1)	(59.4, 75.5)	(46.2, 65.9)	(36.9, 42.8)
Developed new SOPs/SOGs	(23.8, 29.0)	(41.5, 58.8)	(28.3, 47.5)	(23.5, 28.8)
Made changes to SOPs/SOGs	(32.2, 37.7)	(57.5, 74.0)	(41.2, 61.3)	(31.8, 37.4)
Justified current budget/staffing	(4.0, 6.3)	(10.1, 22.5)	(4.8, 16.6)	(3.8, 6.3)
Made new budget/staffing requests	(4.4, 6.8)	(14.3, 27.7)	(6.4, 19.7)	(4.2, 6.7)
Justified grant applications	(13.5, 17.8)	(22.7, 38.7)	(14.6, 31.8)	(13.3, 17.6)
Does not apply. We have not used NIOSH recommendations.	(27.3, 32.9)	(5.8, 16.6)	(11.1, 25.5)	(27.6, 33.3)
<i>Legitimately Skipped Question</i>	(9.8, 13.9)	(1.1, 7.8)	(1.3, 12.8)	(9.9, 14.1)
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	(26.7, 32.1)	(41.3, 58.5)	(36.0, 56.0)	(26.3, 31.8)
Personal protective equipment and clothing	(38.7, 44.5)	(51.0, 68.0)	(41.0, 60.9)	(38.4, 44.4)
SCBA	(37.2, 43.0)	(47.8, 65.1)	(40.2, 59.9)	(36.9, 42.8)
PASS systems	(29.9, 35.5)	(37.6, 54.8)	(30.1, 49.5)	(29.7, 35.3)
Incident Command systems	(29.4, 34.9)	(37.7, 54.8)	(39.9, 60.0)	(29.1, 34.7)
Radio communications	(20.7, 25.6)	(32.2, 49.1)	(29.6, 49.2)	(20.3, 25.4)
Physical fitness and cardiovascular disease (CVD)	(7.1, 10.2)	(21.9, 36.9)	(10.0, 25.6)	(6.9, 10.0)
Building code compliance (e.g., warning against the use of wooden trusses)	(5.6, 8.5)	(10.1, 22.3)	(3.4, 15.5)	(5.5, 8.5)
Other	(1.6, 3.4)	(3.4, 12.2)	(0.6, 7.4)	(1.5, 3.4)
Does not apply. We have not used NIOSH recommendations for training purposes.	(1.3, 2.9)	(0.7, 7.7)	(2.9, 12.8)	(1.2, 2.9)
<i>Legitimately Skipped Question</i>	(38.9, 44.8)	(8.2, 20.2)	(14.4, 31.0)	(39.3, 45.3)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
No	(76.4, 80.4)	(51.2, 67.5)	(62.2, 79.2)	(76.5, 80.6)
Yes, it's required	(5.9, 8.3)	(12.9, 25.8)	(6.9, 19.7)	(5.7, 8.2)
Yes, it's optional	(12.8, 16.4)	(15.8, 29.4)	(10.9, 24.6)	(12.7, 16.4)
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	(12.7, 16.6)	(9.0, 20.6)	(9.9, 23.7)	(12.7, 16.6)
Less frequently than once a year	(5.8, 8.6)	(6.0, 16.2)	(4.7, 15.4)	(5.8, 8.6)
One time a year	(15.2, 19.3)	(25.2, 41.0)	(16.7, 34.2)	(15.0, 19.2)
More than one time a year	(0.1, 0.7)	(**, **)	(**, **)	(0.1, 0.7)
Does not apply. Firefighters are not required to receive CVD screenings	(58.3, 63.5)	(35.3, 52.3)	(41.5, 61.1)	(58.4, 63.8)
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
	(5.1, 8.0)	(0.7, 6.7)	(2.3, 11.5)	(5.1, 8.1)
Yes, they receive training required by the department	(81.7, 86.0)	(86.3, 95.6)	(76.5, 90.3)	(81.6, 86.0)
No Yes, they receive training required by the state	(23.3, 28.3)	(21.3, 36.5)	(13.6, 29.7)	(23.3, 28.4)
Yes, they receive optional training	(11.8, 15.9)	(4.6, 13.8)	(9.2, 23.5)	(11.8, 16.0)
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	(12.2, 16.4)	(9.1, 21.7)	(7.8, 21.1)	(12.2, 16.4)
Once every year	(37.5, 43.2)	(35.5, 52.5)	(27.6, 46.4)	(37.5, 43.3)
Less frequently than once a year	(22.3, 27.3)	(19.9, 34.8)	(20.6, 38.4)	(22.2, 27.3)
Does not apply. Firefighters are not required to receive continuing driver training.	(18.4, 23.2)	(9.9, 22.6)	(14.5, 31.1)	(18.4, 23.3)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
Yes	(81.9, 86.3)	(86.2, 95.7)	(79.6, 93.3)	(81.8, 86.2)
No	(13.7, 18.1)	(4.3, 13.8)	(6.7, 20.4)	(13.8, 18.2)
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	(5.5, 8.5)	(5.3, 15.1)	(1.4, 11.1)	(5.5, 8.5)
Disagree	(15.8, 20.4)	(14.5, 28.2)	(8.5, 21.4)	(15.8, 20.5)
Neither agree nor disagree	(28.2, 33.7)	(15.3, 29.7)	(25.9, 45.2)	(28.1, 33.7)
Agree	(29.5, 34.9)	(29.2, 45.5)	(16.5, 33.2)	(29.5, 35.0)
Strongly agree	(10.4, 14.2)	(7.4, 18.0)	(15.9, 33.2)	(10.3, 14.1)
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Never	(4.2, 6.9)	(1.5, 9.0)	(0.2, 7.6)	(4.2, 7.0)
Some of the time	(20.3, 25.3)	(13.1, 26.4)	(23.4, 41.8)	(20.2, 25.3)
About half the time	(14.8, 19.4)	(8.5, 20.4)	(9.1, 23.4)	(14.8, 19.4)
Most of the time	(35.6, 41.3)	(30.5, 46.9)	(23.0, 41.4)	(35.6, 41.4)
Always	(14.6, 18.7)	(18.9, 33.7)	(13.9, 29.3)	(14.4, 18.6)
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Never	(1.5, 3.5)	(**, **)	(0.4, 7.8)	(1.5, 3.6)
Rarely	(5.4, 8.5)	(1.5, 8.5)	(1.5, 9.1)	(5.4, 8.6)
About half the time	(5.3, 8.4)	(0.8, 8.1)	(0.3, 4.1)	(5.4, 8.5)
Most of the time	(25.0, 30.4)	(12.0, 25.1)	(12.2, 28.3)	(25.2, 30.6)
Always	(53.7, 59.4)	(68.0, 82.7)	(64.7, 82.1)	(53.3, 59.2)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	(20.1, 25.1)	(4.4, 14.1)	(5.7, 18.1)	(20.3, 25.4)
Not enough firefighters available at the scene of the fire	(18.8, 23.7)	(6.4, 17.6)	(8.2, 22.1)	(18.9, 23.9)
Other	(5.0, 7.8)	(3.1, 12.1)	(2.1, 13.4)	(4.9, 7.9)
Does not apply. My department always assigns an Incident Commander for structure fires.	(2.7, 4.9)	(1.1, 7.5)	(0.3, 5.1)	(2.7, 5.0)
<i>Legitimately Skipped Question</i>	(53.7, 59.5)	(68.6, 83.2)	(66.1, 83.3)	(53.4, 59.2)
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	(89.1, 92.6)	(85.0, 94.8)	(84.5, 95.9)	(89.0, 92.6)
Develop and coordinate the fire attack strategy	(91.4, 94.5)	(90.2, 98.0)	(85.3, 96.4)	(91.3, 94.5)
Develop and initiate a risk management plan	(49.4, 55.3)	(56.8, 73.1)	(53.2, 72.4)	(49.1, 55.1)
Document all assessments, plans and events related to the fire	(36.0, 41.7)	(38.7, 55.7)	(30.9, 50.1)	(35.8, 41.7)
Ensure that at least four (4) firefighters are on the scene before entering the building	(65.7, 71.3)	(65.9, 81.1)	(57.0, 75.6)	(65.6, 71.3)
Establish a collapse zone around the building	(46.1, 52.0)	(47.2, 64.2)	(43.7, 63.4)	(46.0, 52.0)
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	(45.7, 51.3)	(60.5, 76.5)	(49.8, 69.4)	(45.3, 51.1)
Identify and implement a communication strategy	(61.9, 67.5)	(56.7, 72.9)	(54.9, 73.8)	(61.8, 67.6)
Monitor location of all firefighters at the scene	(73.6, 78.7)	(76.5, 89.3)	(73.7, 88.5)	(73.4, 78.6)
Other	(7.6, 10.9)	(5.7, 16.9)	(6.5, 19.4)	(7.5, 10.9)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	(11.4, 15.5)	(2.4, 10.2)	(3.9, 17.1)	(11.5, 15.6)
Some of the time	(24.0, 29.2)	(21.8, 36.6)	(20.2, 37.5)	(23.9, 29.2)
About half the time	(6.6, 9.9)	(7.1, 19.2)	(3.3, 14.3)	(6.6, 9.9)
Most of the time	(27.2, 32.5)	(18.8, 33.5)	(18.7, 36.8)	(27.2, 32.6)
Always	(19.9, 24.9)	(22.0, 37.3)	(21.6, 39.3)	(19.8, 24.8)
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	(29.5, 35.1)	(14.5, 28.0)	(10.1, 24.2)	(29.7, 35.4)
Not enough firefighters are available at the scene of the fire	(48.7, 54.6)	(34.8, 51.6)	(41.7, 61.4)	(48.7, 54.7)
Other	(11.3, 15.1)	(14.1, 27.6)	(10.3, 24.7)	(11.2, 15.1)
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	(1.4, 3.0)	(1.1, 7.6)	(0.1, 5.4)	(1.4, 3.1)
<i>Legitimately Skipped Question</i>	(20.3, 25.2)	(22.0, 37.3)	(21.9, 39.8)	(20.1, 25.2)
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	(26.7, 32.1)	(8.4, 20.7)	(11.3, 27.4)	(26.9, 32.4)
Some of the time	(19.5, 24.3)	(8.9, 20.8)	(11.7, 27.3)	(19.5, 24.5)
About half the time	(5.2, 8.0)	(4.8, 14.5)	(1.8, 12.2)	(5.2, 8.1)
Most of the time	(20.2, 25.0)	(20.4, 36.0)	(13.0, 28.1)	(20.2, 25.1)
Always	(17.8, 22.1)	(29.2, 45.4)	(30.3, 49.7)	(17.4, 21.8)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	(7.8, 11.2)	(4.1, 13.8)	(2.8, 11.8)	(7.8, 11.3)
When there are enough firefighters on and at the scene of the fire	(29.6, 35.1)	(21.6, 37.1)	(20.2, 37.8)	(29.6, 35.2)
Whenever firefighters enter a burning building	(23.9, 29.1)	(21.0, 36.7)	(12.8, 28.4)	(23.9, 29.2)
Other	(3.8, 6.3)	(3.0, 11.4)	(1.2, 8.2)	(3.8, 6.3)
<i>Legitimately Skipped Question</i>	(46.4, 52.2)	(42.2, 59.3)	(48.0, 67.5)	(46.2, 52.2)
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	(32.1, 37.8)	(18.6, 33.6)	(16.0, 32.9)	(32.2, 38.1)
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	(7.2, 10.8)	(0.7, 6.8)	(1.4, 9.9)	(7.3, 10.9)
We don't have enough firefighters available at the scene of the fire	(50.6, 56.5)	(33.3, 50.3)	(29.4, 48.5)	(50.8, 56.7)
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	(18.3, 23.2)	(6.4, 17.7)	(9.0, 24.7)	(18.4, 23.4)
We have never established an RIT/RIC	(15.5, 20.1)	(3.6, 13.1)	(6.2, 20.5)	(15.6, 20.3)
We use other fire departments in the area for RITs/RICs	(26.6, 32.0)	(15.4, 29.8)	(12.7, 28.2)	(26.7, 32.3)
We use other safety practices and so we don't need them	(3.1, 5.7)	(0.6, 5.6)	(0.2, 7.7)	(3.1, 5.8)
Other	(3.1, 5.4)	(4.2, 14.2)	(2.5, 12.5)	(3.0, 5.3)
<i>Legitimately Skipped Question</i>	(18.1, 22.6)	(29.6, 46.0)	(30.5, 49.9)	(17.8, 22.3)
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
Yes	(76.2, 81.1)	(87.3, 96.7)	(71.3, 88.4)	(76.0, 81.0)
No	(18.9, 23.8)	(3.3, 12.7)	(11.6, 28.7)	(19.0, 24.0)

(continued)



**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
Never	(4.9, 8.0)	(0.9, 8.1)	(5.8, 20.9)	(4.8, 8.0)
Some of the time	(2.9, 5.3)	(0.1, 6.7)	(**, **)	(2.9, 5.4)
About half the time	(1.2, 2.8)	(0.1, 4.8)	(0.4, 6.3)	(1.2, 2.9)
Most of the time	(10.9, 15.0)	(2.2, 9.5)	(7.1, 21.5)	(11.0, 15.1)
Always	(72.5, 77.6)	(84.7, 94.9)	(64.0, 82.6)	(72.4, 77.6)
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	(11.2, 15.4)	(1.3, 8.8)	(9.4, 26.1)	(11.2, 15.4)
Situation doesn't require them	(7.9, 11.4)	(1.1, 7.9)	(5.1, 18.2)	(7.9, 11.5)
Firefighters think the devices do not always work reliably	(0.1, 1.0)	(0.1, 4.4)	(0.1, 6.3)	(0.1, 1.0)
Firefighters don't think they need them	(3.5, 5.9)	(0.1, 5.4)	(0.6, 11.3)	(3.5, 6.0)
Devices go off while firefighters are resting	(2.7, 4.9)	(0.6, 5.7)	(0.6, 11.3)	(2.7, 4.9)
<i>Legitimately Skipped Question</i>	(72.9, 78.0)	(85.3, 95.3)	(65.0, 83.5)	(72.7, 77.9)
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
Yes	(98.4, 99.6)	(94.5, 99.7)	(90.1, 99.3)	(98.4, 99.6)
	(0.4, 1.6)	(0.3, 5.5)	(0.7, 9.9)	(0.4, 1.6)
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No				
Yes	(46.7, 52.7)	(26.8, 43.1)	(42.3, 63.2)	(46.8, 52.8)
No	(46.5, 52.5)	(55.5, 71.8)	(34.1, 54.7)	(46.4, 52.5)
<i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.4, 5.7)	(0.8, 11.1)	(0.4, 1.7)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	(3.5, 6.3)	(0.4, 5.6)	(0.5, 8.3)	(3.6, 6.4)
Firefighters don't like using the equipment	(0.1, 0.9)	(**, **)	(**, **)	(0.1, 0.9)
Have never needed them (e.g., we don't do interior attacks)	(0.3, 1.5)	(**, **)	(0.2, 10.3)	(0.3, 1.5)
They cost too much, there is not enough money in the budget	(29.0, 34.7)	(14.2, 28.3)	(21.5, 40.3)	(29.0, 34.8)
We don't have enough equipment for all of our firefighters	(22.0, 27.3)	(13.2, 27.6)	(17.6, 36.3)	(22.0, 27.4)
Shared systems work fine for our needs	(20.9, 26.2)	(9.3, 21.7)	(18.5, 37.9)	(20.9, 26.2)
Other	(3.8, 6.5)	(2.2, 9.6)	(4.8, 16.2)	(3.8, 6.5)
<i>Legitimately Skipped Question</i>	(47.4, 53.3)	(58.9, 75.1)	(37.0, 57.9)	(47.2, 53.3)
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	(0.6, 2.2)	(**, **)	(**, **)	(0.6, 2.2)
Some of the time	(3.6, 6.2)	(0.9, 8.9)	(1.8, 14.0)	(3.5, 6.3)
About half the time	(1.8, 3.9)	(**, **)	(**, **)	(1.9, 3.9)
Most of the time	(22.0, 27.2)	(10.5, 23.1)	(13.4, 29.6)	(22.0, 27.4)
Always	(63.3, 68.9)	(71.9, 85.9)	(61.3, 80.1)	(63.1, 68.8)
<i>Legitimately Skipped Question</i>	(0.4, 1.6)	(0.4, 5.7)	(0.7, 10.6)	(0.4, 1.6)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	(23.3, 28.6)	(12.3, 25.8)	(10.7, 26.4)	(23.4, 28.8)
Firefighters do not trust that the SCBAs will work reliably	(**, **)	(**, **)	(**, **)	(**, **)
Firefighters don't think they need them	(8.6, 12.3)	(3.4, 12.3)	(6.4, 19.5)	(8.6, 12.4)
Firefighters don't like sharing facepieces with others	(0.5, 1.8)	(**, **)	(0.1, 6.9)	(0.5, 1.8)
Firefighters are concerned that the SCBA may be or become contaminated	(**, **)	(**, **)	(**, **)	(**, **)
Wearing SCBAs makes it more difficult to work	(4.6, 7.5)	(2.0, 10.1)	(4.9, 17.8)	(4.6, 7.5)
Firefighters don't have SCBAs to use	(2.8, 5.4)	(**, **)	(**, **)	(2.9, 5.4)
<i>Legitimately Skipped Question</i>	(64.9, 70.5)	(72.8, 86.6)	(64.4, 82.5)	(64.7, 70.4)
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	(39.7, 46.3)	(50.3, 68.4)	(43.2, 65.6)	(39.4, 46.1)
Once a month or more	(16.5, 21.7)	(10.1, 24.3)	(8.6, 24.2)	(16.5, 21.8)
Several times a year	(12.8, 17.5)	(4.5, 14.1)	(4.8, 19.0)	(12.8, 17.7)
Once a year	(14.1, 19.1)	(8.1, 20.9)	(7.3, 23.3)	(14.1, 19.2)
Less than once a year	(3.1, 5.9)	(**, **)	(0.8, 9.5)	(3.1, 6.0)
Never. Maintenance has not been done on our SCBAs.	(0.8, 2.5)	(0.2, 8.7)	(0.1, 6.8)	(0.8, 2.5)
Does not apply. My department does not have SCBAs.	(**, **)	(**, **)	(**, **)	(**, **)
<i>Legitimately Skipped Question</i>	(0.5, 2.0)	(0.4, 6.5)	(0.9, 13.2)	(0.4, 2.0)
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	(15.5, 19.8)	(28.1, 44.5)	(17.0, 33.7)	(15.3, 19.6)
Zero	(80.2, 84.5)	(55.5, 71.9)	(66.3, 83.0)	(80.4, 84.7)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
CBRN SCBA devices are not needed in our department	(18.5, 23.6)	(4.9, 15.5)	(10.6, 27.6)	(18.6, 23.8)
We didn't know they were available	(12.9, 17.5)	(3.5, 13.7)	(3.9, 15.3)	(13.0, 17.7)
We don't have adequate technical information to purchase them	(17.3, 22.3)	(6.6, 18.8)	(7.3, 20.8)	(17.4, 22.5)
We don't have adequate funding to purchase them	(57.2, 63.2)	(37.8, 55.4)	(43.4, 64.3)	(57.3, 63.4)
Other	(3.7, 6.4)	(5.1, 15.3)	(6.9, 21.0)	(3.6, 6.3)
<i>Legitimately Skipped Question</i>	(16.2, 20.6)	(29.0, 45.8)	(18.6, 36.7)	(15.9, 20.4)
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
Yes	(74.8, 79.9)	(81.7, 93.3)	(77.0, 91.7)	(74.6, 79.7)
No	(20.1, 25.2)	(6.7, 18.3)	(8.3, 23.0)	(20.3, 25.4)
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	(1.9, 4.1)	(0.2, 8.5)	(1.9, 13.3)	(1.9, 4.1)
On the emergency vehicles (or apparatus)	(58.9, 64.9)	(65.8, 81.9)	(57.7, 77.7)	(58.7, 64.8)
Both at the fire station(s) and on the vehicles (or apparatus)	(8.7, 12.3)	(6.8, 18.0)	(4.9, 16.6)	(8.7, 12.4)
<i>Legitimately Skipped Question</i>	(22.2, 27.7)	(7.7, 20.7)	(10.1, 27.4)	(22.4, 27.9)
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	(11.7, 16.4)	(16.9, 32.7)	(10.6, 27.4)	(11.6, 16.3)
Once a month or more	(22.6, 28.5)	(15.5, 31.4)	(12.7, 29.0)	(22.6, 28.7)
Several times a year	(18.0, 23.4)	(13.8, 29.2)	(10.6, 27.4)	(17.9, 23.5)
Once a year	(19.6, 25.3)	(17.1, 33.8)	(26.2, 47.2)	(19.4, 25.2)
Less frequently than once a year	(5.8, 9.5)	(1.2, 8.3)	(1.5, 9.6)	(5.8, 9.6)
Never. Maintenance on our AEDs has not been done.	(8.4, 12.8)	(2.5, 11.7)	(2.2, 13.5)	(8.4, 12.9)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Never	(1.0, 2.6)	(0.2, 7.4)	(**, **)	(1.0, 2.7)
Some of the time	(3.6, 6.1)	(**, **)	(2.6, 12.3)	(3.6, 6.2)
About half the time	(1.8, 3.8)	(0.1, 4.4)	(**, **)	(1.8, 3.9)
Most of the time	(18.3, 23.1)	(10.3, 23.4)	(19.4, 37.5)	(18.2, 23.1)
Always	(67.7, 73.0)	(74.6, 88.3)	(56.5, 75.4)	(67.6, 73.0)
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Never	(15.9, 20.4)	(6.5, 16.7)	(10.1, 24.9)	(15.9, 20.5)
Some of the time	(61.6, 67.3)	(67.0, 81.6)	(58.8, 77.1)	(61.5, 67.2)
About half the time	(8.6, 12.2)	(5.5, 15.2)	(4.5, 17.1)	(8.6, 12.3)
Most of the time	(4.2, 6.9)	(2.3, 11.3)	(2.7, 11.9)	(4.1, 6.9)
Always	(1.1, 2.9)	(**, **)	(0.1, 2.9)	(1.2, 2.9)
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	(45.7, 51.6)	(43.5, 60.4)	(39.8, 59.2)	(45.6, 51.6)
Adequate	(42.8, 48.6)	(34.4, 51.1)	(36.5, 55.7)	(42.7, 48.7)
More than adequate	(4.5, 7.2)	(2.7, 10.8)	(1.8, 11.3)	(4.5, 7.2)
<b>42b. Training</b>				
Not adequate	(36.3, 42.0)	(32.1, 48.7)	(32.1, 51.4)	(36.2, 42.1)
Adequate	(52.7, 58.6)	(45.2, 62.0)	(45.1, 64.5)	(52.7, 58.6)
More than adequate	(4.0, 6.8)	(3.2, 11.8)	(1.6, 7.9)	(4.0, 6.8)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>42c. Personnel</b>				
Not adequate	(48.5, 54.5)	(48.0, 64.9)	(45.9, 65.5)	(48.4, 54.5)
Adequate	(41.3, 47.3)	(31.0, 47.7)	(33.0, 52.6)	(41.3, 47.4)
More than adequate	(3.1, 5.7)	(1.9, 9.6)	(0.5, 5.1)	(3.1, 5.7)
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
Never	(24.2, 29.5)	(4.6, 14.4)	(6.4, 18.5)	(24.5, 29.9)
One or two times per year	(31.6, 37.2)	(16.7, 30.5)	(33.0, 52.4)	(31.5, 37.2)
Several times per year	(30.5, 35.9)	(43.6, 60.3)	(31.1, 50.7)	(30.3, 35.8)
Once a month or more	(4.5, 7.2)	(11.6, 24.0)	(2.7, 13.0)	(4.4, 7.2)
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	(53.1, 58.9)	(57.3, 73.2)	(56.6, 75.0)	(52.8, 58.8)
On the Internet	(22.4, 27.1)	(43.1, 60.0)	(26.6, 45.6)	(22.0, 26.9)
From colleagues in other departments	(8.3, 11.8)	(10.3, 22.6)	(6.5, 20.0)	(8.2, 11.8)
At conferences or other meetings	(5.7, 8.5)	(8.7, 20.2)	(6.6, 19.2)	(5.6, 8.4)
<i>Legitimately Skipped Question</i>	(24.2, 29.5)	(4.6, 14.4)	(6.4, 18.3)	(24.5, 29.9)
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	(50.4, 56.2)	(75.4, 88.8)	(59.0, 76.8)	(50.0, 55.9)
No	(17.8, 22.5)	(4.6, 15.4)	(13.7, 29.6)	(17.8, 22.6)
<i>Legitimately Skipped Question</i>	(24.1, 29.4)	(4.6, 14.5)	(6.3, 18.2)	(24.3, 29.7)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	(57.7, 63.5)	(74.9, 88.1)	(71.0, 86.4)	(57.3, 63.2)
No	(10.2, 14.1)	(5.4, 15.5)	(4.7, 16.1)	(10.3, 14.2)
<i>Legitimately Skipped Question</i>	(24.7, 30.0)	(4.6, 14.5)	(6.5, 18.8)	(24.9, 30.4)
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	(21.1, 26.1)	(19.7, 34.9)	(15.9, 33.1)	(21.0, 26.2)
Training sessions	(41.3, 47.2)	(47.5, 64.3)	(48.4, 67.7)	(41.0, 47.0)
Provide copies of NIOSH reports to firefighters	(14.2, 18.3)	(26.2, 42.3)	(14.1, 30.1)	(14.0, 18.2)
Provide copies of NIOSH report summaries to firefighters	(5.0, 7.7)	(8.1, 20.1)	(6.9, 20.5)	(4.9, 7.6)
Provide summaries prepared by department to firefighters	(1.2, 2.7)	(2.8, 10.9)	(0.8, 10.8)	(1.1, 2.7)
Postings on bulletin boards	(35.6, 41.3)	(42.7, 59.7)	(37.8, 57.6)	(35.4, 41.2)
Post report on the department website	(0.7, 1.8)	(2.1, 9.1)	(0.2, 8.2)	(0.7, 1.8)
Send message to firefighters by email	(4.3, 6.5)	(9.7, 21.4)	(6.8, 20.1)	(4.2, 6.4)
Other	(0.8, 2.0)	(1.3, 7.6)	(1.2, 9.1)	(0.7, 2.0)
<i>Legitimately Skipped Question</i>	(36.2, 42.0)	(12.0, 25.2)	(13.4, 28.7)	(36.5, 42.4)
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
Yes	(31.6, 36.9)	(45.6, 62.8)	(39.9, 59.8)	(31.3, 36.7)
No	(35.5, 41.3)	(29.1, 46.0)	(29.6, 49.1)	(35.5, 41.4)
<i>Legitimately Skipped Question</i>	(24.8, 30.2)	(4.7, 14.9)	(6.5, 18.7)	(25.1, 30.5)

(continued)

**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	(0.2, 1.1)	(1.4, 8.0)	(**, **)	(0.2, 1.1)
Disagree	(2.6, 4.8)	(2.5, 10.6)	(1.6, 9.7)	(2.6, 4.8)
Neither Agree nor Disagree	(16.5, 21.2)	(11.5, 24.7)	(17.5, 34.9)	(16.4, 21.1)
Agree	(42.7, 48.6)	(52.7, 69.3)	(45.1, 64.8)	(42.4, 48.4)
Strongly Agree	(2.7, 5.0)	(2.2, 9.4)	(1.7, 9.9)	(2.7, 5.0)
<i>Legitimately Skipped Question</i>	(25.3, 30.8)	(4.6, 14.6)	(6.7, 19.1)	(25.6, 31.1)
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	(0.2, 1.0)	(0.6, 5.9)	(**, **)	(0.2, 1.1)
Disagree	(1.1, 2.6)	(0.4, 5.6)	(1.0, 8.4)	(1.1, 2.7)
Neither Agree nor Disagree	(17.5, 22.3)	(11.1, 24.8)	(11.9, 28.2)	(17.5, 22.4)
Agree	(42.4, 48.4)	(54.6, 71.4)	(53.1, 72.2)	(42.1, 48.1)
Strongly Agree	(3.5, 6.1)	(4.2, 13.4)	(1.5, 8.5)	(3.5, 6.1)
<i>Legitimately Skipped Question</i>	(25.4, 30.9)	(4.8, 15.2)	(6.7, 19.2)	(25.7, 31.2)
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	(0.2, 1.0)	(0.6, 5.9)	(**, **)	(0.2, 1.0)
Disagree	(2.3, 4.4)	(5.0, 14.9)	(0.5, 6.9)	(2.3, 4.4)
Neither Agree nor Disagree	(24.0, 29.4)	(14.1, 28.4)	(22.6, 41.2)	(24.0, 29.4)
Agree	(35.0, 40.8)	(44.5, 61.7)	(39.8, 59.9)	(34.8, 40.6)
Strongly Agree	(2.8, 5.2)	(3.8, 12.9)	(2.5, 11.9)	(2.8, 5.2)
<i>Legitimately Skipped Question</i>	(25.4, 30.8)	(4.8, 15.1)	(6.7, 19.1)	(25.6, 31.2)

(continued)



**Exhibit B-6b. Results from the Fire Department Survey, Confidence Interval Estimates by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	(54.4, 60.4)	(59.7, 75.9)	(57.2, 76.2)	(54.2, 60.2)
Respirator maintenance program guide	(11.9, 15.9)	(14.9, 28.9)	(12.6, 27.9)	(11.8, 15.8)
CDs of firefighter program materials	(25.4, 30.7)	(39.3, 56.5)	(24.1, 42.7)	(25.2, 30.6)
Alerts	(29.1, 34.5)	(39.9, 57.1)	(32.4, 51.8)	(28.8, 34.3)
Hazard IDs	(14.5, 19.0)	(16.5, 30.8)	(12.7, 28.9)	(14.4, 18.9)
Workplace Solutions	(10.7, 14.6)	(11.7, 24.3)	(10.7, 25.8)	(10.6, 14.5)
Other	(0.4, 1.4)	(**, **)	(0.2, 3.3)	(0.4, 1.4)
None. I have not seen any NIOSH materials.	(22.6, 27.9)	(6.0, 17.0)	(8.1, 23.2)	(22.8, 28.2)
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	(0.8, 2.2)	(0.1, 4.7)	(0.6, 6.3)	(0.8, 2.2)
Dissatisfied	(0.0, 0.7)	(0.1, 4.6)	(**, **)	(0.0, 0.8)
Neither satisfied nor dissatisfied	(18.8, 23.8)	(4.2, 14.2)	(15.1, 32.2)	(18.9, 23.9)
Satisfied	(44.1, 50.1)	(61.3, 77.5)	(44.6, 64.3)	(43.9, 49.9)
Very satisfied	(4.0, 6.7)	(6.0, 17.3)	(3.7, 15.0)	(4.0, 6.6)
<i>Legitimately Skipped Question</i>	(22.4, 27.7)	(6.1, 17.3)	(7.6, 22.3)	(22.6, 28.0)
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
No	(56.5, 62.2)	(17.5, 32.4)	(35.1, 54.7)	(56.9, 62.6)
Yes, in the last year	(31.9, 37.3)	(58.0, 74.2)	(36.5, 56.0)	(31.5, 37.0)
Yes, longer than one year ago	(4.9, 7.6)	(5.3, 15.4)	(4.5, 17.8)	(4.8, 7.6)

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>1. Does your department have a Safety Officer?</b>	1,587	139	119	1,329
	1,587	139	119	1,329
<b>2. Does your department have a Training Officer?</b>				
Yes	1,600	139	118	1,343
No	1,600	139	118	1,343
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	1,600	140	117	1,343
Maintenance of SCBAs	1,600	140	117	1,343
Motor vehicle safety	1,600	140	117	1,343
Participation in a personal physical fitness program	1,600	140	117	1,343
Participation in regular health screenings for cardiovascular disease (CVD)	1,600	140	117	1,343
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	1,600	140	117	1,343
Use of Personal Alert Safety System (PASS) devices	1,600	140	117	1,343
Use of personal protective equipment and protective clothing	1,600	140	117	1,343
Use of radio communications	1,600	140	117	1,343
	1,600	140	117	1,343
Does not apply. Our fire department does not use SOPs/SOGs.	1,600	140	117	1,343

Other

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	1,607	139	119	1,349
Optional Training	1,607	139	119	1,349
Required Training	1,607	139	119	1,349
<b>4b. Driving safety</b>				
No Training	1,598	138	119	1,341
Optional Training	1,598	138	119	1,341
Required Training	1,598	138	119	1,341
<b>4c. Incident Command systems</b>				
No Training	1,584	137	118	1,329
Optional Training	1,584	137	118	1,329
Required Training	1,584	137	118	1,329
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	1,581	135	119	1,327
Optional Training	1,581	135	119	1,327
Required Training	1,581	135	119	1,327
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	1,511	131	114	1,266
Optional Training	1,511	131	114	1,266
Required Training	1,511	131	114	1,266

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1,611	140	119	1,352
Optional Training	1,611	140	119	1,352
Required Training	1,611	140	119	1,352
<b>4g. Use of radio communication devices</b>				
No Training	1,606	139	119	1,348
Optional Training	1,606	139	119	1,348
Required Training	1,606	139	119	1,348
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	1,611	140	118	1,353
Other officers within our department	1,611	140	118	1,353
State fire training agency	1,611	140	118	1,353
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	1,611	140	118	1,353
Conferences or regional meetings	1,611	140	118	1,353
	1,611	140	118	1,353
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Other				
Roadside incidents/Motor Vehicle Accidents (MVA)	1,622	141	121	1,360
Scuba diving	1,622	141	121	1,360
Swift water rescue	1,622	141	121	1,360
Wildland fire fighting	1,622	141	121	1,360
HAZMAT	1,622	141	121	1,360
	1,622	141	121	1,360

(continued)

Other

Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	1,610	138	121	1,351
Not very familiar	1,610	138	121	1,351
Somewhat familiar	1,610	138	121	1,351
Very familiar	1,610	138	121	1,351
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	1,611	138	121	1,352
Not very familiar	1,611	138	121	1,352
Somewhat familiar	1,611	138	121	1,352
Very familiar	1,611	138	121	1,352
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	1,609	139	121	1,349
National conference presentations	1,609	139	121	1,349
State-level conference presentations	1,609	139	121	1,349
Other firefighters or departments	1,609	139	121	1,349
At seminars or other training opportunities (not conferences)	1,609	139	121	1,349
Trade publications (such as Firehouse and Fire Engineering)	1,609	139	121	1,349
NIOSH website	1,609	139	121	1,349
Links from other websites (such as NFPA and Firehouse)	1,609	139	121	1,349
Media reports—newspaper, television, radio	1,609	139	121	1,349
Does not apply. We have not received information about NIOSH recommendations.	1,609	139	121	1,349
Other				

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	1,536	134	114	1,288
Developed new SOPs/SOGs	1,536	134	114	1,288
Made changes to SOPs/SOGs	1,536	134	114	1,288
Justified current budget/staffing	1,536	134	114	1,288
Made new budget/staffing requests	1,536	134	114	1,288
Justified grant applications	1,536	134	114	1,288
Does not apply. We have not used NIOSH recommendations.	1,536	134	114	1,288
<i>Legitimately Skipped Question</i>	1,536	134	114	1,288
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	1,530	133	113	1,284
Personal protective equipment and clothing	1,530	133	113	1,284
	1,530	133	113	1,284
PASS systems	1,530	133	113	1,284
SCBA Incident Command systems	1,530	133	113	1,284
Radio communications	1,530	133	113	1,284
Physical fitness and cardiovascular disease (CVD)	1,530	133	113	1,284
Building code compliance (e.g., warning against the use of wooden trusses)	1,530	133	113	1,284
	1,530	133	113	1,284
Does not apply. We have not used NIOSH recommendations for training purposes.	1,530	133	113	1,284
Other	1,530	133	113	1,284
<i>Legitimately Skipped Question</i>	1,530	133	113	1,284

(continued)

Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	1,596	137	118	1,341
No Yes, it's optional	1,596	137	118	1,341
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	1,582	134	121	1,327
Less frequently than once a year	1,582	134	121	1,327
One time a year	1,582	134	121	1,327
More than one time a year	1,582	134	121	1,327
Does not apply. Firefighters are not required to receive CVD screenings	1,582	134	121	1,327
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	1,616	139	121	1,356
Yes, they receive training required by the department	1,616	139	121	1,356
Yes, they receive training required by the state	1,616	139	121	1,356
Yes, they receive optional training	1,616	139	121	1,356
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	1,611	137	121	1,353
Once every year	1,611	137	121	1,353
Less frequently than once a year	1,611	137	121	1,353
Does not apply. Firefighters are not required to receive continuing driver training.	1,611	137	121	1,353

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>	1,613	140	119	1,354
	1,613	140	119	1,354
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
No				
Strongly disagree	1,603	139	117	1,347
Disagree	1,603	139	117	1,347
Neither agree nor disagree	1,603	139	117	1,347
Agree	1,603	139	117	1,347
Strongly agree	1,603	139	117	1,347
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	1,616	140	121	1,355
Never	1,616	140	121	1,355
About half the time	1,616	140	121	1,355
Most of the time	1,616	140	121	1,355
Always	1,616	140	121	1,355
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Rarely	1,604	139	120	1,345
Never	1,604	139	120	1,345
About half the time	1,604	139	120	1,345
Most of the time	1,604	139	120	1,345
Always	1,604	139	120	1,345

(continued)



**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	1,600	138	118	1,344
Not enough firefighters available at the scene of the fire	1,600	138	118	1,344
Does not apply. My department always assigns an Incident Commander for structure fires.	1,600	138	118	1,344
Other <i>Legitimately Skipped Question</i>	1,600	138	118	1,344
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	1,588	138	119	1,331
Develop and coordinate the fire attack strategy	1,588	138	119	1,331
Develop and initiate a risk management plan	1,588	138	119	1,331
Document all assessments, plans and events related to the fire	1,588	138	119	1,331
Ensure that at least four (4) firefighters are on the scene before entering the building	1,588	138	119	1,331
Establish a collapse zone around the building	1,588	138	119	1,331
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	1,588	138	119	1,331
Identify and implement a communication strategy	1,588	138	119	1,331
Monitor location of all firefighters at the scene	1,588	138	119	1,331

(continued)

Other

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	1,605	139	119	1,347
Some of the time	1,605	139	119	1,347
About half the time	1,605	139	119	1,347
Most of the time	1,605	139	119	1,347
Always	1,605	139	119	1,347
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	1,588	139	117	1,332
Not enough firefighters are available at the scene of the fire	1,588	139	117	1,332
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	1,588	139	117	1,332
Other <i>Legitimately Skipped Question</i>	1,588	139	117	1,332
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	1,602	138	117	1,347
Some of the time	1,602	138	117	1,347
About half the time	1,602	138	117	1,347
Most of the time	1,602	138	117	1,347
Always	1,602	138	117	1,347

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	1,600	137	117	1,346
When there are enough firefighters on and at the scene of the fire	1,600	137	117	1,346
Whenever firefighters enter a burning building	1,600	137	117	1,346
<i>Legitimately Skipped Question</i>	1,600	137	117	1,346
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	1,575	136	117	1,322
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	1,575	136	117	1,322
We don't have enough firefighters available at the scene of the fire	1,575	136	117	1,322
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	1,575	136	117	1,322
We have never established an RIT/RIC	1,575	136	117	1,322
We use other fire departments in the area for RITs/RICs	1,575	136	117	1,322
We use other safety practices and so we don't need them	1,575	136	117	1,322
<i>Legitimately Skipped Question</i>	1,575	136	117	1,322
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
Yes	1,606	140	117	1,349
No	1,606	140	117	1,349

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
Some of the time	1,600	139	116	1,345
Never	1,600	139	116	1,345
About half the time	1,600	139	116	1,345
Most of the time	1,600	139	116	1,345
Always	1,600	139	116	1,345
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	1,590	138	115	1,337
Situation doesn't require them	1,590	138	115	1,337
Firefighters think the devices do not always work reliably	1,590	138	115	1,337
Firefighters don't think they need them	1,590	138	115	1,337
Devices go off while firefighters are resting	1,590	138	115	1,337
<i>Legitimately Skipped Question</i>	1,590	138	115	1,337
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	1,606	140	117	1,349
	1,606	140	117	1,349
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	1,521	135	105	1,281
	1,521	135	105	1,281
Yes <i>Legitimately Skipped Question</i>	1,521	135	105	1,281

No

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	1,517	132	105	1,280
Firefighters don't like using the equipment	1,517	132	105	1,280
Have never needed them (e.g., we don't do interior attacks)	1,517	132	105	1,280
They cost too much, there is not enough money in the budget	1,517	132	105	1,280
We don't have enough equipment for all of our firefighters	1,517	132	105	1,280
Shared systems work fine for our needs	1,517	132	105	1,280
<i>Legitimately Skipped Question</i>	1,517	132	105	1,280
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1,536	135	110	1,291
Some of the time	1,536	135	110	1,291
About half the time	1,536	135	110	1,291
Most of the time	1,536	135	110	1,291
Always	1,536	135	110	1,291
<i>Legitimately Skipped Question</i>	1,536	135	110	1,291
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	1,525	136	110	1,279
Firefighters do not trust that the SCBAs will work reliably	1,525	136	110	1,279
Firefighters don't think they need them	1,525	136	110	1,279
Firefighters don't like sharing facepieces with others	1,525	136	110	1,279
Firefighters are concerned that the SCBA may be or become contaminated	1,525	136	110	1,279
Wearing SCBAs makes it more difficult to work	1,525	136	110	1,279
Firefighters don't have SCBAs to use	1,525	136	110	1,279
<i>Legitimately Skipped Question</i>	1,525	136	110	1,279

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	1,270	119	88	1,063
Once a month or more	1,270	119	88	1,063
Several times a year	1,270	119	88	1,063
Once a year	1,270	119	88	1,063
Less than once a year	1,270	119	88	1,063
Never. Maintenance has not been done on our SCBAs.	1,270	119	88	1,063
Does not apply. My department does not have SCBAs.	1,270	119	88	1,063
<i>Legitimately Skipped Question</i>	1,270	119	88	1,063
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	1,518	131	116	1,271
	1,518	131	116	1,271
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
Zero				
CBRN SCBA devices are not needed in our department	1,454	128	105	1,221
We didn't know they were available	1,454	128	105	1,221
We don't have adequate technical information to purchase them	1,454	128	105	1,221
We don't have adequate funding to purchase them	1,454	128	105	1,221
	1,454	128	105	1,221
<i>Legitimately Skipped Question</i>	1,454	128	105	1,221
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
Yes	1,610	139	121	1,350
	1,610	139	121	1,350

(continued)

No

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	1,424	121	102	1,201
On the emergency vehicles (or apparatus)	1,424	121	102	1,201
Both at the fire station(s) and on the vehicles (or apparatus)	1,424	121	102	1,201
<i>Legitimately Skipped Question</i>	1,424	121	102	1,201
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	1,235	112	100	1,023
Once a month or more	1,235	112	100	1,023
Several times a year	1,235	112	100	1,023
Once a year	1,235	112	100	1,023
Less frequently than once a year	1,235	112	100	1,023
Never. Maintenance on our AEDs has not been done.	1,235	112	100	1,023
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
	1,610	140	118	1,352
Some of the time	1,610	140	118	1,352
Never>About half the time	1,610	140	118	1,352
Most of the time	1,610	140	118	1,352
Always	1,610	140	118	1,352

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Some of the time	1,612	141	121	1,350
Never	1,612	141	121	1,350
About half the time	1,612	141	121	1,350
Most of the time	1,612	141	121	1,350
Always	1,612	141	121	1,350
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	1,608	139	121	1,348
Adequate	1,608	139	121	1,348
More than adequate	1,608	139	121	1,348
<b>42b. Training</b>				
Not adequate	1,608	139	121	1,348
Adequate	1,608	139	121	1,348
More than adequate	1,608	139	121	1,348
<b>42c. Personnel</b>				
Not adequate	1,551	137	117	1,297
Adequate	1,551	137	117	1,297
More than adequate	1,551	137	117	1,297

(continued)



**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	1,605	140	119	1,346
Never	1,605	140	119	1,346
Several times per year	1,605	140	119	1,346
Once a month or more	1,605	140	119	1,346
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	1,605	140	120	1,345
On the Internet	1,605	140	120	1,345
From colleagues in other departments	1,605	140	120	1,345
At conferences or other meetings	1,605	140	120	1,345
<i>Legitimately Skipped Question</i>	1,605	140	120	1,345
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	1,611	139	121	1,351
	1,611	139	121	1,351
<i>Legitimately Skipped Question</i>	1,611	139	121	1,351
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
	1,583	139	117	1,327
Yes	1,583	139	117	1,327
<i>Legitimately Skipped Question</i>	1,583	139	117	1,327
No				

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	1,585	138	118	1,329
Training sessions	1,585	138	118	1,329
Provide copies of NIOSH reports to firefighters	1,585	138	118	1,329
Provide copies of NIOSH report summaries to firefighters	1,585	138	118	1,329
Provide summaries prepared by department to firefighters	1,585	138	118	1,329
Postings on bulletin boards	1,585	138	118	1,329
Post report on the department website	1,585	138	118	1,329
Send message to firefighters by email	1,585	138	118	1,329
<i>Legitimately Skipped Question</i>	1,585	138	118	1,329
<b>51. Whether The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
Yes	1,564	135	117	1,312
No	1,564	135	117	1,312
<i>Legitimately Skipped Question</i>	1,564	135	117	1,312

(continued)

## Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	1,547	138	115	1,294
Disagree	1,547	138	115	1,294
Neither Agree nor Disagree	1,547	138	115	1,294
Agree	1,547	138	115	1,294
Strongly Agree	1,547	138	115	1,294
<i>Legitimately Skipped Question</i>	1,547	138	115	1,294
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	1,537	133	115	1,289
Disagree	1,537	133	115	1,289
Neither Agree nor Disagree	1,537	133	115	1,289
Agree	1,537	133	115	1,289
Strongly Agree	1,537	133	115	1,289
<i>Legitimately Skipped Question</i>	1,537	133	115	1,289
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	1,537	134	114	1,289
Disagree	1,537	134	114	1,289
Neither Agree nor Disagree	1,537	134	114	1,289
Agree	1,537	134	114	1,289
Strongly Agree	1,537	134	114	1,289
<i>Legitimately Skipped Question</i>	1,537	134	114	1,289

(continued)

**Exhibit B-6c. Results from the Fire Department Survey, Sample Sizes by Fatality and FFFIPP Investigation (continued)**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	1,537	134	117	1,286
Respirator maintenance program guide	1,537	134	117	1,286
CDs of firefighter program materials	1,537	134	117	1,286
Alerts	1,537	134	117	1,286
Hazard IDs	1,537	134	117	1,286
Workplace Solutions	1,537	134	117	1,286
None. I have not seen any NIOSH materials.	1,537	134	117	1,286
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1,536	132	119	1,285
Dissatisfied	1,536	132	119	1,285
Neither satisfied nor dissatisfied	1,536	132	119	1,285
Satisfied	1,536	132	119	1,285
Very satisfied	1,536	132	119	1,285
<i>Legitimately Skipped Question</i>	1,536	132	119	1,285
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	1,589	139	119	1,331
No Yes, longer than one year ago	1,589	139	119	1,331

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>1. Does your department have a Safety Officer?</b>	70.3 29.7	77.4 22.6	73.7 26.3	70.2 29.8
<b>2. Does your department have a Training Officer?</b>				
Yes	88.5	92.4	91.2	88.4
No	11.5	7.6	8.8	11.6
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	83.7	91.0 <sup>[3]</sup>	93.5 <sup>[3]</sup>	83.6 <sup>[1,2]</sup>
Maintenance of SCBAs	69.7	72.2	74.8	69.6
Motor vehicle safety	78.8	89.3 <sup>[3]</sup>	82.8	78.7 <sup>[1]</sup>
Participation in a personal physical fitness program	11.0	25.7 <sup>[3]</sup>	16.2	10.9 <sup>[1]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	16.8	31.2 <sup>[3]</sup>	24.5	16.6 <sup>[1]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	40.4	56.6 <sup>[3]</sup>	60.9 <sup>[3]</sup>	40.1 <sup>[1,2]</sup>
Use of Personal Alert Safety System (PASS) devices	75.4	71.2	80.8	75.3
Use of personal protective equipment and protective clothing	89.1	91.4	93.8	89.1
Use of radio communications	84.8	87.0	92.3 <sup>[3]</sup>	84.7 <sup>[2]</sup>
Other	8.7	9.2	9.8	8.7
Does not apply. Our fire department does not use SOPs/SOGs.	5.0	1.3 <sup>[3,+]</sup>	** <sup>[3]</sup>	5.1 <sup>[1,2]</sup>

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.1	5.5	0.6 <sup>[+]</sup>	1.1
Optional Training	16.7	11.7	18.2	16.8
Required Training	82.8	82.9	81.2	82.8
<b>4b. Driving safety</b>				
No Training	3.9	3.0 <sup>[+]</sup>	3.2 <sup>[+]</sup>	3.9
Optional Training	18.6	7.0 <sup>[3]</sup>	16.1	18.7 <sup>[1]</sup>
Required Training	77.7	89.9 <sup>[3]</sup>	80.7	77.6 <sup>[1]</sup>
<b>4c. Incident Command systems</b>				
No Training	2.9	1.7 <sup>[+]</sup>	3.2 <sup>[+]</sup>	2.9
Optional Training	27.4	17.8 <sup>[3]</sup>	19.7	27.5 <sup>[1]</sup>
Required Training	69.9	80.5 <sup>[3]</sup>	77.1	69.7 <sup>[1]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	6.6	11.8 <sup>[2]</sup>	0.5 <sup>[1,3,+]</sup>	6.6 <sup>[2]</sup>
Optional Training	33.6	26.1	30.3	33.7
Required Training	60.3	62.1	69.2	60.2
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	28.5	16.2 <sup>[3]</sup>	13.1 <sup>[3]</sup>	28.8 <sup>[1,2]</sup>
Optional Training	36.2	35.4	43.3	36.1
Required Training	35.5	48.4 <sup>[3]</sup>	43.6	35.4 <sup>[1]</sup>

(continued)

Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.5	** [3]	0.6 [+]	1.5 [1]
Optional Training	9.9	6.9	12.1	9.9
Required Training	88.9	93.9 [3]	87.3	88.9 [1]
<b>4g. Use of radio communication devices</b>				
No Training	2.7	0.5 [3,+]	1.5 [+]	2.7 [1]
Optional Training	21.4	16.1	19.7	21.4
Required Training	76.2	83.4 [3]	78.8	76.1 [1]
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	84.9	88.6	90.1	84.8
Other officers within our department	82.8	86.1	93.8 [3]	82.7 [2]
State fire training agency	77.4	82.6	85.2 [3]	77.3 [2]
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	20.9	35.6 [3]	37.5 [3]	20.7 [1,2]
Conferences or regional meetings	51.7	64.7 [3]	64.9 [3]	51.5 [1,2]
Other	25.2	29.7	23.0	25.2
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	55.3	57.9	53.7	55.3
Scuba diving	7.5	11.9	8.1	7.4
Swift water rescue	11.2	21.7 [3]	14.5	11.1 [1]
Wildland fire fighting	47.0	46.9	35.8 [3]	47.1 [2]
HAZMAT	66.7	74.7	84.6 [3]	66.4 [2]
Other	31.2	33.7	30.0	31.2

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	8.3	3.5 <sup>[3,+]</sup>	1.7 <sup>[3,+]</sup>	8.4 <sup>[1,2]</sup>
Not very familiar	24.3	10.0 <sup>[3]</sup>	16.8	24.5 <sup>[1]</sup>
Somewhat familiar	58.1	52.7	58.5	58.2
Very familiar	9.3	33.7 <sup>[3]</sup>	23.1 <sup>[3]</sup>	8.9 <sup>[1,2]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	20.8	8.5 <sup>[3]</sup>	8.3 <sup>[3]</sup>	21.0 <sup>[1,2]</sup>
Not very familiar	33.5	19.3 <sup>[3]</sup>	17.8 <sup>[3]</sup>	33.8 <sup>[1,2]</sup>
Somewhat familiar	37.9	40.6	50.9 <sup>[3]</sup>	37.8 <sup>[2]</sup>
Very familiar	7.8	31.5 <sup>[3]</sup>	23.1 <sup>[3]</sup>	7.5 <sup>[1,2]</sup>
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	67.8	82.7 <sup>[3]</sup>	74.5	67.6 <sup>[1]</sup>
National conference presentations	3.6	9.4 <sup>[3]</sup>	5.9	3.6 <sup>[1]</sup>
State-level conference presentations	11.5	10.8	12.0	11.5
Other firefighters or departments	22.9	22.9	27.8	22.8
At seminars or other training opportunities (not conferences)	16.4	21.6	27.5 <sup>[3]</sup>	16.2 <sup>[2]</sup>
Trade publications (such as Firehouse and Fire Engineering)	47.2	57.8 <sup>[3]</sup>	60.0 <sup>[3]</sup>	47.0 <sup>[1,2]</sup>
NIOSH website	24.3	45.8 <sup>[3]</sup>	40.2 <sup>[3]</sup>	23.9 <sup>[1,2]</sup>
Links from other websites (such as NFPA and Firehouse)	28.2	36.0	43.5 <sup>[3]</sup>	28.0 <sup>[2]</sup>
Media reports—newspaper, television, radio	14.9	15.2	20.5	14.8
	1.1	4.5	3.2 <sup>[+]</sup>	1.1
Does not apply. We have not received information about NIOSH recommendations.	11.1	2.9 <sup>[3,+]</sup>	4.0 <sup>[3,+]</sup>	11.3 <sup>[1,2]</sup>
Other				

(continued)



Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	40.2	59.3 <sup>[3]</sup>	62.4 <sup>[3]</sup>	39.8 <sup>[1,2]</sup>
Developed new SOPs/SOGs	26.3	41.4 <sup>[3]</sup>	43.5 <sup>[3]</sup>	26.1 <sup>[1,2]</sup>
Made changes to SOPs/SOGs	34.9	59.8 <sup>[3]</sup>	55.2 <sup>[3]</sup>	34.5 <sup>[1,2]</sup>
Justified current budget/staffing	5.0	10.2 <sup>[3]</sup>	12.8 <sup>[3]</sup>	4.9 <sup>[1,2]</sup>
Made new budget/staffing requests	5.5	10.5 <sup>[3]</sup>	18.8 <sup>[3]</sup>	5.3 <sup>[1,2]</sup>
Justified grant applications	15.5	22.6	27.6 <sup>[3]</sup>	15.4 <sup>[2]</sup>
Does not apply. We have not used NIOSH recommendations.	30.1	18.0 <sup>[3]</sup>	11.1 <sup>[3]</sup>	30.3 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	11.7	3.1 <sup>[3,+]</sup>	4.3 <sup>[3,+]</sup>	11.9 <sup>[1,2]</sup>
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	29.3	45.2 <sup>[3]</sup>	49.5 <sup>[3]</sup>	29.0 <sup>[1,2]</sup>
Personal protective equipment and clothing	41.6	51.8 <sup>[3]</sup>	56.9 <sup>[3]</sup>	41.4 <sup>[1,2]</sup>
SCBA	40.1	46.2	58.3 <sup>[3]</sup>	39.8 <sup>[2]</sup>
PASS systems	32.6	40.9	43.2	32.5
Incident Command systems	32.1	47.4 <sup>[3]</sup>	49.3 <sup>[3]</sup>	31.8 <sup>[1,2]</sup>
Radio communications	23.0	36.0 <sup>[3]</sup>	42.5 <sup>[3]</sup>	22.8 <sup>[1,2]</sup>
Physical fitness and cardiovascular disease (CVD)	8.5	18.4 <sup>[3]</sup>	23.9 <sup>[3]</sup>	8.3 <sup>[1,2]</sup>
Building code compliance (e.g., warning against the use of wooden trusses)	6.9	9.1	11.8	6.8
Does not apply. We have not used NIOSH recommendations for training purposes.	2.3	6.4 <sup>[3]</sup>	1.8 <sup>[+]</sup>	2.3 <sup>[1]</sup>
Other	1.9	4.7	4.6	1.9
<i>Legitimately Skipped Question</i>	41.9	21.1 <sup>[3]</sup>	15.6 <sup>[3]</sup>	42.3 <sup>[1,2]</sup>

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	78.5	63.5 <sup>[3]</sup>	69.5 <sup>[3]</sup>	78.7 <sup>[1,2]</sup>
No Yes, it's optional	7.0	16.2 <sup>[3]</sup>	13.1	6.9 <sup>[1]</sup>
	14.5	20.3	17.4	14.5
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	12.9	16.6	14.5
Less frequently than once a year	7.1	9.0	9.3	7.1
One time a year	17.1	26.0 <sup>[3]</sup>	29.0 <sup>[3]</sup>	17.0 <sup>[1,2]</sup>
More than one time a year	0.3	** <sup>[3]</sup>	** <sup>[3]</sup>	0.3 <sup>[1,2]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	60.9	52.1	45.2 <sup>[3]</sup>	61.2 <sup>[2]</sup>
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	6.4	3.5	4.4 <sup>[+]</sup>	6.4
Yes, they receive training required by the department	84.0	88.6	86.8	83.9
Yes, they receive training required by the state	25.7	25.4	22.0	25.8
Yes, they receive optional training	13.8	9.8	14.3	13.8
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	14.2	13.9	13.2	14.2
Once every year	40.3	43.0	36.3	40.4
Less frequently than once a year	24.8	24.2	31.1	24.7
Does not apply. Firefighters are not required to receive continuing driver training.	20.7	18.8	19.4	20.8

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
No	84.2	93.4 <sup>[3]</sup>	86.4	84.1 <sup>[1]</sup>
	15.8	6.6 <sup>[3]</sup>	13.6	15.9 <sup>[1]</sup>
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	6.9	5.5	6.6	6.9
Disagree	18.0	20.7	12.9	18.0
Neither agree nor disagree	30.8	28.4	30.5	30.9
Agree	32.1	29.7	28.8	32.2
Strongly agree	12.2	15.7	21.2	12.0
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	5.4	1.6 <sup>[3,+]</sup>	2.7 <sup>[+]</sup>	5.4 <sup>[1]</sup>
Never	22.7	22.3	30.5	22.6
About half the time	17.0	12.1	16.2	17.0
Most of the time	38.4	34.1	34.4	38.5
	16.5	29.8 <sup>[2,3]</sup>	16.3 <sup>[1]</sup>	16.4 <sup>[1]</sup>
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Always	2.3	2.5 <sup>[+]</sup>	** <sup>[3]</sup>	2.3 <sup>[2]</sup>
Rarely	6.8	2.6 <sup>[3]</sup>	4.6	6.8 <sup>[1]</sup>
Never	6.7	2.8 <sup>[3,+]</sup>	0.7 <sup>[3,+]</sup>	6.8 <sup>[1,2]</sup>
About half the time	27.6	17.4 <sup>[3]</sup>	19.4	27.8 <sup>[1]</sup>
Most of the time	56.6	74.8 <sup>[3]</sup>	75.3 <sup>[3]</sup>	56.3 <sup>[1,2]</sup>

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	22.5	9.7 <sup>[3]</sup>	9.2 <sup>[3]</sup>	22.7 <sup>[1,2]</sup>
Not enough firefighters available at the scene of the fire	21.2	13.9 <sup>[3]</sup>	11.4 <sup>[3]</sup>	21.3 <sup>[1,2]</sup>
Other	6.2	5.0	6.4	6.2
Does not apply. My department always assigns an Incident Commander for structure fires.	3.6	2.4	1.4 <sup>[+]</sup>	3.7
<i>Legitimately Skipped Question</i>	56.6	75.3 <sup>[3]</sup>	76.8 <sup>[3]</sup>	56.3 <sup>[1,2]</sup>
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.0	89.5	93.2	91.0
Develop and coordinate the fire attack strategy	93.1	91.6	95.6	93.1
Develop and initiate a risk management plan	52.3	63.1 <sup>[3]</sup>	65.0 <sup>[3]</sup>	52.1 <sup>[1,2]</sup>
Document all assessments, plans and events related to the fire	38.8	43.4	42.5	38.7
Ensure that at least four (4) firefighters are on the scene before entering the building	68.6	70.7	69.1	68.5
Establish a collapse zone around the building	49.1	55.8	53.5	49.0
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	48.5	64.8 <sup>[3]</sup>	62.7 <sup>[3]</sup>	48.2 <sup>[1,2]</sup>
Identify and implement a communication strategy	64.7	66.2	64.0	64.7
Monitor location of all firefighters at the scene	76.2	80.5	85.0 <sup>[3]</sup>	76.1 <sup>[2]</sup>
Other	9.1	14.7	7.6	9.1

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	13.3	6.5 <sup>[3]</sup>	7.5	13.4 <sup>[1]</sup>
Some of the time	26.5	25.6	30.5	26.5
About half the time	8.1	11.4	7.0	8.1
Most of the time	29.8	26.5	26.1	29.8
	22.3	30.0	29.0	22.2
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Always Fires are not big enough to require an Incident Safety Officer	32.3	20.9 <sup>[3]</sup>	15.2 <sup>[3]</sup>	32.5 <sup>[1,2]</sup>
Not enough firefighters are available at the scene of the fire	51.7	42.6 <sup>[3]</sup>	52.7	51.7 <sup>[1]</sup>
Other	13.1	19.9	16.0	13.0
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	2.1	2.0 <sup>[+]</sup>	1.4 <sup>[+]</sup>	2.1
<i>Legitimately Skipped Question</i>	22.6	30.3	29.2	22.5
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	29.4	17.2 <sup>[3]</sup>	15.3 <sup>[3]</sup>	29.6 <sup>[1,2]</sup>
Some of the time	21.8	14.7 <sup>[3]</sup>	17.9	21.9 <sup>[1]</sup>
About half the time	6.5	6.0	6.4	6.5
Most of the time	22.5	27.0	19.2	22.5
	19.9	35.1 <sup>[3]</sup>	41.3 <sup>[3]</sup>	19.5 <sup>[1,2]</sup>

(continued)

Always

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	9.3	7.3	5.9	9.4
When there are enough firefighters on and at the scene of the fire	32.3	31.8	25.6	32.4
Whenever firefighters enter a burning building	26.4	23.4	22.6	26.5
	4.9	5.8	3.1 <sup>[+]</sup>	4.9
<i>Legitimately Skipped Question</i>	49.3	52.1	57.7	49.2
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	34.9	23.6 <sup>[3]</sup>	24.7 <sup>[3]</sup>	35.1 <sup>[1,2]</sup>
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	8.8	2.6 <sup>[3,+]</sup>	3.6 <sup>[3,+]</sup>	8.9 <sup>[1,2]</sup>
We don't have enough firefighters available at the scene of the fire	53.5	45.0	35.4 <sup>[3]</sup>	53.8 <sup>[2]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	20.7	12.2 <sup>[3]</sup>	14.6	20.8 <sup>[1]</sup>
We have never established an RIT/RIC	17.7	8.1 <sup>[3]</sup>	11.0	17.8 <sup>[1]</sup>
We use other fire departments in the area for RITs/RICs	29.2	24.1	17.2 <sup>[3]</sup>	29.4 <sup>[2]</sup>
We use other safety practices and so we don't need them	4.2	1.0 <sup>[3,+]</sup>	1.7 <sup>[+]</sup>	4.2 <sup>[1]</sup>
Other	4.1	8.2	5.2	4.0
<i>Legitimately Skipped Question</i>	20.3	35.6 <sup>[3]</sup>	41.5 <sup>[3]</sup>	19.9 <sup>[1,2]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
Yes	78.8	84.4	87.8 <sup>[3]</sup>	78.6 <sup>[2]</sup>
No	21.2	15.6	12.2 <sup>[3]</sup>	21.4 <sup>[2]</sup>

(continued)

Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
Some of the time	6.3	8.9	6.9	6.2
Never	3.9	0.9 <sup>[3,+]</sup>	** <sup>[3]</sup>	4.0 <sup>[1,2]</sup>
About half the time	1.8	1.5 <sup>[+]</sup>	1.0 <sup>[+]</sup>	1.8
Most of the time	12.8	7.5 <sup>[3]</sup>	10.9	12.9 <sup>[1]</sup>
Always	75.2	81.2	81.2	75.1
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	13.1	10.5	11.2	13.2
Situation doesn't require them	9.5	6.9	7.2	9.5
Firefighters think the devices do not always work reliably	0.3	**	1.4 <sup>[+]</sup>	0.3 <sup>[+]</sup>
Firefighters don't think they need them	4.6	1.7 <sup>[3,+]</sup>	2.1 <sup>[+]</sup>	4.6 <sup>[1]</sup>
Devices go off while firefighters are resting	3.7	2.1 <sup>[+]</sup>	2.5 <sup>[+]</sup>	3.7
<i>Legitimately Skipped Question</i>	75.5	83.1 <sup>[3]</sup>	81.2	75.4 <sup>[1]</sup>
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
No	99.2	95.3	100.0 <sup>[3]</sup>	99.3 <sup>[2]</sup>
Yes	0.8	4.7 <sup>[+]</sup>	** <sup>[3]</sup>	0.7 <sup>[2]</sup>
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
Yes	49.7	46.8	43.3	49.8
<i>Legitimately Skipped Question</i>	49.5	48.3	56.7	49.4
No	0.8	4.9 <sup>[+]</sup>	** <sup>[3]</sup>	0.8 <sup>[2]</sup>

No

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	4.8	2.2 <sup>[+]</sup>	1.4 <sup>[3,+]</sup>	4.8 <sup>[2]</sup>
Firefighters don't like using the equipment	0.3	**	**	0.3 <sup>[+]</sup>
Have never needed them (e.g., we don't do interior attacks)	0.7	** <sup>[3]</sup>	1.7 <sup>[+]</sup>	0.7 <sup>[1]</sup>
They cost too much, there is not enough money in the budget	31.8	32.4	20.1 <sup>[3]</sup>	31.9 <sup>[2]</sup>
We don't have enough equipment for all of our firefighters	24.6	22.5	23.6	24.6
Shared systems work fine for our needs	23.4	19.7	23.7	23.5
	5.0	9.1	5.4	5.0
<i>Legitimately Skipped Question</i>	50.3	53.7	57.9	50.3
<b>34. How often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1.1	** <sup>[3]</sup>	** <sup>[3]</sup>	1.2 <sup>[1,2]</sup>
Some of the time	4.7	4.0	4.5 <sup>[+]</sup>	4.7
About half the time	2.7	** <sup>[3]</sup>	** <sup>[3]</sup>	2.7 <sup>[1,2]</sup>
Most of the time	24.5	17.7	19.1	24.6
	66.1	73.5	76.4 <sup>[3]</sup>	66.0 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	0.8	4.9 <sup>[+]</sup>	** <sup>[3]</sup>	0.8 <sup>[2]</sup>
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	25.9	18.1 <sup>[3]</sup>	17.0 <sup>[3]</sup>	26.0 <sup>[1,2]</sup>
Firefighters do not trust that the SCBAs will work reliably	**	**	**	** <sup>[+]</sup>
Firefighters don't think they need them	10.3	6.6	11.8	10.4
Firefighters don't like sharing facepieces with others	1.0	1.3 <sup>[+]</sup>	<sup>[3]</sup>	1.0 <sup>[2]</sup>
Firefighters are concerned that the SCBA may be or become contaminated	**	**	**	** <sup>[+]</sup>
Wearing SCBAs makes it more difficult to work	5.9	6.3	8.5	5.9
Firefighters don't have SCBAs to use	3.9	** <sup>[3]</sup>	<sup>[3]</sup>	4.0 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	67.8	78.4 <sup>[3]</sup>	75.9	67.6 <sup>[1]</sup>

(continued)

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Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	43.0	54.3 <sup>[3]</sup>	59.4 <sup>[3]</sup>	42.7 <sup>[1,2]</sup>
Once a month or more	19.0	18.9	11.9	19.0
Several times a year	15.0	7.0 <sup>[3]</sup>	11.0	15.1 <sup>[1]</sup>
Once a year	16.4	11.6	15.0	16.5
Less than once a year	4.3	1.4 <sup>[3,+]</sup>	1.7 <sup>[+]</sup>	4.3 <sup>[1]</sup>
Never. Maintenance has not been done on our SCBAs.	1.4	1.2 <sup>[+]</sup>	1.1 <sup>[+]</sup>	1.4
Does not apply. My department does not have SCBAs.	**	**	**	**
<i>Legitimately Skipped Question</i>	1.0	5.6 <sup>[+]</sup>	** <sup>[3]</sup>	0.9 <sup>[2]</sup>
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	17.5	27.5 <sup>[3]</sup>	30.1 <sup>[3]</sup>	17.3 <sup>[1,2]</sup>
Zero	82.5	72.5 <sup>[3]</sup>	69.9 <sup>[3]</sup>	82.7 <sup>[1,2]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
CBRN SCBA devices are not needed in our department	20.9	14.0	14.1	21.1
We didn't know they were available	15.1	8.5 <sup>[3]</sup>	6.8 <sup>[3]</sup>	15.2 <sup>[1,2]</sup>
We don't have adequate technical information to purchase them	19.7	16.2	8.9 <sup>[3]</sup>	19.8 <sup>[2]</sup>
We don't have adequate funding to purchase them	60.3	51.6	50.4	60.4
	4.9	10.1	11.6 <sup>[3]</sup>	4.8 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	18.3	30.2 <sup>[3]</sup>	31.5 <sup>[3]</sup>	18.1 <sup>[1,2]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
Yes	77.4	84.9 <sup>[3]</sup>	88.9 <sup>[3]</sup>	77.3 <sup>[1,2]</sup>
No	22.6	15.1 <sup>[3]</sup>	11.1 <sup>[3]</sup>	22.7 <sup>[1,2]</sup>

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	2.8	5.8	1.5 <sup>[+]</sup>	2.8
On the emergency vehicles (or apparatus)	62.0	66.7	75.2 <sup>[3]</sup>	61.8 <sup>[2]</sup>
Both at the fire station(s) and on the vehicles (or apparatus)	10.4	10.5	9.6	10.4
<i>Legitimately Skipped Question</i>	24.9	17.1	13.7 <sup>[3]</sup>	25.0 <sup>[2]</sup>
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	13.9	16.7	22.8	13.8
Once a month or more	25.4	25.3	17.0	25.5
Several times a year	20.6	22.4	15.6	20.6
Once a year	22.3	24.5	37.1 <sup>[3]</sup>	22.2 <sup>[2]</sup>
Less frequently than once a year	7.4	4.8	2.6 <sup>[3,+]</sup>	7.5 <sup>[2]</sup>
Never. Maintenance on our AEDs has not been done.	10.4	6.3	5.0 <sup>[+]</sup>	10.5
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Always	1.6	1.0 <sup>[+]</sup>	** <sup>[3]</sup>	1.7 <sup>[2]</sup>
Some of the time	4.7	3.0	3.8 <sup>[+]</sup>	4.7
Never	2.6	** <sup>[3]</sup>	0.5 <sup>[3,+]</sup>	2.7 <sup>[1,2]</sup>
About half the time	20.6	17.1	27.5	20.6
Most of the time	70.4	78.9 <sup>[3]</sup>	68.2	70.4 <sup>[1]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Always	18.0	9.7 <sup>[3]</sup>	17.6	18.1 <sup>[1]</sup>
Some of the time	64.5	72.3	70.3	64.4
Never	10.3	10.1	8.2	10.3
About half the time	5.4	7.4	3.9 <sup>[+]</sup>	5.4
Most of the time	1.8	0.5 <sup>[+]</sup>	** <sup>[3]</sup>	1.9 <sup>[2]</sup>

(continued)

Always

Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	48.6	54.1	47.4	48.6
Adequate	45.7	40.7	47.9	45.7
More than adequate	5.7	5.2	4.7	5.7
<b>42b. Training</b>				
Not adequate	39.1	38.5	43.0	39.1
Adequate	55.6	55.3	53.7	55.7
More than adequate	5.2	6.2	3.3	5.2
<b>42c. Personnel</b>				
Not adequate	51.5	60.2	52.9	51.4
Adequate	44.3	36.6	44.8	44.3
More than adequate	4.2	3.1	2.3 <sup>[+]</sup>	4.2
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	26.8	10.7 <sup>[3]</sup>	9.3 <sup>[3]</sup>	27.1 <sup>[1,2]</sup>
Several times per year	34.3	27.9	40.2	34.3
Never	33.2	49.0 <sup>[3]</sup>	41.9	33.0 <sup>[1]</sup>
Once a month or more	5.7	12.5 <sup>[3]</sup>	8.7	5.6 <sup>[1]</sup>
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	56.0	66.2 <sup>[3]</sup>	66.1 <sup>[3]</sup>	55.8 <sup>[1,2]</sup>
On the Internet	24.7	42.5 <sup>[3]</sup>	41.5 <sup>[3]</sup>	24.4 <sup>[1,2]</sup>
From colleagues in other departments	10.0	8.4	17.2	9.9
At conferences or other meetings	6.9	14.4 <sup>[3]</sup>	10.4	6.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	26.8	10.5 <sup>[3]</sup>	9.3 <sup>[3]</sup>	27.1 <sup>[1,2]</sup>

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	53.3	70.2 <sup>[3]</sup>	77.9 <sup>[3]</sup>	53.0 <sup>[1,2]</sup>
No	20.0	19.3	12.7	20.1
<i>Legitimately Skipped Question</i>	26.6	10.4 <sup>[3]</sup>	9.4 <sup>[3]</sup>	26.9 <sup>[1,2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
No	60.7	78.6 <sup>[3]</sup>	82.8 <sup>[3]</sup>	60.3 <sup>[1,2]</sup>
Yes	12.1	10.6	7.8	12.1
<i>Legitimately Skipped Question</i>	27.3	10.8 <sup>[3]</sup>	9.5 <sup>[3]</sup>	27.6 <sup>[1,2]</sup>
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	23.5	18.2 <sup>[2]</sup>	30.2 <sup>[1]</sup>	23.5
Training sessions	44.2	55.2 <sup>[3]</sup>	59.4 <sup>[3]</sup>	44.0 <sup>[1,2]</sup>
Provide copies of NIOSH reports to firefighters	16.2	27.0 <sup>[3]</sup>	25.4 <sup>[3]</sup>	16.0 <sup>[1,2]</sup>
Provide copies of NIOSH report summaries to firefighters	6.2	11.0	13.7 <sup>[3]</sup>	6.1 <sup>[2]</sup>
Provide summaries prepared by department to firefighters	1.8	1.8 <sup>[+]</sup>	6.1	1.8
Postings on bulletin boards	38.5	46.5	51.2 <sup>[3]</sup>	38.3 <sup>[2]</sup>
Post report on the department website	1.1	1.1 <sup>[+]</sup>	3.7	1.1
Send message to firefighters by email	5.3	15.1 <sup>[3]</sup>	11.1	5.2 <sup>[1]</sup>
Other	1.3	3.7	3.0 <sup>[+]</sup>	1.2
<i>Legitimately Skipped Question</i>	39.1	21.2 <sup>[3]</sup>	17.3 <sup>[3]</sup>	39.4 <sup>[1,2]</sup>
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	34.2	50.8 <sup>[3]</sup>	52.3 <sup>[3]</sup>	33.9 <sup>[1,2]</sup>
Yes	38.4	38.4	38.1	38.4
<i>Legitimately Skipped Question</i>	27.4	10.8 <sup>[3]</sup>	9.6 <sup>[3]</sup>	27.7 <sup>[1,2]</sup>

(continued)

Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	0.5	1.2 <sup>[+]</sup>	1.6 <sup>[+]</sup>	0.5
Disagree	3.6	4.5	4.5	3.5
Neither Agree nor Disagree	18.7	24.2	20.0	18.6
Agree	45.6	54.4	60.4 <sup>[3]</sup>	45.4 <sup>[2]</sup>
Strongly Agree	3.7	4.9	3.9	3.7
<i>Legitimately Skipped Question</i>	28.0	10.8 <sup>[3]</sup>	9.7 <sup>[3]</sup>	28.3 <sup>[1,2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	0.4	0.5 <sup>[+]</sup>	1.0 <sup>[+]</sup>	0.4
Disagree	1.7	1.8 <sup>[+]</sup>	2.8 <sup>[+]</sup>	1.7
Neither Agree nor Disagree	19.8	18.0	18.0	19.8
Agree	45.4	60.8 <sup>[3]</sup>	65.4 <sup>[3]</sup>	45.1 <sup>[1,2]</sup>
Strongly Agree	4.6	7.8	3.0	4.6
<i>Legitimately Skipped Question</i>	28.1	11.1 <sup>[3]</sup>	9.8 <sup>[3]</sup>	28.4 <sup>[1,2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	0.4	0.5 <sup>[+]</sup>	1.0 <sup>[+]</sup>	0.4
Disagree	3.2	6.8	2.9 <sup>[+]</sup>	3.2
Neither Agree nor Disagree	26.6	26.2	27.3	26.6
Agree	37.9	47.8 <sup>[3]</sup>	54.1 <sup>[3]</sup>	37.7 <sup>[1,2]</sup>
Strongly Agree	3.8	7.7	4.8	3.8
<i>Legitimately Skipped Question</i>	28.0	11.0 <sup>[3]</sup>	9.8 <sup>[3]</sup>	28.3 <sup>[1,2]</sup>

(continued)

**Exhibit B-7a. Results from the Fire Department Survey, Percent Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	57.4	65.6	69.7 <sup>[3]</sup>	57.2 <sup>[2]</sup>
Respirator maintenance program guide	13.8	24.2 <sup>[3]</sup>	16.2	13.7 <sup>[1]</sup>
CDs of firefighter program materials	28.0	39.0 <sup>[3]</sup>	38.6 <sup>[3]</sup>	27.8 <sup>[1,2]</sup>
Alerts	31.7	48.6 <sup>[3]</sup>	40.8	31.5 <sup>[1]</sup>
Hazard IDs	16.6	17.9	23.5	16.5
Workplace Solutions	12.5	14.7	19.0	12.4
	0.8	1.1 <sup>[+]</sup>	** <sup>[3]</sup>	0.8 <sup>[2]</sup>
None. I have not seen any NIOSH materials.	25.2	12.3 <sup>[3]</sup>	12.7 <sup>[3]</sup>	25.4 <sup>[1,2]</sup>
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.3	1.5 <sup>[+]</sup>	1.5 <sup>[+]</sup>	1.3
Dissatisfied	0.2	0.6 <sup>[+]</sup>	**	0.2 <sup>[+]</sup>
Neither satisfied nor dissatisfied	21.2	17.2	16.5	21.3
Satisfied	47.1	59.8 <sup>[3]</sup>	61.4 <sup>[3]</sup>	46.9 <sup>[1,2]</sup>
Very satisfied	5.2	9.5	7.9	5.1
<i>Legitimately Skipped Question</i>	24.9	11.5 <sup>[3]</sup>	12.8 <sup>[3]</sup>	25.2 <sup>[1,2]</sup>
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
	59.4	29.6 <sup>[3]</sup>	42.3 <sup>[3]</sup>	59.8 <sup>[1,2]</sup>
Yes, in the last year	34.5	58.9 <sup>[3]</sup>	50.5 <sup>[3]</sup>	34.2 <sup>[1,2]</sup>
No Yes, longer than one year ago	6.1	11.5	7.2	6.0

Note: Traumatic includes those fatalities considered both "Traumatic" and "Cardiovascular."

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+ ] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

## Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>1. Does your department have a Safety Officer?</b>	(67.5, 72.9) (27.1, 32.5)	(69.4, 83.8) (16.2, 30.6)	(63.0, 82.1) (17.9, 37.0)	(67.3, 72.9) (27.1, 32.7)
<b>2. Does your department have a Training Officer?</b>				
Yes	(86.4, 90.3)	(86.7, 95.8)	(81.7, 96.0)	(86.3, 90.3)
No	(9.7, 13.6)	(4.2, 13.3)	(4.0, 18.3)	(9.7, 13.7)
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	(81.3, 85.8)	(85.2, 94.7)	(86.7, 97.0)	(81.1, 85.7)
Maintenance of SCBAs	(66.9, 72.3)	(63.4, 79.6)	(64.2, 83.1)	(66.7, 72.3)
Motor vehicle safety	(76.3, 81.2)	(83.2, 93.3)	(73.2, 89.5)	(76.1, 81.1)
Participation in a personal physical fitness program	(9.6, 12.7)	(18.7, 34.3)	(10.4, 24.5)	(9.4, 12.6)
Participation in regular health screenings for cardiovascular disease (CVD)	(14.9, 18.9)	(23.6, 39.9)	(17.0, 34.1)	(14.6, 18.8)
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	(37.7, 43.2)	(47.8, 65.0)	(50.2, 70.7)	(37.4, 42.9)
Use of Personal Alert Safety System (PASS) devices	(72.7, 77.9)	(62.5, 78.5)	(70.5, 88.1)	(72.6, 77.9)
Use of personal protective equipment and protective clothing	(87.1, 90.9)	(84.5, 95.4)	(85.6, 97.5)	(87.0, 90.8)
Use of radio communications	(82.5, 86.8)	(80.2, 91.7)	(85.4, 96.1)	(82.4, 86.7)
Other	(7.2, 10.5)	(5.4, 15.2)	(5.2, 17.7)	(7.2, 10.5)
Does not apply. Our fire department does not use SOPs/SOGs.	(3.8, 6.5)	(0.3, 5.1)	(**, **)	(3.9, 6.6)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	(0.6, 2.0)	(2.1, 13.9)	(0.1, 4.0)	(0.6, 2.0)
Optional Training	(14.6, 19.1)	(6.8, 19.2)	(11.0, 28.7)	(14.6, 19.2)
Required Training	(80.4, 85.0)	(74.1, 89.1)	(70.7, 88.5)	(80.4, 85.0)
<b>4b. Driving safety</b>				
No Training	(2.9, 5.3)	(1.1, 8.3)	(0.9, 10.3)	(2.9, 5.4)
Optional Training	(16.3, 21.1)	(3.6, 13.1)	(9.6, 25.8)	(16.4, 21.2)
Required Training	(75.1, 80.1)	(83.2, 94.2)	(70.7, 87.9)	(74.9, 80.0)
<b>4c. Incident Command systems</b>				
No Training	(2.0, 4.1)	(0.5, 5.3)	(0.9, 10.5)	(2.0, 4.2)
Optional Training	(24.8, 30.2)	(12.0, 25.5)	(12.1, 30.3)	(24.9, 30.4)
Required Training	(67.1, 72.6)	(72.7, 86.5)	(66.4, 85.2)	(66.9, 72.4)
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	(5.2, 8.3)	(6.4, 20.7)	(0.1, 3.7)	(5.2, 8.3)
Optional Training	(30.8, 36.5)	(19.3, 34.3)	(21.5, 40.8)	(30.9, 36.6)
Required Training	(57.3, 63.1)	(53.1, 70.3)	(58.7, 78.1)	(57.2, 63.1)
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	(25.8, 31.3)	(10.2, 24.9)	(7.1, 22.9)	(26.0, 31.6)
Optional Training	(33.3, 39.2)	(27.5, 44.3)	(33.0, 54.1)	(33.2, 39.1)
Required Training	(32.8, 38.3)	(39.9, 56.9)	(33.7, 54.0)	(32.6, 38.2)

(continued)



**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	(0.9, 2.4)	(**, **)	(0.1, 4.0)	(0.9, 2.4)
Optional Training	(8.2, 11.8)	(3.5, 12.9)	(6.7, 20.9)	(8.2, 11.9)
Required Training	(86.9, 90.7)	(88.0, 97.0)	(78.5, 92.8)	(86.8, 90.7)
<b>4g. Use of radio communication devices</b>				
No Training	(1.9, 3.8)	(0.1, 3.4)	(0.5, 4.5)	(1.9, 3.9)
Optional Training	(19.0, 23.9)	(10.7, 23.5)	(12.6, 29.5)	(19.0, 24.0)
Required Training	(73.6, 78.6)	(76.0, 88.9)	(69.0, 86.2)	(73.4, 78.6)
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	(82.6, 86.9)	(81.5, 93.2)	(81.0, 95.1)	(82.5, 86.9)
Other officers within our department	(80.4, 85.0)	(78.6, 91.2)	(86.0, 97.4)	(80.2, 84.9)
State fire training agency	(74.8, 79.8)	(75.0, 88.3)	(76.4, 91.1)	(74.7, 79.7)
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	(18.9, 23.1)	(28.1, 43.9)	(28.4, 47.7)	(18.6, 22.9)
Conferences or regional meetings	(48.8, 54.6)	(56.1, 72.4)	(54.2, 74.2)	(48.5, 54.4)
Other	(22.7, 27.8)	(22.3, 38.2)	(15.3, 33.2)	(22.7, 27.8)
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	(52.4, 58.2)	(49.3, 66.0)	(43.3, 63.8)	(52.4, 58.3)
Scuba diving	(6.2, 9.1)	(7.5, 18.4)	(4.1, 15.5)	(6.1, 9.1)
Swift water rescue	(9.6, 13.0)	(15.9, 28.9)	(9.4, 21.5)	(9.5, 12.9)
Wildland fire fighting	(44.1, 49.9)	(38.5, 55.5)	(26.4, 46.3)	(44.2, 50.1)
HAZMAT	(63.8, 69.4)	(66.0, 81.8)	(75.7, 90.7)	(63.6, 69.2)
Other	(28.5, 33.9)	(26.3, 42.0)	(21.6, 39.9)	(28.5, 34.0)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	(6.8, 10.2)	(1.3, 9.2)	(0.4, 7.4)	(6.8, 10.3)
Not very familiar	(21.8, 27.0)	(5.7, 16.8)	(10.2, 26.3)	(22.0, 27.2)
Somewhat familiar	(55.2, 61.0)	(44.2, 61.2)	(48.1, 68.1)	(55.2, 61.1)
Very familiar	(7.8, 10.9)	(26.5, 41.8)	(16.0, 32.2)	(7.5, 10.6)
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	(18.4, 23.3)	(4.6, 15.4)	(3.9, 16.6)	(18.6, 23.6)
Not very familiar	(30.8, 36.4)	(13.6, 26.7)	(11.1, 27.2)	(31.0, 36.7)
Somewhat familiar	(35.1, 40.7)	(32.5, 49.3)	(40.6, 61.1)	(34.9, 40.6)
Very familiar	(6.5, 9.4)	(24.9, 39.0)	(15.7, 32.5)	(6.1, 9.1)
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	(64.9, 70.5)	(74.4, 88.8)	(64.2, 82.6)	(64.7, 70.3)
National conference presentations	(2.8, 4.7)	(5.6, 15.3)	(2.9, 11.7)	(2.8, 4.6)
State-level conference presentations	(9.7, 13.5)	(6.9, 16.5)	(7.2, 19.4)	(9.7, 13.5)
Other firefighters or departments	(20.5, 25.5)	(16.3, 31.1)	(19.6, 37.8)	(20.4, 25.5)
At seminars or other training opportunities (not conferences)	(14.3, 18.6)	(15.5, 29.3)	(19.4, 37.4)	(14.2, 18.5)
Trade publications (such as Firehouse and Fire Engineering)	(44.3, 50.1)	(49.1, 66.1)	(49.6, 69.6)	(44.0, 49.9)
NIOSH website	(22.0, 26.7)	(37.6, 54.2)	(31.0, 50.2)	(21.6, 26.4)
Links from other websites (such as NFPA and Firehouse)	(25.7, 30.9)	(28.4, 44.3)	(33.7, 53.7)	(25.4, 30.7)
Media reports—newspaper, television, radio	(12.9, 17.1)	(10.2, 21.9)	(13.3, 30.3)	(12.8, 17.1)
Other	(0.7, 1.9)	(1.8, 10.7)	(0.9, 10.7)	(0.6, 1.8)
Does not apply. We have not received information about NIOSH recommendations.	(9.3, 13.2)	(0.8, 9.9)	(1.3, 12.1)	(9.4, 13.4)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	(37.3, 43.1)	(50.6, 67.5)	(51.7, 72.1)	(36.9, 42.8)
Developed new SOPs/SOGs	(23.8, 29.0)	(33.3, 49.9)	(33.5, 54.1)	(23.5, 28.8)
Made changes to SOPs/SOGs	(32.2, 37.7)	(51.1, 68.0)	(44.4, 65.5)	(31.8, 37.4)
Justified current budget/staffing	(4.0, 6.3)	(6.2, 16.3)	(7.5, 20.9)	(3.8, 6.3)
Made new budget/staffing requests	(4.4, 6.8)	(6.7, 16.1)	(12.2, 27.8)	(4.2, 6.7)
Justified grant applications	(13.5, 17.8)	(16.3, 30.3)	(19.1, 38.1)	(13.3, 17.6)
Does not apply. We have not used NIOSH recommendations.	(27.3, 32.9)	(12.1, 25.9)	(6.0, 19.6)	(27.6, 33.3)
<i>Legitimately Skipped Question</i>	(9.8, 13.9)	(0.9, 10.4)	(1.3, 12.6)	(9.9, 14.1)
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	(26.7, 32.1)	(36.8, 53.8)	(39.0, 60.0)	(26.3, 31.8)
Personal protective equipment and clothing	(38.7, 44.5)	(43.2, 60.2)	(46.1, 67.1)	(38.4, 44.4)
SCBA	(37.2, 43.0)	(37.8, 54.7)	(47.5, 68.5)	(36.9, 42.8)
PASS systems	(29.9, 35.5)	(32.9, 49.3)	(33.1, 53.9)	(29.7, 35.3)
Incident Command systems	(29.4, 34.9)	(38.8, 56.2)	(38.8, 59.8)	(29.1, 34.7)
Radio communications	(20.7, 25.6)	(28.3, 44.5)	(32.3, 53.3)	(20.3, 25.4)
Physical fitness and cardiovascular disease (CVD)	(7.1, 10.2)	(12.6, 26.1)	(16.5, 33.4)	(6.9, 10.0)
Building code compliance (e.g., warning against the use of wooden trusses)	(5.6, 8.5)	(5.6, 14.6)	(6.5, 20.4)	(5.5, 8.5)
Other	(1.6, 3.4)	(3.4, 11.6)	(0.4, 8.1)	(1.5, 3.4)
Does not apply. We have not used NIOSH recommendations for training purposes.	(1.3, 2.9)	(2.0, 10.6)	(1.7, 11.8)	(1.2, 2.9)
<i>Legitimately Skipped Question</i>	(38.9, 44.8)	(14.6, 29.6)	(9.1, 25.3)	(39.3, 45.3)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	(76.4, 80.4)	(54.9, 71.2)	(60.1, 77.6)	(76.5, 80.6)
No Yes, it's optional	(5.9, 8.3)	(10.5, 24.1)	(8.1, 20.6)	(5.7, 8.2)
	(12.8, 16.4)	(14.6, 27.6)	(11.2, 25.9)	(12.7, 16.4)
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	(12.7, 16.6)	(8.5, 19.2)	(10.3, 25.4)	(12.7, 16.6)
Less frequently than once a year	(5.8, 8.6)	(4.8, 16.1)	(5.3, 15.7)	(5.8, 8.6)
One time a year	(15.2, 19.3)	(19.1, 34.2)	(20.5, 39.2)	(15.0, 19.2)
More than one time a year	(0.1, 0.7)	(**, **)	(**, **)	(0.1, 0.7)
Does not apply. Firefighters are not required to receive CVD screenings	(58.3, 63.5)	(43.4, 60.6)	(35.1, 55.7)	(58.4, 63.8)
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	(5.1, 8.0)	(1.6, 7.8)	(1.6, 11.8)	(5.1, 8.1)
Yes, they receive training required by the department	(81.7, 86.0)	(82.0, 92.9)	(78.2, 92.4)	(81.6, 86.0)
Yes, they receive training required by the state	(23.3, 28.3)	(18.9, 33.3)	(14.6, 31.9)	(23.3, 28.4)
Yes, they receive optional training	(11.8, 15.9)	(5.9, 15.8)	(8.3, 23.6)	(11.8, 16.0)
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	(12.2, 16.4)	(9.0, 21.0)	(7.6, 21.9)	(12.2, 16.4)
Once every year	(37.5, 43.2)	(34.9, 51.5)	(26.8, 46.8)	(37.5, 43.3)
Less frequently than once a year	(22.3, 27.3)	(17.5, 32.5)	(22.5, 41.4)	(22.2, 27.3)
Does not apply. Firefighters are not required to receive continuing driver training.	(18.4, 23.2)	(13.0, 26.6)	(12.2, 29.6)	(18.4, 23.3)

(continued)

Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>	(81.9, 86.3) (13.7, 18.1)	(87.5, 96.6) (3.4, 12.5)	(77.3, 92.2) (7.8, 22.7)	(81.8, 86.2) (13.8, 18.2)
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	(5.5, 8.5)	(2.7, 10.9)	(3.1, 13.5)	(5.5, 8.5)
Disagree	(15.8, 20.4)	(14.5, 28.5)	(7.8, 20.6)	(15.8, 20.5)
Neither agree nor disagree	(28.2, 33.7)	(21.2, 37.0)	(21.5, 41.2)	(28.1, 33.7)
Agree	(29.5, 34.9)	(22.6, 37.8)	(20.7, 38.6)	(29.5, 35.0)
Strongly agree	(10.4, 14.2)	(10.6, 22.7)	(13.6, 31.5)	(10.3, 14.1)
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Never	(4.2, 6.9)	(0.4, 6.3)	(0.9, 7.8)	(4.2, 7.0)
Some of the time	(20.3, 25.3)	(16.2, 30.0)	(21.7, 41.0)	(20.2, 25.3)
About half the time	(14.8, 19.4)	(7.5, 19.1)	(9.9, 25.2)	(14.8, 19.4)
Most of the time	(35.6, 41.3)	(26.6, 42.6)	(25.3, 44.7)	(35.6, 41.4)
Always	(14.6, 18.7)	(22.5, 38.3)	(10.1, 25.3)	(14.4, 18.6)
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Never	(1.5, 3.5)	(0.6, 10.1)	(**, **)	(1.5, 3.6)
Rarely	(5.4, 8.5)	(1.0, 6.7)	(2.0, 10.5)	(5.4, 8.6)
About half the time	(5.3, 8.4)	(1.0, 7.5)	(0.1, 4.9)	(5.4, 8.5)
Most of the time	(25.0, 30.4)	(11.8, 24.9)	(12.3, 29.2)	(25.2, 30.6)
Always	(53.7, 59.4)	(66.4, 81.7)	(65.3, 83.2)	(53.3, 59.2)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	(20.1, 25.1)	(5.6, 16.2)	(4.6, 17.4)	(20.3, 25.4)
Not enough firefighters available at the scene of the fire	(18.8, 23.7)	(8.8, 21.3)	(6.2, 20.2)	(18.9, 23.9)
Other	(5.0, 7.8)	(2.1, 11.6)	(2.7, 14.3)	(4.9, 7.9)
Does not apply. My department always assigns an Incident Commander for structure fires.	(2.7, 4.9)	(0.9, 6.3)	(0.3, 5.8)	(2.7, 5.0)
<i>Legitimately Skipped Question</i>	(53.7, 59.5)	(66.9, 82.1)	(66.8, 84.5)	(53.4, 59.2)
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	(89.1, 92.6)	(81.1, 94.4)	(87.5, 96.4)	(89.0, 92.6)
Develop and coordinate the fire attack strategy	(91.4, 94.5)	(83.9, 95.8)	(88.9, 98.3)	(91.3, 94.5)
Develop and initiate a risk management plan	(49.4, 55.3)	(54.3, 71.1)	(54.4, 74.3)	(49.1, 55.1)
Document all assessments, plans and events related to the fire	(36.0, 41.7)	(35.2, 52.1)	(32.8, 52.9)	(35.8, 41.7)
Ensure that at least four (4) firefighters are on the scene before entering the building	(65.7, 71.3)	(61.9, 78.3)	(58.8, 77.8)	(65.6, 71.3)
Establish a collapse zone around the building	(46.1, 52.0)	(47.0, 64.3)	(43.0, 63.6)	(46.0, 52.0)
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	(45.7, 51.3)	(55.7, 72.8)	(52.0, 72.3)	(45.3, 51.1)
Identify and implement a communication strategy	(61.9, 67.5)	(57.4, 74.0)	(53.7, 73.2)	(61.8, 67.6)
Monitor location of all firefighters at the scene	(73.6, 78.7)	(72.1, 86.9)	(76.6, 90.8)	(73.4, 78.6)
Other	(7.6, 10.9)	(9.0, 22.9)	(3.6, 15.3)	(7.5, 10.9)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	(11.4, 15.5)	(3.1, 13.2)	(3.2, 16.6)	(11.5, 15.6)
Some of the time	(24.0, 29.2)	(19.0, 33.6)	(22.1, 40.3)	(23.9, 29.2)
About half the time	(6.6, 9.9)	(6.9, 18.2)	(3.1, 14.9)	(6.6, 9.9)
Most of the time	(27.2, 32.5)	(19.5, 34.9)	(17.8, 36.4)	(27.2, 32.6)
Always	(19.9, 24.9)	(22.9, 38.2)	(20.6, 39.0)	(19.8, 24.8)
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	(29.5, 35.1)	(14.9, 28.5)	(9.3, 23.8)	(29.7, 35.4)
Not enough firefighters are available at the scene of the fire	(48.7, 54.6)	(34.3, 51.3)	(42.4, 62.8)	(48.7, 54.7)
Other	(11.3, 15.1)	(13.7, 28.0)	(10.1, 24.4)	(11.2, 15.1)
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	(1.4, 3.0)	(0.6, 5.9)	(0.3, 5.7)	(1.4, 3.1)
<i>Legitimately Skipped Question</i>	(20.3, 25.2)	(23.1, 38.5)	(20.8, 39.3)	(20.1, 25.2)
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	(26.7, 32.1)	(11.2, 25.5)	(8.9, 24.9)	(26.9, 32.4)
Some of the time	(19.5, 24.3)	(9.4, 22.2)	(11.3, 27.2)	(19.5, 24.5)
About half the time	(5.2, 8.0)	(3.1, 11.3)	(2.8, 13.9)	(5.2, 8.1)
Most of the time	(20.2, 25.0)	(20.0, 35.3)	(12.6, 28.2)	(20.2, 25.1)
Always	(17.8, 22.1)	(27.6, 43.5)	(31.5, 51.8)	(17.4, 21.8)
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	(7.8, 11.2)	(3.9, 13.2)	(2.8, 12.2)	(7.8, 11.3)
When there are enough firefighters on and at the scene of the fire	(29.6, 35.1)	(24.3, 40.3)	(17.6, 35.6)	(29.6, 35.2)
Whenever firefighters enter a burning building	(23.9, 29.1)	(16.9, 31.5)	(15.4, 32.0)	(23.9, 29.2)
Other	(3.8, 6.3)	(3.0, 10.8)	(1.1, 8.6)	(3.8, 6.3)
<i>Legitimately Skipped Question</i>	(46.4, 52.2)	(43.4, 60.6)	(47.3, 67.6)	(46.2, 52.2)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b> The structure fire may not be large enough to need an RIT/RIC We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC We don't have enough firefighters available at the scene of the fire We don't have enough training or trained personnel at the scene to establish an RIT/RIC We have never established an RIT/RIC We use other fire departments in the area for RITs/RICs We use other safety practices and so we don't need them Other <i>Legitimately Skipped Question</i>	(32.1, 37.8) (7.2, 10.8) (50.6, 56.5) (18.3, 23.2) (15.5, 20.1) (26.6, 32.0) (3.1, 5.7) (3.1, 5.4) (18.1, 22.6)	(17.0, 31.7) (0.8, 8.0) (36.6, 53.7) (7.4, 19.5) (4.3, 14.8) (17.5, 32.3) (0.2, 3.9) (3.9, 16.4) (28.0, 44.0)	(16.9, 34.7) (1.3, 9.9) (26.2, 45.9) (8.2, 24.4) (5.6, 20.4) (10.7, 26.5) (0.4, 7.6) (2.5, 10.4) (31.6, 52.0)	(32.2, 38.1) (7.3, 10.9) (50.8, 56.7) (18.4, 23.4) (15.6, 20.3) (26.7, 32.3) (3.1, 5.8) (3.0, 5.3) (17.8, 22.3)
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>	(76.2, 81.1) (18.9, 23.8)	(75.9, 90.2) (9.8, 24.1)	(77.5, 93.8) (6.2, 22.5)	(76.0, 81.0) (19.0, 24.0)
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b> No Never Some of the time About half the time Most of the time Always	(4.9, 8.0) (2.9, 5.3) (1.2, 2.8) (10.9, 15.0) (72.5, 77.6)	(4.4, 17.2) (0.1, 6.1) (0.4, 6.2) (4.1, 13.2) (72.7, 87.5)	(2.6, 17.1) (**, **) (0.1, 6.7) (5.5, 20.5) (70.3, 88.7)	(4.8, 8.0) (2.9, 5.4) (1.2, 2.9) (11.0, 15.1) (72.4, 77.6)

(continued)



**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b> They don't have a PASS device to use Situation doesn't require them Firefighters think the devices do not always work reliably Firefighters don't think they need them Devices go off while firefighters are resting <i>Legitimately Skipped Question</i>	(11.2, 15.4) (7.9, 11.4) (0.1, 1.0) (3.5, 5.9) (2.7, 4.9) (72.9, 78.0)	(5.8, 18.2) (3.3, 13.9) (**, **) (0.4, 6.5) (0.6, 6.5) (75.0, 89.0)	(5.4, 21.7) (3.1, 15.6) (0.3, 6.2) (0.3, 13.3) (0.5, 12.0) (70.3, 88.7)	(11.2, 15.4) (7.9, 11.5) (0.1, 1.0) (3.5, 6.0) (2.7, 4.9) (72.7, 77.9)
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>	(98.4, 99.6) (0.4, 1.6)	(87.1, 98.4) (1.6, 12.9)	(0.0, 100.0) (**, **)	(98.4, 99.6) (0.4, 1.6)
<del>33.</del> <b>Do your firefighters ever have to share facepieces for SCBAs?</b> No Yes <i>Legitimately Skipped Question</i>	(46.7, 52.7) (46.5, 52.5) (0.4, 1.6)	(38.2, 55.6) (39.7, 56.9) (1.7, 13.5)	(32.9, 54.2) (45.8, 67.1) (**, **)	(46.8, 52.8) (46.4, 52.5) (0.4, 1.7)
<del>33a.</del> <b>What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b> Didn't know it was recommended Firefighters don't like using the equipment Have never needed them (e.g., we don't do interior attacks) They cost too much, there is not enough money in the budget We don't have enough equipment for all of our firefighters Shared systems work fine for our needs Other <i>Legitimately Skipped Question</i>	(3.5, 6.3) (0.1, 0.9) (0.3, 1.5) (29.0, 34.7) (22.0, 27.3) (20.9, 26.2) (3.8, 6.5) (47.4, 53.3)	(0.7, 6.9) (**, **) (**, **) (24.7, 41.2) (15.8, 31.1) (13.5, 27.8) (5.3, 15.2) (44.9, 62.3)	(0.2, 9.5) (**, **) (0.2, 11.3) (12.4, 30.8) (15.3, 34.6) (15.1, 35.0) (2.1, 13.2) (46.7, 68.3)	(3.6, 6.4) (0.1, 0.9) (0.3, 1.5) (29.0, 34.8) (22.0, 27.4) (20.9, 26.2) (3.8, 6.5) (47.2, 53.3)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	(0.6, 2.2)	(**, **)	(**, **)	(0.6, 2.2)
Some of the time	(3.6, 6.2)	(1.5, 10.3)	(1.3, 14.4)	(3.5, 6.3)
About half the time	(1.8, 3.9)	(**, **)	(**, **)	(1.9, 3.9)
Most of the time	(22.0, 27.2)	(12.0, 25.2)	(12.1, 28.8)	(22.0, 27.4)
Always	(63.3, 68.9)	(64.7, 80.8)	(65.8, 84.4)	(63.1, 68.8)
<i>Legitimately Skipped Question</i>	(0.4, 1.6)	(1.7, 13.3)	(**, **)	(0.4, 1.6)
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	(23.3, 28.6)	(12.3, 26.0)	(10.4, 26.6)	(23.4, 28.8)
Firefighters do not trust that the SCBAs will work reliably	(**, **)	(**, **)	(**, **)	(**, **)
Firefighters don't think they need them	(8.6, 12.3)	(3.5, 12.1)	(6.5, 20.5)	(8.6, 12.4)
Firefighters don't like sharing facepieces with others	(0.5, 1.8)	(0.2, 8.4)	(**, **)	(0.5, 1.8)
Firefighters are concerned that the SCBA may be or become contaminated	(**, **)	(**, **)	(**, **)	(**, **)
Wearing SCBAs makes it more difficult to work	(4.6, 7.5)	(3.1, 12.5)	(4.0, 17.2)	(4.6, 7.5)
Firefighters don't have SCBAs to use	(2.8, 5.4)	(**, **)	(**, **)	(2.9, 5.4)
<i>Legitimately Skipped Question</i>	(64.9, 70.5)	(70.3, 84.7)	(65.4, 84.0)	(64.7, 70.4)
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	(39.7, 46.3)	(44.8, 63.4)	(47.5, 70.3)	(39.4, 46.1)
Once a month or more	(16.5, 21.7)	(12.6, 27.3)	(6.1, 21.9)	(16.5, 21.8)
Several times a year	(12.8, 17.5)	(3.3, 14.0)	(5.7, 20.2)	(12.8, 17.7)
Once a year	(14.1, 19.1)	(6.8, 19.3)	(8.4, 25.2)	(14.1, 19.2)
Less than once a year	(3.1, 5.9)	(0.3, 5.8)	(0.2, 11.2)	(3.1, 6.0)
Never. Maintenance has not been done on our SCBAs.	(0.8, 2.5)	(0.2, 7.9)	(0.1, 7.4)	(0.8, 2.5)
Does not apply. My department does not have SCBAs.	(**, **)	(**, **)	(**, **)	(**, **)
<i>Legitimately Skipped Question</i>	(0.5, 2.0)	(1.9, 15.2)	(**, **)	(0.4, 2.0)

(continued)

Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero Zero	(15.5, 19.8) (80.2, 84.5)	(20.7, 35.6) (64.4, 79.3)	(21.7, 40.0) (60.0, 78.3)	(15.3, 19.6) (80.4, 84.7)
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> CBRN SCBA devices are not needed in our department We didn't know they were available We don't have adequate technical information to purchase them We don't have adequate funding to purchase them Other <i>Legitimately Skipped Question</i>	(18.5, 23.6) (12.9, 17.5) (17.3, 22.3) (57.2, 63.2) (3.7, 6.4) (16.2, 20.6)	(8.1, 23.1) (4.6, 15.3) (10.1, 24.9) (42.4, 60.7) (5.5, 17.7) (22.7, 38.9)	(7.9, 23.8) (3.1, 14.5) (4.5, 16.6) (39.9, 60.9) (6.4, 20.1) (22.8, 41.7)	(18.6, 23.8) (13.0, 17.7) (17.4, 22.5) (57.3, 63.4) (3.6, 6.3) (15.9, 20.4)
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> Yes	(74.8, 79.9) (20.1, 25.2)	(76.9, 90.5) (9.5, 23.1)	(79.6, 94.2) (5.8, 20.4)	(74.6, 79.7) (20.3, 25.4)
<b>38a. At your fire department, where do you have AEDs?</b> No At the fire station(s) On the emergency vehicles (or apparatus) Both at the fire station(s) and on the vehicles (or apparatus) <i>Legitimately Skipped Question</i>	(1.9, 4.1) (58.9, 64.9) (8.7, 12.3) (22.2, 27.7)	(2.1, 14.8) (57.1, 75.0) (6.2, 17.1) (10.8, 25.9)	(0.2, 10.1) (63.9, 83.9) (5.0, 17.6) (7.1, 24.6)	(1.9, 4.1) (58.7, 64.8) (8.7, 12.4) (22.4, 27.9)
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b> After every time they are used Once a month or more Several times a year Once a year Less frequently than once a year Never. Maintenance on our AEDs has not been done.	(11.7, 16.4) (22.6, 28.5) (18.0, 23.4) (19.6, 25.3) (5.8, 9.5) (8.4, 12.8)	(11.0, 24.5) (18.0, 34.4) (15.2, 31.7) (16.9, 34.2) (2.1, 10.4) (2.9, 13.1)	(14.9, 33.3) (10.2, 26.9) (9.0, 25.6) (26.9, 48.6) (0.7, 8.9) (1.7, 13.3)	(11.6, 16.3) (22.6, 28.7) (17.9, 23.5) (19.4, 25.2) (5.8, 9.6) (8.4, 12.9)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Never	(1.0, 2.6)	(0.1, 6.7)	(**, **)	(1.0, 2.7)
Some of the time	(3.6, 6.1)	(1.1, 7.9)	(1.2, 11.1)	(3.6, 6.2)
About half the time	(1.8, 3.8)	(**, **)	(0.1, 3.3)	(1.8, 3.9)
Most of the time	(18.3, 23.1)	(11.4, 24.9)	(19.0, 38.0)	(18.2, 23.1)
Always	(67.7, 73.0)	(70.7, 85.2)	(57.7, 77.2)	(67.6, 73.0)
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Never	(15.9, 20.4)	(5.9, 15.5)	(10.9, 27.1)	(15.9, 20.5)
Some of the time	(61.6, 67.3)	(64.1, 79.3)	(59.8, 78.9)	(61.5, 67.2)
About half the time	(8.6, 12.2)	(5.8, 16.9)	(3.9, 16.6)	(8.6, 12.3)
Most of the time	(4.2, 6.9)	(4.0, 13.4)	(1.3, 11.0)	(4.1, 6.9)
Always	(1.1, 2.9)	(0.1, 3.8)	(**, **)	(1.2, 2.9)
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	(45.7, 51.6)	(45.6, 62.4)	(37.3, 57.7)	(45.6, 51.6)
Adequate	(42.8, 48.6)	(32.8, 49.2)	(37.8, 58.1)	(42.7, 48.7)
More than adequate	(4.5, 7.2)	(2.5, 10.4)	(1.8, 12.0)	(4.5, 7.2)

(continued)

Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>42b. Training</b>				
Not adequate	(36.3, 42.0)	(30.4, 47.2)	(33.2, 53.4)	(36.2, 42.1)
Adequate	(52.7, 58.6)	(46.6, 63.7)	(43.4, 63.7)	(52.7, 58.6)
More than adequate	(4.0, 6.8)	(3.2, 11.8)	(1.5, 7.4)	(4.0, 6.8)
<b>42c. Personnel</b>				
Not adequate	(48.5, 54.5)	(51.5, 68.3)	(42.6, 63.0)	(48.4, 54.5)
Adequate	(41.3, 47.3)	(28.7, 45.3)	(34.8, 55.2)	(41.3, 47.4)
More than adequate	(3.1, 5.7)	(1.3, 7.7)	(0.8, 6.2)	(3.1, 5.7)
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
Never	(24.2, 29.5)	(6.3, 17.4)	(5.0, 16.9)	(24.5, 29.9)
One or two times per year	(31.6, 37.2)	(20.9, 36.1)	(30.6, 50.6)	(31.5, 37.2)
Several times per year	(30.5, 35.9)	(40.6, 57.4)	(32.0, 52.4)	(30.3, 35.8)
Once a month or more	(4.5, 7.2)	(8.2, 18.4)	(4.5, 16.1)	(4.4, 7.2)
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	(53.1, 58.9)	(57.4, 74.0)	(56.0, 74.8)	(52.8, 58.8)
On the Internet	(22.4, 27.1)	(34.4, 51.1)	(31.9, 51.8)	(22.0, 26.9)
From colleagues in other departments	(8.3, 11.8)	(5.0, 13.8)	(10.8, 26.4)	(8.2, 11.8)
At conferences or other meetings	(5.7, 8.5)	(9.0, 22.1)	(5.9, 17.9)	(5.6, 8.4)
<i>Legitimately Skipped Question</i>	(24.2, 29.5)	(6.2, 17.2)	(5.0, 16.9)	(24.5, 29.9)
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	(50.4, 56.2)	(61.7, 77.5)	(67.9, 85.5)	(50.0, 55.9)
	(17.8, 22.5)	(13.2, 27.4)	(6.9, 22.3)	(17.8, 22.6)
<i>Legitimately Skipped Question</i>	(24.1, 29.4)	(6.2, 17.1)	(5.0, 17.0)	(24.3, 29.7)

No

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>	(57.7, 63.5)	(70.8, 84.8)	(73.6, 89.2)	(57.3, 63.2)
Yes	(10.2, 14.1)	(6.6, 16.7)	(3.7, 15.7)	(10.3, 14.2)
<i>Legitimately Skipped Question</i>	(24.7, 30.0)	(6.4, 17.7)	(5.0, 17.1)	(24.9, 30.4)
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	(21.1, 26.1)	(12.7, 25.4)	(21.5, 40.7)	(21.0, 26.2)
Training sessions	(41.3, 47.2)	(46.5, 63.6)	(49.0, 69.0)	(41.0, 47.0)
Provide copies of NIOSH reports to firefighters	(14.2, 18.3)	(20.2, 34.9)	(17.7, 35.1)	(14.0, 18.2)
Provide copies of NIOSH report summaries to firefighters	(5.0, 7.7)	(6.2, 18.8)	(8.2, 22.0)	(4.9, 7.6)
Provide summaries prepared by department to firefighters	(1.2, 2.7)	(0.6, 5.4)	(2.7, 13.4)	(1.1, 2.7)
Postings on bulletin boards	(35.6, 41.3)	(38.0, 55.1)	(40.9, 61.5)	(35.4, 41.2)
Post report on the department website	(0.7, 1.8)	(0.3, 4.5)	(1.5, 8.9)	(0.7, 1.8)
Send message to firefighters by email	(4.3, 6.5)	(9.8, 22.6)	(6.1, 19.3)	(4.2, 6.4)
Other	(0.8, 2.0)	(1.7, 7.7)	(0.9, 9.8)	(0.7, 2.0)
<i>Legitimately Skipped Question</i>	(36.2, 42.0)	(15.1, 28.9)	(10.8, 26.5)	(36.5, 42.4)
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
Yes	(31.6, 36.9)	(42.1, 59.4)	(41.8, 62.6)	(31.3, 36.7)
<i>Legitimately Skipped Question</i>	(35.5, 41.3)	(30.2, 47.2)	(28.3, 48.9)	(35.5, 41.4)
No	(24.8, 30.2)	(6.4, 17.7)	(5.1, 17.4)	(25.1, 30.5)

(continued)

## Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	(0.2, 1.1)	(0.3, 4.7)	(0.5, 4.7)	(0.2, 1.1)
Disagree	(2.6, 4.8)	(2.2, 9.3)	(1.8, 10.7)	(2.6, 4.8)
Neither Agree nor Disagree	(16.5, 21.2)	(17.3, 32.7)	(12.7, 30.0)	(16.4, 21.1)
Agree	(42.7, 48.6)	(45.8, 62.8)	(49.9, 70.1)	(42.4, 48.4)
Strongly Agree	(2.7, 5.0)	(2.3, 10.1)	(1.5, 9.7)	(2.7, 5.0)
<i>Legitimately Skipped Question</i>	(25.3, 30.8)	(6.4, 17.6)	(5.2, 17.5)	(25.6, 31.1)
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	(0.2, 1.0)	(0.1, 3.6)	(0.2, 3.9)	(0.2, 1.1)
Disagree	(1.1, 2.6)	(0.6, 5.6)	(0.8, 8.9)	(1.1, 2.7)
Neither Agree nor Disagree	(17.5, 22.3)	(12.0, 26.0)	(11.0, 28.1)	(17.5, 22.4)
Agree	(42.4, 48.4)	(51.9, 69.0)	(54.8, 74.6)	(42.1, 48.1)
Strongly Agree	(3.5, 6.1)	(4.3, 13.7)	(1.2, 7.6)	(3.5, 6.1)
<i>Legitimately Skipped Question</i>	(25.4, 30.9)	(6.6, 18.2)	(5.2, 17.7)	(25.7, 31.2)
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	(0.2, 1.0)	(0.1, 3.5)	(0.2, 3.9)	(0.2, 1.0)
Disagree	(2.3, 4.4)	(3.8, 11.8)	(1.0, 8.3)	(2.3, 4.4)
Neither Agree nor Disagree	(24.0, 29.4)	(19.2, 34.7)	(18.8, 37.9)	(24.0, 29.4)
Agree	(35.0, 40.8)	(39.1, 56.6)	(43.5, 64.4)	(34.8, 40.6)
Strongly Agree	(2.8, 5.2)	(4.3, 13.7)	(1.9, 11.6)	(2.8, 5.2)
<i>Legitimately Skipped Question</i>	(25.4, 30.8)	(6.5, 17.9)	(5.2, 17.8)	(25.6, 31.2)

(continued)

**Exhibit B-7b. Results from the Fire Department Survey, Confidence Interval Estimates by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	(54.4, 60.4)	(56.8, 73.3)	(58.8, 78.8)	(54.2, 60.2)
Respirator maintenance program guide	(11.9, 15.9)	(17.5, 32.4)	(9.9, 25.4)	(11.8, 15.8)
CDs of firefighter program materials	(25.4, 30.7)	(31.3, 47.3)	(28.9, 49.2)	(25.2, 30.6)
Alerts	(29.1, 34.5)	(40.0, 57.2)	(31.1, 51.3)	(28.8, 34.3)
Hazard IDs	(14.5, 19.0)	(12.4, 25.1)	(15.7, 33.5)	(14.4, 18.9)
Workplace Solutions	(10.7, 14.6)	(9.7, 21.7)	(12.2, 28.4)	(10.6, 14.5)
Other	(0.4, 1.4)	(0.3, 4.3)	(**, **)	(0.4, 1.4)
None. I have not seen any NIOSH materials.	(22.6, 27.9)	(7.6, 19.2)	(6.7, 22.7)	(22.8, 28.2)
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	(0.8, 2.2)	(0.4, 5.9)	(0.3, 6.2)	(0.8, 2.2)
Dissatisfied	(0.0, 0.7)	(0.1, 3.8)	(**, **)	(0.0, 0.8)
Neither satisfied nor dissatisfied	(18.8, 23.8)	(11.4, 25.1)	(9.5, 27.0)	(18.9, 23.9)
Satisfied	(44.1, 50.1)	(51.1, 67.8)	(50.3, 71.4)	(43.9, 49.9)
Very satisfied	(4.0, 6.7)	(5.6, 15.7)	(3.7, 16.3)	(4.0, 6.6)
<i>Legitimately Skipped Question</i>	(22.4, 27.7)	(7.0, 18.3)	(6.8, 22.8)	(22.6, 28.0)
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	(56.5, 62.2)	(22.4, 37.9)	(32.5, 52.9)	(56.9, 62.6)
No	(31.9, 37.3)	(50.2, 67.0)	(40.4, 60.6)	(31.5, 37.0)
Yes, longer than one year ago	(4.9, 7.6)	(7.0, 18.5)	(2.9, 16.6)	(4.8, 7.6)

Note: Traumatic includes those fatalities considered both "Traumatic" and "Cardiovascular."

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.



**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>1. Does your department have a Safety Officer?</b>	1,587	146	112	1,329
	1,587	146	112	1,329
<b>2. Does your department have a Training Officer?</b>				
Yes	1,600	146	111	1,343
No	1,600	146	111	1,343
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Yes				
No				
Incident Command Systems	1,600	144	113	1,343
Maintenance of SCBAs	1,600	144	113	1,343
Motor vehicle safety	1,600	144	113	1,343
Participation in a personal physical fitness program	1,600	144	113	1,343
Participation in regular health screenings for cardiovascular disease (CVD)	1,600	144	113	1,343
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	1,600	144	113	1,343
Use of Personal Alert Safety System (PASS) devices	1,600	144	113	1,343
Use of personal protective equipment and protective clothing	1,600	144	113	1,343
Use of radio communications	1,600	144	113	1,343
	1,600	144	113	1,343
Does not apply. Our fire department does not use SOPs/SOGs.	1,600	144	113	1,343

Other

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required?</b>				
<b>4a. Fighting structure fires</b>				
No Training	1,607	145	113	1,349
Optional Training	1,607	145	113	1,349
Required Training	1,607	145	113	1,349
<b>4b. Driving safety</b>				
No Training	1,598	144	113	1,341
Optional Training	1,598	144	113	1,341
Required Training	1,598	144	113	1,341
<b>4c. Incident Command systems</b>				
No Training	1,584	144	111	1,329
Optional Training	1,584	144	111	1,329
Required Training	1,584	144	111	1,329
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	1,581	143	111	1,327
Optional Training	1,581	143	111	1,327
Required Training	1,581	143	111	1,327
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	1,511	141	104	1,266
Optional Training	1,511	141	104	1,266
Required Training	1,511	141	104	1,266

(continued)

Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1,611	146	113	1,352
Optional Training	1,611	146	113	1,352
Required Training	1,611	146	113	1,352
<b>4g. Use of radio communication devices</b>				
No Training	1,606	146	112	1,348
Optional Training	1,606	146	112	1,348
Required Training	1,606	146	112	1,348
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	1,611	145	113	1,353
Other officers within our department	1,611	145	113	1,353
State fire training agency	1,611	145	113	1,353
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	1,611	145	113	1,353
Conferences or regional meetings	1,611	145	113	1,353
	1,611	145	113	1,353
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Other				
Roadside incidents/Motor Vehicle Accidents (MVA)	1,622	147	115	1,360
Scuba diving	1,622	147	115	1,360
Swift water rescue	1,622	147	115	1,360
Wildland fire fighting	1,622	147	115	1,360
HAZMAT	1,622	147	115	1,360
	1,622	147	115	1,360

(continued)

Other

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	1,610	145	114	1,351
Not very familiar	1,610	145	114	1,351
Somewhat familiar	1,610	145	114	1,351
Very familiar	1,610	145	114	1,351
<b>9. How familiar are you with NIOSH’s Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	1,611	146	113	1,352
Not very familiar	1,611	146	113	1,352
Somewhat familiar	1,611	146	113	1,352
Very familiar	1,611	146	113	1,352
<b>10. How does your department receive information about NIOSH’s firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	1,609	146	114	1,349
National conference presentations	1,609	146	114	1,349
State-level conference presentations	1,609	146	114	1,349
Other firefighters or departments	1,609	146	114	1,349
At seminars or other training opportunities (not conferences)	1,609	146	114	1,349
Trade publications (such as Firehouse and Fire Engineering)	1,609	146	114	1,349
NIOSH website	1,609	146	114	1,349
Links from other websites (such as NFPA and Firehouse)	1,609	146	114	1,349
Media reports—newspaper, television, radio	1,609	146	114	1,349
Does not apply. We have not received information about NIOSH recommendations.	1,609	146	114	1,349
Other				

(continued)

Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	1,536	140	108	1,288
Developed new SOPs/SOGs	1,536	140	108	1,288
Made changes to SOPs/SOGs	1,536	140	108	1,288
Justified current budget/staffing	1,536	140	108	1,288
Made new budget/staffing requests	1,536	140	108	1,288
Justified grant applications	1,536	140	108	1,288
Does not apply. We have not used NIOSH recommendations.	1,536	140	108	1,288
<i>Legitimately Skipped Question</i>	1,536	140	108	1,288
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	1,530	139	107	1,284
Personal protective equipment and clothing	1,530	139	107	1,284
	1,530	139	107	1,284
PASS systems	1,530	139	107	1,284
SCBA Incident Command systems	1,530	139	107	1,284
Radio communications	1,530	139	107	1,284
Physical fitness and cardiovascular disease (CVD)	1,530	139	107	1,284
Building code compliance (e.g., warning against the use of wooden trusses)	1,530	139	107	1,284
	1,530	139	107	1,284
Does not apply. We have not used NIOSH recommendations for training purposes.	1,530	139	107	1,284
Other	1,530	139	107	1,284
<i>Legitimately Skipped Question</i>	1,530	139	107	1,284

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	1,596	144	111	1,341
No Yes, it's optional	1,596	144	111	1,341
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	1,582	143	112	1,327
Less frequently than once a year	1,582	143	112	1,327
One time a year	1,582	143	112	1,327
More than one time a year	1,582	143	112	1,327
Does not apply. Firefighters are not required to receive CVD screenings	1,582	143	112	1,327
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	1,616	147	113	1,356
Yes, they receive training required by the department	1,616	147	113	1,356
Yes, they receive training required by the state	1,616	147	113	1,356
Yes, they receive optional training	1,616	147	113	1,356
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	1,611	147	111	1,353
Once every year	1,611	147	111	1,353
Less frequently than once a year	1,611	147	111	1,353
Does not apply. Firefighters are not required to receive continuing driver training.	1,611	147	111	1,353

(continued)

Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>	1,613	147	112	1,354
	1,613	147	112	1,354
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
No				
Strongly disagree	1,603	145	111	1,347
Disagree	1,603	145	111	1,347
Neither agree nor disagree	1,603	145	111	1,347
Agree	1,603	145	111	1,347
Strongly agree	1,603	145	111	1,347
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	1,616	147	114	1,355
Never	1,616	147	114	1,355
About half the time	1,616	147	114	1,355
Most of the time	1,616	147	114	1,355
	1,616	147	114	1,355
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Always	1,604	145	114	1,345
Rarely	1,604	145	114	1,345
Never	1,604	145	114	1,345
About half the time	1,604	145	114	1,345
Most of the time	1,604	145	114	1,345
	1,604	145	114	1,345

(continued)

Always

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	1,600	144	112	1,344
Not enough firefighters available at the scene of the fire	1,600	144	112	1,344
Does not apply. My department always assigns an Incident Commander for structure fires.	1,600	144	112	1,344
Other <i>Legitimately Skipped Question</i>	1,600	144	112	1,344
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	1,588	144	113	1,331
Develop and coordinate the fire attack strategy	1,588	144	113	1,331
Develop and initiate a risk management plan	1,588	144	113	1,331
Document all assessments, plans and events related to the fire	1,588	144	113	1,331
Ensure that at least four (4) firefighters are on the scene before entering the building	1,588	144	113	1,331
Establish a collapse zone around the building	1,588	144	113	1,331
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	1,588	144	113	1,331
Identify and implement a communication strategy	1,588	144	113	1,331
Monitor location of all firefighters at the scene	1,588	144	113	1,331

(continued)

Other



Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	1,605	144	114	1,347
Some of the time	1,605	144	114	1,347
About half the time	1,605	144	114	1,347
Most of the time	1,605	144	114	1,347
	1,605	144	114	1,347
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Always Fires are not big enough to require an Incident Safety Officer	1,588	143	113	1,332
Not enough firefighters are available at the scene of the fire	1,588	143	113	1,332
	1,588	143	113	1,332
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	1,588	143	113	1,332
Other <i>Legitimately Skipped Question</i>	1,588	143	113	1,332
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Never	1,602	142	113	1,347
Some of the time	1,602	142	113	1,347
About half the time	1,602	142	113	1,347
Most of the time	1,602	142	113	1,347
	1,602	142	113	1,347
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
Always When the building has more than one story/floor	1,600	143	111	1,346
When there are enough firefighters on and at the scene of the fire	1,600	143	111	1,346
Whenever firefighters enter a burning building	1,600	143	111	1,346
	1,600	143	111	1,346
<i>Legitimately Skipped Question</i>	1,600	143	111	1,346

Other

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	1,575	141	112	1,322
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	1,575	141	112	1,322
We don't have enough firefighters available at the scene of the fire	1,575	141	112	1,322
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	1,575	141	112	1,322
We have never established an RIT/RIC	1,575	141	112	1,322
We use other fire departments in the area for RITs/RICs	1,575	141	112	1,322
We use other safety practices and so we don't need them	1,575	141	112	1,322
<i>Legitimately Skipped Question</i>	1,575	141	112	1,322
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	1,606	144	113	1,349
	1,606	144	113	1,349
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No	1,600	143	112	1,345
Some of the time	1,600	143	112	1,345
Never	1,600	143	112	1,345
About half the time	1,600	143	112	1,345
Most of the time	1,600	143	112	1,345
Always	1,600	143	112	1,345

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	1,590	141	112	1,337
Situation doesn't require them	1,590	141	112	1,337
Firefighters think the devices do not always work reliably	1,590	141	112	1,337
Firefighters don't think they need them	1,590	141	112	1,337
Devices go off while firefighters are resting	1,590	141	112	1,337
<i>Legitimately Skipped Question</i>	1,590	141	112	1,337
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	1,606	144	113	1,349
	1,606	144	113	1,349
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No				
	1,521	137	103	1,281
	1,521	137	103	1,281
Yes <i>Legitimately Skipped Question</i>	1,521	137	103	1,281
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	1,517	136	101	1,280
Firefighters don't like using the equipment	1,517	136	101	1,280
Have never needed them (e.g., we don't do interior attacks)	1,517	136	101	1,280
They cost too much, there is not enough money in the budget	1,517	136	101	1,280
We don't have enough equipment for all of our firefighters	1,517	136	101	1,280
Shared systems work fine for our needs	1,517	136	101	1,280
	1,517	136	101	1,280
<i>Legitimately Skipped Question</i>	1,517	136	101	1,280

Other

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Never	1,536	140	105	1,291
Some of the time	1,536	140	105	1,291
About half the time	1,536	140	105	1,291
Most of the time	1,536	140	105	1,291
	1,536	140	105	1,291
<i>Legitimately Skipped Question</i>	1,536	140	105	1,291
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	1,525	140	106	1,279
Firefighters do not trust that the SCBAs will work reliably	1,525	140	106	1,279
Firefighters don't think they need them	1,525	140	106	1,279
Firefighters don't like sharing facepieces with others	1,525	140	106	1,279
Firefighters are concerned that the SCBA may be or become contaminated	1,525	140	106	1,279
Wearing SCBAs makes it more difficult to work	1,525	140	106	1,279
Firefighters don't have SCBAs to use	1,525	140	106	1,279
<i>Legitimately Skipped Question</i>	1,525	140	106	1,279
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	1,270	120	87	1,063
Once a month or more	1,270	120	87	1,063
Several times a year	1,270	120	87	1,063
Once a year	1,270	120	87	1,063
Less than once a year	1,270	120	87	1,063
Never. Maintenance has not been done on our SCBAs.	1,270	120	87	1,063
Does not apply. My department does not have SCBAs.	1,270	120	87	1,063
<i>Legitimately Skipped Question</i>	1,270	120	87	1,063

(continued)

Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	1,518	137	110	1,271
	1,518	137	110	1,271
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero				
CBRN SCBA devices are not needed in our department	1,454	125	108	1,221
We didn't know they were available	1,454	125	108	1,221
We don't have adequate technical information to purchase them	1,454	125	108	1,221
We don't have adequate funding to purchase them	1,454	125	108	1,221
	1,454	125	108	1,221
<i>Legitimately Skipped Question</i>	1,454	125	108	1,221
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> Yes	1,610	147	113	1,350
	1,610	147	113	1,350
<b>38a. At your fire department, where do you have AEDs?</b> No				
At the fire station(s)	1,424	129	94	1,201
On the emergency vehicles (or apparatus)	1,424	129	94	1,201
Both at the fire station(s) and on the vehicles (or apparatus)	1,424	129	94	1,201
<i>Legitimately Skipped Question</i>	1,424	129	94	1,201
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b> After every time they are used	1,235	115	97	1,023
Once a month or more	1,235	115	97	1,023
Several times a year	1,235	115	97	1,023
Once a year	1,235	115	97	1,023
Less frequently than once a year	1,235	115	97	1,023
Never. Maintenance on our AEDs has not been done.	1,235	115	97	1,023

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	1,610	144	114	1,352
Never About half the time	1,610	144	114	1,352
Most of the time	1,610	144	114	1,352
	1,610	144	114	1,352
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Always	1,612	147	115	1,350
Some of the time	1,612	147	115	1,350
Never About half the time	1,612	147	115	1,350
Most of the time	1,612	147	115	1,350
	1,612	147	115	1,350
<b>42. How would you rate your department's budget in the following areas?</b>				
Always				
<b>42a. Equipment</b>				
Not adequate	1,608	145	115	1,348
Adequate	1,608	145	115	1,348
More than adequate	1,608	145	115	1,348

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>42b. Training</b>				
Not adequate	1,608	145	115	1,348
Adequate	1,608	145	115	1,348
More than adequate	1,608	145	115	1,348
<b>42c. Personnel</b>				
Not adequate	1,551	140	114	1,297
Adequate	1,551	140	114	1,297
More than adequate	1,551	140	114	1,297
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
	1,605	145	114	1,346
One or two times per year	1,605	145	114	1,346
Never Several times per year	1,605	145	114	1,346
Once a month or more	1,605	145	114	1,346
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	1,605	146	114	1,345
On the Internet	1,605	146	114	1,345
From colleagues in other departments	1,605	146	114	1,345
At conferences or other meetings	1,605	146	114	1,345
<i>Legitimately Skipped Question</i>	1,605	146	114	1,345
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	1,611	147	113	1,351
	1,611	147	113	1,351
<i>Legitimately Skipped Question</i>	1,611	147	113	1,351

No

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
	1,583	143	113	1,327
	1,583	143	113	1,327
Yes <i>Legitimately Skipped Question</i>	1,583	143	113	1,327
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	1,585	144	112	1,329
Training sessions	1,585	144	112	1,329
Provide copies of NIOSH reports to firefighters	1,585	144	112	1,329
Provide copies of NIOSH report summaries to firefighters	1,585	144	112	1,329
Provide summaries prepared by department to firefighters	1,585	144	112	1,329
Postings on bulletin boards	1,585	144	112	1,329
Post report on the department website	1,585	144	112	1,329
Send message to firefighters by email	1,585	144	112	1,329
	1,585	144	112	1,329
<i>Legitimately Skipped Question</i>	1,585	144	112	1,329
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
	1,564	142	110	1,312
	1,564	142	110	1,312
Yes <i>Legitimately Skipped Question</i>	1,564	142	110	1,312

No

(continued)



Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	1,547	142	111	1,294
Disagree	1,547	142	111	1,294
Neither Agree nor Disagree	1,547	142	111	1,294
Agree	1,547	142	111	1,294
Strongly Agree	1,547	142	111	1,294
<i>Legitimately Skipped Question</i>	1,547	142	111	1,294
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	1,537	138	110	1,289
Disagree	1,537	138	110	1,289
Neither Agree nor Disagree	1,537	138	110	1,289
Agree	1,537	138	110	1,289
Strongly Agree	1,537	138	110	1,289
<i>Legitimately Skipped Question</i>	1,537	138	110	1,289
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	1,537	139	109	1,289
Disagree	1,537	139	109	1,289
Neither Agree nor Disagree	1,537	139	109	1,289
Agree	1,537	139	109	1,289
Strongly Agree	1,537	139	109	1,289
<i>Legitimately Skipped Question</i>	1,537	139	109	1,289

(continued)

**Exhibit B-7c. Results from the Fire Department Survey, Sample Sizes by Type of Fatality (continued)**

Question	Type of Fatality			
	Total	Traumatic	Cardiovascular	No Fatality
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	1,537	142	109	1,286
Respirator maintenance program guide	1,537	142	109	1,286
CDs of firefighter program materials	1,537	142	109	1,286
Alerts	1,537	142	109	1,286
Hazard IDs	1,537	142	109	1,286
Workplace Solutions	1,537	142	109	1,286
	1,537	142	109	1,286
None. I have not seen any NIOSH materials.	1,537	142	109	1,286
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1,536	144	107	1,285
Dissatisfied	1,536	144	107	1,285
Neither satisfied nor dissatisfied	1,536	144	107	1,285
Satisfied	1,536	144	107	1,285
Very satisfied	1,536	144	107	1,285
<i>Legitimately Skipped Question</i>	1,536	144	107	1,285
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
	1,589	145	113	1,331
Yes, in the last year	1,589	145	113	1,331
No Yes, longer than one year ago	1,589	145	113	1,331

Note: Traumatic includes those fatalities considered both "Traumatic" and "Cardiovascular."

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

Exhibit B-8a. Results from the Fire Department Survey, Percent Estimates from Main Study and Nonresponse Follow-up Study

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>1. Does your department have a Safety Officer?</b>	70.3 29.7	80.2 19.8	71.0 29.0	0.8 -0.8
<b>Yes</b> <b>What kind of a position does your Safety Officer have within your department?</b>				
No				
Full-time paid position	8.3	11.4 <sup>[+]</sup>	8.6	0.2
Part-time paid position	2.1	1.3 <sup>[+]</sup>	2.0	-0.1
Volunteer position	56.6	62.3	57.1	0.4
<i>Legitimate Skip</i>	3.0 29.9	5.2 19.8	3.2 29.1	0.2 -0.8
<b>Other</b> <b>How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	20.8	16.5	20.5	-0.3
Not very familiar	33.5	24.1	32.8	-0.7
Somewhat familiar	37.9 <sup>[2]</sup>	56.3 <sup>[1,3]</sup>	39.3 <sup>[2]</sup>	1.4
Very familiar	7.8 <sup>[2,3]</sup>	3.2 <sup>[1,3]</sup>	7.5 <sup>[1,2]</sup>	-0.3
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	40.2	46.0	40.6	0.4
Developed new SOPs/SOGs	26.3	36.3	27.1	0.8
Made changes to SOPs/SOGs	34.9	43.1	35.5	0.6
Justified current budget/staffing	5.0	10.8	5.5	0.4
Made new budget/staffing requests	5.5 <sup>[2,3]</sup>	31.6 <sup>[1,3]</sup>	7.5 <sup>[1,2]</sup>	2.0
Justified grant applications	15.5 <sup>[2,3]</sup>	37.2 <sup>[1,3]</sup>	17.2 <sup>[1,2]</sup>	1.7
Does not apply. We have not used NIOSH recommendations.	30.1	35.6	30.5	0.4

(continued)

**Exhibit B-8a. Results from the Fire Department Survey, Percent Estimates from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	29.3	31.5	29.5	0.2
Personal protective equipment and clothing	41.6	30.5	40.7	-0.9
SCBA	40.1	39.2	40.0	-0.1
PASS systems	32.6	47.6	33.8	1.1
Incident Command systems	32.1	30.9	32.0	-0.1
Radio communications	23.0	26.7	23.3	0.3
Physical fitness and cardiovascular disease (CVD)	8.5	12.5	8.8	0.3
Building code compliance (e.g., warning against the use of wooden trusses)	6.9 <sup>[2]</sup>	27.0 <sup>[1,3]</sup>	8.5 <sup>[2]</sup>	1.5
Does not apply. We have not used NIOSH recommendations for training purposes.	2.3	5.3 <sup>[+]</sup>	2.6	0.2
Other	1.9	4.9 <sup>[+]</sup>	2.1	0.2
<i>Legitimate Skip</i>	41.9	36.0	41.4	-0.4
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	20.3	15.0	0.4
Less frequently than once a year	7.1 <sup>[2,3]</sup>	20.5 <sup>[1,3]</sup>	8.1 <sup>[1,2]</sup>	1.0
One time a year	17.1	27.2	17.9	0.8
More than one time a year	0.3	7.6 <sup>[+]</sup>	0.8 <sup>[+]</sup>	0.6
Does not apply. Firefighters are not required to receive CVD screenings	60.9 <sup>[2,3]</sup>	24.4 <sup>[1,3]</sup>	58.2 <sup>[1,2]</sup>	-2.8
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Always	5.4	6.0 <sup>[+]</sup>	5.4	0.0
Some of the time	22.7	16.4	22.3	-0.5
Never	17.0	11.2 <sup>[+]</sup>	16.6	-0.4
About half the time	38.4 <sup>[2,3]</sup>	18.1 <sup>[1,3]</sup>	36.9 <sup>[1,2]</sup>	-1.5
Most of the time	16.5 <sup>[2,3]</sup>	48.4 <sup>[1,3]</sup>	18.8 <sup>[1,2]</sup>	2.3

(continued)

**Exhibit B-8a. Results from the Fire Department Survey, Percent Estimates from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Rarely	2.3 <sup>[2,3]</sup>	0.5 <sup>[1,3,+]</sup>	2.2 <sup>[1,2]</sup>	-0.1
Never	6.8	3.6 <sup>[+]</sup>	6.5	-0.2
About half the time	6.7	9.1 <sup>[+]</sup>	6.9	0.2
Most of the time	27.6 <sup>[2,3]</sup>	9.4 <sup>[1,3]</sup>	26.3 <sup>[1,2]</sup>	-1.3
	56.6 <sup>[2,3]</sup>	77.5 <sup>[1,3]</sup>	58.1 <sup>[1,2]</sup>	1.5
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Always				
Never	13.3	9.3	13.0	-0.3
Some of the time	26.5 <sup>[2,3]</sup>	11.4 <sup>[1,3]</sup>	25.4 <sup>[1,2]</sup>	-1.1
About half the time	8.1 <sup>[2,3]</sup>	3.0 <sup>[1,3,+]</sup>	7.7 <sup>[1,2]</sup>	-0.4
Most of the time	29.8	29.7	29.8	-0.0
Always	22.3 <sup>[2,3]</sup>	46.6 <sup>[1,3]</sup>	24.1 <sup>[1,2]</sup>	1.8
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
No	99.2	97.2	99.1	-0.2
	0.8	2.8 <sup>[+]</sup>	0.9	0.2
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	49.7	37.7	48.8	-0.9
Yes	49.5	59.5	50.3	0.8
<i>Legitimate Skip</i>	0.8	2.8 <sup>[+]</sup>	1.0	0.2
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes	53.3	51.1	53.2	-0.2
No	20.0 <sup>[2,3]</sup>	48.9 <sup>[1,3]</sup>	22.2 <sup>[1,2]</sup>	2.1
<i>Legitimate Skip</i>	26.6 <sup>[2,3]</sup>	** <sup>[1,3]</sup>	24.7 <sup>[1,2]</sup>	-2.0

(continued)

**Exhibit B-8a. Results from the Fire Department Survey, Percent Estimates from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>47. Overall, how would you rate the amount of detail in the NIOSH reports?</b>				
Tool little detail	2.2	4.5 <sup>[+]</sup>	2.3	0.2
About the right amount of detail	67.5 <sup>[2,3]</sup>	42.9 <sup>[1,3]</sup>	65.7 <sup>[1,2]</sup>	-1.8
Too much detail	2.8	2.5 <sup>[+]</sup>	2.8	-0.0
<i>Legitimate Skip</i>	27.5 <sup>[2,3]</sup>	50.0 <sup>[1,3]</sup>	29.2 <sup>[1,2]</sup>	1.7
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
No	60.7	45.4	59.5	-1.1
Yes	12.1 <sup>[2]</sup>	4.5 <sup>[1,3,+]</sup>	11.5 <sup>[2]</sup>	-0.6
<i>Legitimate Skip</i>	27.3 <sup>[2,3]</sup>	50.0 <sup>[1,3]</sup>	29.0 <sup>[1,2]</sup>	1.7
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	23.5	16.5	23.0	-0.5
Training sessions	44.2	30.3	43.2	-1.0
Provide copies of NIOSH reports to firefighters	16.2	13.6 <sup>[+]</sup>	16.0	-0.2
Provide copies of NIOSH report summaries to firefighters	6.2	11.5 <sup>[+]</sup>	6.6	0.4
Provide summaries prepared by department to firefighters	1.8	9.5 <sup>[+]</sup>	2.4	0.6
Postings on bulletin boards	38.5	32.7	38.0	-0.4
Post report on the department website	1.1	0.8 <sup>[+]</sup>	1.1	-0.0
Send message to firefighters by email	5.3	4.3	5.2	-0.1
Other	1.3	15.7	2.3	1.1
<i>Legitimate Skip</i>	39.1	54.6	40.2	1.1

(continued)

**Exhibit B-8a. Results from the Fire Department Survey, Percent Estimates from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	0.5 <sup>[2,3]</sup>	** <sup>[1,3]</sup>	0.4 <sup>[1,2]</sup>	-0.0
Disagree	3.6	3.7 <sup>[+]</sup>	3.6	0.0
Neither Agree nor Disagree	18.7 <sup>[2,3]</sup>	4.0 <sup>[1,3,+]</sup>	17.6 <sup>[1,2]</sup>	-1.1
Agree	45.6 <sup>[2,3]</sup>	26.0 <sup>[1,3]</sup>	44.1 <sup>[1,2]</sup>	-1.5
Strongly Agree	3.7	16.3	4.6	1.0
<i>Legitimate Skip</i>	28.0 <sup>[2,3]</sup>	50.0 <sup>[1,3]</sup>	29.6 <sup>[1,2]</sup>	1.7
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	0.4 <sup>[2,3]</sup>	** <sup>[1,3]</sup>	0.4 <sup>[1,2]</sup>	-0.0
Disagree	1.7 <sup>[2,3]</sup>	** <sup>[1,3]</sup>	1.6 <sup>[1,2]</sup>	-0.1
Neither Agree nor Disagree	19.8 <sup>[2,3]</sup>	7.5 <sup>[1,3,+]</sup>	18.9 <sup>[1,2]</sup>	-0.9
Agree	45.4 <sup>[2,3]</sup>	28.3 <sup>[1,3]</sup>	44.1 <sup>[1,2]</sup>	-1.3
Strongly Agree	4.6	14.1 <sup>[+]</sup>	5.4	0.7
<i>Legitimate Skip</i>	28.1 <sup>[2,3]</sup>	50.0 <sup>[1,3]</sup>	29.7 <sup>[1,2]</sup>	1.7
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	0.4 <sup>[2,3]</sup>	** <sup>[1,3]</sup>	0.4 <sup>[1,2]</sup>	-0.0
Disagree	3.2	12.8 <sup>[+]</sup>	3.9	0.7
Neither Agree nor Disagree	26.6 <sup>[2]</sup>	14.0 <sup>[1,3]</sup>	25.7 <sup>[2]</sup>	-1.0
Agree	37.9 <sup>[2,3]</sup>	14.2 <sup>[1,3]</sup>	36.1 <sup>[1,2]</sup>	-1.8
Strongly Agree	3.8	8.9 <sup>[+]</sup>	4.2	0.4
<i>Legitimate Skip</i>	28.0 <sup>[2,3]</sup>	50.0 <sup>[1,3]</sup>	29.7 <sup>[1,2]</sup>	1.7

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-8b. Results from the Fire Department Survey, Confidence Interval Estimates from Main Study and Nonresponse Follow-up Study**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>1. Does your department have a Safety Officer?</b>	(67.5, 72.9) (27.1, 32.5)	(65.0, 89.9) (10.1, 35.0)	(68.2, 73.7) (26.3, 31.8)	(-0.3, 1.8) (-1.8, 0.3)
<b>10. What kind of a position does your Safety Officer have within your department?</b>				
Yes				
No				
Full-time paid position	(7.3, 9.5)	(3.9, 28.8)	(7.3, 10.0)	(-0.7, 1.1)
Part-time paid position	(1.5, 3.0)	(0.4, 3.6)	(1.4, 2.9)	(-0.2, 0.1)
Volunteer position	(53.8, 59.4)	(45.4, 76.6)	(54.2, 59.9)	(-0.8, 1.7)
Other	(2.3, 4.0)	(2.2, 11.8)	(2.5, 4.2)	(-0.2, 0.5)
<i>Legitimate Skip</i>	(27.2, 32.7)	(10.1, 35.0)	(26.5, 31.9)	(-1.8, 0.3)
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	(18.4, 23.3)	(8.1, 30.5)	(18.1, 23.0)	(-1.2, 0.5)
Not very familiar	(30.8, 36.4)	(13.2, 39.8)	(30.1, 35.7)	(-1.8, 0.4)
Somewhat familiar	(35.1, 40.7)	(39.5, 71.7)	(36.3, 42.3)	(-0.1, 2.8)
Very familiar	(6.5, 9.4)	(1.5, 6.8)	(6.2, 8.9)	(-0.6, -0.1)
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	(37.3, 43.1)	(29.4, 63.4)	(37.7, 43.6)	(-1.0, 1.8)
Developed new SOPs/SOGs	(23.8, 29.0)	(21.1, 54.7)	(24.4, 29.9)	(-0.6, 2.2)
Made changes to SOPs/SOGs	(32.2, 37.7)	(26.8, 61.0)	(32.7, 38.5)	(-0.8, 2.1)
Justified current budget/staffing	(4.0, 6.3)	(4.9, 21.9)	(4.4, 6.9)	(-0.2, 1.1)
Made new budget/staffing requests	(4.4, 6.8)	(16.9, 51.2)	(5.7, 9.7)	(0.4, 3.6)
Justified grant applications	(13.5, 17.8)	(21.7, 55.9)	(14.9, 19.9)	(0.1, 3.2)
Does not apply. We have not used NIOSH recommendations.	(27.3, 32.9)	(21.0, 53.6)	(27.7, 33.5)	(-0.9, 1.8)

(continued)



**Exhibit B-8b. Results from the Fire Department Survey, Confidence Interval Estimates from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	(26.7, 32.1)	(17.2, 50.4)	(26.7, 32.4)	(-1.2, 1.5)
Personal protective equipment and clothing	(38.7, 44.5)	(17.0, 48.3)	(37.8, 43.7)	(-2.1, 0.4)
SCBA	(37.2, 43.0)	(23.8, 57.2)	(37.1, 43.0)	(-1.4, 1.3)
PASS systems	(29.9, 35.5)	(30.7, 65.0)	(30.9, 36.8)	(-0.3, 2.6)
Incident Command systems	(29.4, 34.9)	(17.3, 49.0)	(29.2, 34.9)	(-1.4, 1.2)
Radio communications	(20.7, 25.6)	(14.2, 44.6)	(20.9, 26.0)	(-0.9, 1.5)
Physical fitness and cardiovascular disease (CVD)	(7.1, 10.2)	(4.6, 29.9)	(7.3, 10.7)	(-0.6, 1.2)
Building code compliance (e.g., warning against the use of wooden trusses)	(5.6, 8.5)	(13.0, 47.9)	(6.6, 10.8)	(-0.0, 3.1)
Other	(1.6, 3.4)	(1.3, 19.0)	(1.7, 3.7)	(-0.3, 0.8)
Does not apply. We have not used NIOSH recommendations for training purposes.	(1.3, 2.9)	(1.1, 19.4)	(1.4, 3.3)	(-0.3, 0.8)
<i>Legitimate Skip</i>	(38.9, 44.8)	(21.2, 54.1)	(38.4, 44.4)	(-1.8, 0.9)
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	(12.7, 16.6)	(9.3, 38.7)	(13.0, 17.2)	(-0.7, 1.6)
Less frequently than once a year	(5.8, 8.6)	(10.5, 36.2)	(6.6, 9.9)	(0.0, 2.0)
One time a year	(15.2, 19.3)	(15.1, 44.0)	(15.8, 20.2)	(-0.4, 1.9)
More than one time a year	(0.1, 0.7)	(1.6, 30.0)	(0.3, 2.6)	(-0.4, 1.5)
Does not apply. Firefighters are not required to receive CVD screenings	(58.3, 63.5)	(12.2, 42.8)	(55.3, 61.0)	(-4.2, -1.3)
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Never	(4.2, 6.9)	(1.5, 21.3)	(4.2, 7.0)	(-0.6, 0.6)
Some of the time	(20.3, 25.3)	(7.9, 31.0)	(19.9, 24.8)	(-1.3, 0.4)
About half the time	(14.8, 19.4)	(3.8, 28.7)	(14.4, 18.9)	(-1.3, 0.4)
Most of the time	(35.6, 41.3)	(9.8, 30.9)	(34.1, 39.8)	(-2.5, -0.4)
Always	(14.6, 18.7)	(31.4, 65.8)	(16.4, 21.5)	(0.6, 4.0)

(continued)

**Exhibit B-8b. Results from the Fire Department Survey, Confidence Interval Estimates from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Never	(1.5, 3.5)	(0.1, 3.5)	(1.4, 3.3)	(-0.2, -0.0)
Rarely	(5.4, 8.5)	(0.8, 14.3)	(5.2, 8.2)	(-0.6, 0.2)
About half the time	(5.3, 8.4)	(3.3, 23.0)	(5.5, 8.6)	(-0.5, 0.8)
Most of the time	(25.0, 30.4)	(3.5, 22.7)	(23.8, 29.0)	(-2.2, -0.5)
Always	(53.7, 59.4)	(61.8, 88.0)	(55.1, 61.0)	(0.3, 2.7)
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	(11.4, 15.5)	(3.4, 23.0)	(11.1, 15.2)	(-1.0, 0.4)
Some of the time	(24.0, 29.2)	(4.9, 24.2)	(22.9, 28.0)	(-2.0, -0.3)
About half the time	(6.6, 9.9)	(0.9, 9.2)	(6.3, 9.4)	(-0.7, -0.0)
Most of the time	(27.2, 32.5)	(15.9, 48.6)	(27.1, 32.6)	(-1.3, 1.3)
Always	(19.9, 24.9)	(30.1, 63.8)	(21.5, 26.9)	(0.3, 3.3)
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	(98.4, 99.6)	(87.1, 99.4)	(98.2, 99.5)	(-0.5, 0.2)
	(0.4, 1.6)	(0.6, 12.9)	(0.5, 1.8)	(-0.2, 0.5)
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No				
	(46.7, 52.7)	(22.6, 55.6)	(45.7, 51.9)	(-2.3, 0.4)
	(46.5, 52.5)	(41.8, 75.0)	(47.2, 53.3)	(-0.6, 2.1)
Yes <i>Legitimate Skip</i>	(0.4, 1.6)	(0.6, 12.9)	(0.5, 1.9)	(-0.2, 0.5)
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
Yes				
	(50.4, 56.2)	(34.1, 67.7)	(50.2, 56.1)	(-1.5, 1.1)
	(17.8, 22.5)	(32.3, 65.9)	(19.7, 24.9)	(0.7, 3.6)
<i>Legitimate Skip</i>	(24.1, 29.4)	(**, **)	(22.2, 27.3)	(-2.7, -1.3)

No

(continued)

**Exhibit B-8b. Results from the Fire Department Survey, Confidence Interval Estimates from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>47. Overall, how would you rate the amount of detail in the NIOSH reports?</b>				
Tool little detail	(1.5, 3.2)	(0.9, 19.9)	(1.6, 3.5)	(-0.4, 0.7)
About the right amount of detail	(64.6, 70.3)	(26.6, 61.0)	(62.7, 68.6)	(-3.3, -0.4)
Too much detail	(2.0, 3.9)	(0.8, 8.1)	(2.0, 3.8)	(-0.3, 0.2)
<i>Legitimate Skip</i>	(24.9, 30.3)	(33.0, 67.1)	(26.4, 32.2)	(0.3, 3.1)
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	(57.7, 63.5)	(28.8, 63.1)	(56.5, 62.5)	(-2.5, 0.2)
<i>Legitimate Skip</i>	(10.2, 14.1)	(0.9, 19.6)	(9.7, 13.5)	(-1.1, 0.0)
Yes <i>Legitimate Skip</i>	(24.7, 30.1)	(33.0, 67.1)	(26.2, 31.9)	(0.3, 3.1)
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	(21.1, 26.1)	(6.4, 36.5)	(20.5, 25.7)	(-1.6, 0.6)
Training sessions	(41.3, 47.2)	(16.6, 48.8)	(40.2, 46.2)	(-2.3, 0.3)
Provide copies of NIOSH reports to firefighters	(14.2, 18.3)	(4.6, 34.0)	(14.0, 18.2)	(-1.2, 0.8)
Provide copies of NIOSH report summaries to firefighters	(5.0, 7.7)	(3.2, 33.8)	(5.1, 8.4)	(-0.7, 1.5)
Provide summaries prepared by department to firefighters	(1.2, 2.7)	(2.0, 34.7)	(1.4, 4.0)	(-0.5, 1.7)
Postings on bulletin boards	(35.6, 41.3)	(17.7, 52.2)	(35.1, 41.0)	(-1.7, 0.9)
Post report on the department website	(0.7, 1.8)	(0.1, 5.0)	(0.7, 1.8)	(-0.1, 0.1)
Send message to firefighters by email	(4.3, 6.5)	(2.1, 8.3)	(4.3, 6.4)	(-0.3, 0.2)
Other	(0.8, 2.0)	(5.7, 36.5)	(1.3, 4.1)	(-0.1, 2.3)
<i>Legitimate Skip</i>	(36.2, 42.0)	(36.9, 71.2)	(37.3, 43.3)	(-0.2, 2.5)

(continued)

**Exhibit B-8b. Results from the Fire Department Survey, Confidence Interval Estimates from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total	Bias
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	(0.2, 1.1)	(**, **)	(0.2, 1.0)	(-0.1, -0.0)
Disagree	(2.6, 4.8)	(0.5, 21.4)	(2.6, 4.9)	(-0.5, 0.5)
Neither Agree nor Disagree	(16.5, 21.2)	(0.7, 20.6)	(15.4, 20.0)	(-1.8, -0.4)
Agree	(42.7, 48.6)	(13.9, 43.3)	(41.2, 47.2)	(-2.8, -0.2)
Strongly Agree	(2.7, 5.0)	(6.0, 37.2)	(3.3, 6.6)	(-0.3, 2.2)
<i>Legitimate Skip</i>	(25.3, 30.8)	(33.0, 67.1)	(26.8, 32.6)	(0.2, 3.1)
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	(0.2, 1.0)	(**, **)	(0.2, 1.0)	(-0.1, -0.0)
Disagree	(1.1, 2.6)	(**, **)	(1.0, 2.4)	(-0.2, -0.1)
Neither Agree nor Disagree	(17.5, 22.3)	(1.9, 24.8)	(16.6, 21.3)	(-1.8, -0.1)
Agree	(42.4, 48.4)	(15.7, 45.5)	(41.1, 47.1)	(-2.6, -0.0)
Strongly Agree	(3.5, 6.1)	(4.6, 36.2)	(3.9, 7.3)	(-0.5, 1.9)
<i>Legitimate Skip</i>	(25.4, 30.9)	(33.0, 67.1)	(26.9, 32.7)	(0.2, 3.1)
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	(0.2, 1.0)	(**, **)	(0.2, 0.9)	(-0.1, -0.0)
Disagree	(2.3, 4.4)	(4.1, 33.5)	(2.7, 5.7)	(-0.4, 1.8)
Neither Agree nor Disagree	(24.0, 29.4)	(5.7, 30.4)	(23.1, 28.4)	(-2.0, 0.0)
Agree	(35.0, 40.8)	(7.5, 25.2)	(33.3, 39.0)	(-2.9, -0.7)
Strongly Agree	(2.8, 5.2)	(1.7, 35.2)	(2.9, 6.1)	(-0.7, 1.5)
<i>Legitimate Skip</i>	(25.4, 30.8)	(33.0, 67.1)	(26.9, 32.7)	(0.2, 3.1)

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey. Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**Exhibit B-8c. Results from the Fire Department Survey, Sample Sizes from Main Study and Nonresponse Follow-up Study**

Question	Main Study	Nonresponse Follow-up Study	Total
<b>1. Does your department have a Safety Officer?</b>	1,587	129	1,716
<b>Yes</b> No Full-time paid position Part-time paid position Volunteer position <i>Legitimate Skip</i>	1,587	129	1,716
<b>9</b> <b>How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b> Not at all familiar Not very familiar Somewhat familiar Very familiar	1,572	127	1,699
<b>0</b> <b>How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>	1,572	127	1,699
Not at all familiar	1,572	127	1,699
Not very familiar	1,572	127	1,699
Somewhat familiar	1,572	127	1,699
Very familiar	1,572	127	1,699
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>			
Made changes to training program	1,536	127	1,663
Developed new SOPs/SOGs	1,536	127	1,663
Made changes to SOPs/SOGs	1,536	127	1,663
Justified current budget/staffing	1,536	127	1,663
Made new budget/staffing requests	1,536	127	1,663
Justified grant applications	1,536	127	1,663
Does not apply. We have not used NIOSH recommendations.	1,536	127	1,663

(continued)

**Exhibit B-8c. Results from the Fire Department Survey, Sample Sizes from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>			
Traffic hazards	1,530	126	1,656
Personal protective equipment and clothing	1,530	126	1,656
	1,530	126	1,656
PASS systems	1,530	126	1,656
SCBA Incident Command systems	1,530	126	1,656
Radio communications	1,530	126	1,656
Physical fitness and cardiovascular disease (CVD)	1,530	126	1,656
Building code compliance (e.g., warning against the use of wooden trusses)	1,530	126	1,656
	1,530	126	1,656
Does not apply. We have not used NIOSH recommendations for training	1,530	126	1,656
Other purposes.			
<i>Legitimate Skip</i>	1,530	126	1,656
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>			
One time, when they first join the department	1,582	129	1,711
Less frequently than once a year	1,582	129	1,711
One time a year	1,582	129	1,711
More than one time a year	1,582	129	1,711
Does not apply. Firefighters are not required to receive CVD screenings	1,582	129	1,711
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>			
	1,616	128	1,744
Some of the time	1,616	128	1,744
Never About half the time	1,616	128	1,744
Most of the time	1,616	128	1,744
	1,616	128	1,744

(continued)

Always

**Exhibit B-8c. Results from the Fire Department Survey, Sample Sizes from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total
<b>21. How often is Incident Command established when responding to structure fires?</b>  Rarely Never About half the time Most of the time	1,604 1,604 1,604 1,604 1,604	128 128 128 128 128	1,732 1,732 1,732 1,732 1,732
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>  Always  Some of the time Never About half the time Most of the time	1,605 1,605 1,605 1,605 1,605	129 129 129 129 129	1,734 1,734 1,734 1,734 1,734
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>  Always	1,606 1,606	129 129	1,735 1,735
<del>33</del> <b>Do your firefighters ever have to share facepieces for SCBAs?</b>  No  Yes <i>Legitimate Skip</i>	1,521 1,521 1,521	129 129 129	1,650 1,650 1,650
<del>45</del> <b>Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>  Yes  <i>Legitimate Skip</i>  No	1,611 1,611 1,611	129 129 129	1,740 1,740 1,740

No

(continued)

**Exhibit B-8c. Results from the Fire Department Survey, Sample Sizes from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total
<b>47. Overall, how would you rate the amount of detail in the NIOSH reports?</b> Tool little detail About the right amount of detail Too much detail <i>Legitimate Skip</i>	1,566 1,566 1,566 1,566	128 128 128 128	1,694 1,694 1,694 1,694
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b> Yes  <i>Legitimate Skip</i>	1,583 1,583 1,583	128 128 128	1,711 1,711 1,711
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b> Regular staff meetings Training sessions Provide copies of NIOSH reports to firefighters Provide copies of NIOSH report summaries to firefighters Provide summaries prepared by department to firefighters Postings on bulletin boards Post report on the department website Send message to firefighters by email  <i>Legitimate Skip</i>	1,585 1,585 1,585 1,585 1,585 1,585 1,585 1,585 1,585 1,585	128 128 128 128 128 128 128 128 128 128	1,713 1,713 1,713 1,713 1,713 1,713 1,713 1,713 1,713 1,713

Other

(continued)



**Exhibit B-8c. Results from the Fire Department Survey, Sample Sizes from Main Study and Nonresponse Follow-up Study (continued)**

Question	Main Study	Nonresponse Follow-up Study	Total
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>			
<b>52a. Recommendations are practical</b>			
Strongly Disagree	1,547	128	1,675
Disagree	1,547	128	1,675
Neither Agree nor Disagree	1,547	128	1,675
Agree	1,547	128	1,675
Strongly Agree	1,547	128	1,675
<i>Legitimate Skip</i>	1,547	128	1,675
<b>52b. Recommendations are easy to understand</b>			
Strongly Disagree	1,537	128	1,665
Disagree	1,537	128	1,665
Neither Agree nor Disagree	1,537	128	1,665
Agree	1,537	128	1,665
Strongly Agree	1,537	128	1,665
<i>Legitimate Skip</i>	1,537	128	1,665
<b>52c. Recommendations are specific and concrete</b>			
Strongly Disagree	1,537	128	1,665
Disagree	1,537	128	1,665
Neither Agree nor Disagree	1,537	128	1,665
Agree	1,537	128	1,665
Strongly Agree	1,537	128	1,665
<i>Legitimate Skip</i>	1,537	128	1,665

Note: Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey. Estimates within each column from the "Mark all that Apply" questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.

**C**

**Additional Analysis  
Tables: Firefighter-  
Level Analysis and  
Logistic Regression  
Models**



## ***Firefighter-Level Analysis***



**Table 15.1 Results from the Fire Department Survey, Percent Estimates by Census Region  
Fire Fighter-Level Estimates**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>1. Does your department have a Safety Officer?</b>					
No	79.0 21.0	80.7 <sup>[3]</sup> 19.3 <sup>[3]</sup>	82.7 <sup>[3]</sup> 17.3 <sup>[3]</sup>	68.1 <sup>[1,2,4]</sup> 31.9 <sup>[1,2,4]</sup>	83.5 <sup>[3]</sup> 16.5 <sup>[3]</sup>
<b>Yes Does your department have a Training Officer?</b>					
Yes	93.3 6.7	90.9 <sup>[2]</sup> 9.1 <sup>[2]</sup>	96.1 <sup>[1,3]</sup> 3.9 <sup>[1,3]</sup>	91.5 <sup>[2]</sup> 8.5 <sup>[2]</sup>	93.6 6.4
<b>Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>					
Incident Command Systems	89.6	91.0 <sup>[3]</sup>	92.3 <sup>[3]</sup>	83.4 <sup>[1,2]</sup>	90.3
Maintenance of SCBAs	76.8	83.4 <sup>[2,3]</sup>	74.4 <sup>[1]</sup>	73.0 <sup>[1]</sup>	76.9
Motor vehicle safety	83.9	85.3 <sup>[3]</sup>	84.6 <sup>[3,4]</sup>	76.4 <sup>[1,2,4]</sup>	91.6 <sup>[2,3]</sup>
Participation in a personal physical fitness program	24.3	13.3 <sup>[2,4]</sup>	29.6 <sup>[1,3,4]</sup>	14.0 <sup>[2,4]</sup>	46.6 <sup>[1,2,3]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	33.5	39.7 <sup>[3]</sup>	32.2	22.3 <sup>[1,4]</sup>	43.4 <sup>[3]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	58.8	63.9 <sup>[3]</sup>	58.6 <sup>[3,4]</sup>	45.7 <sup>[1,2,4]</sup>	71.1 <sup>[2,3]</sup>
Use of Personal Alert Safety System (PASS) devices	81.5	87.6 <sup>[2,3]</sup>	79.0 <sup>[1]</sup>	78.8 <sup>[1]</sup>	81.2
Use of personal protective equipment and protective clothing	93.1	95.4 <sup>[3]</sup>	93.9 <sup>[3]</sup>	88.2 <sup>[1,2,4]</sup>	94.7 <sup>[3]</sup>
Use of radio communications	88.9	92.5 <sup>[3]</sup>	89.8 <sup>[3]</sup>	80.9 <sup>[1,2,4]</sup>	92.7 <sup>[3]</sup>
Other	10.7	15.5 <sup>[2,3]</sup>	8.2 <sup>[1]</sup>	8.0 <sup>[1]</sup>	13.0
Does not apply. Our fire department does not use SOPs/SOGs.	2.6	0.7 <sup>[3,+]</sup>	2.3 <sup>[3]</sup>	5.2 <sup>[1,2,4]</sup>	2.3 <sup>[3]</sup>

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>					
<b>4a. Fighting structure fires</b>					
No Training	1.2	0.4 <sup>[+]</sup>	0.9	0.3 <sup>[+]</sup>	4.6 <sup>[+]</sup>
Optional Training	11.1	9.3 <sup>[3]</sup>	9.4 <sup>[3]</sup>	17.0 <sup>[1,2,4]</sup>	9.3 <sup>[3]</sup>
Required Training	88.1	90.6 <sup>[3]</sup>	90.1 <sup>[3]</sup>	83.2 <sup>[1,2]</sup>	86.6
<b>4b. Driving safety</b>					
No Training	2.3	1.0 <sup>[3,+]</sup>	0.9 <sup>[3]</sup>	5.5 <sup>[1,2]</sup>	2.8
Optional Training	12.9	14.9 <sup>[4]</sup>	10.0 <sup>[3]</sup>	18.9 <sup>[2,4]</sup>	7.1 <sup>[1,3]</sup>
Required Training	85.0	84.2 <sup>[3]</sup>	89.2 <sup>[3]</sup>	75.8 <sup>[1,2,4]</sup>	90.1 <sup>[3]</sup>
<b>4c. Incident Command systems</b>					
No Training	1.5	0.4 <sup>[3,+]</sup>	1.5	3.3 <sup>[1,4]</sup>	0.5 <sup>[3,+]</sup>
Optional Training	19.2	22.6 <sup>[4]</sup>	15.7 <sup>[3]</sup>	24.9 <sup>[2,4]</sup>	13.0 <sup>[1,3]</sup>
Required Training	79.4	77.0 <sup>[4]</sup>	82.8 <sup>[3]</sup>	72.3 <sup>[2,4]</sup>	86.5 <sup>[1,3]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>					
No Training	5.1	2.4 <sup>[4]</sup>	5.7	4.3	9.7 <sup>[1]</sup>
Optional Training	27.6	25.1 <sup>[3,4]</sup>	29.1 <sup>[4]</sup>	35.7 <sup>[1,4]</sup>	15.2 <sup>[1,2,3]</sup>
Required Training	67.7	72.5 <sup>[3]</sup>	65.3	60.9 <sup>[1,4]</sup>	75.7 <sup>[3]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>					
No Training	17.3	12.3 <sup>[3]</sup>	16.6 <sup>[3]</sup>	26.2 <sup>[1,2,4]</sup>	14.6 <sup>[3]</sup>
Optional Training	32.7	48.6 <sup>[2,3,4]</sup>	29.6 <sup>[1,4]</sup>	29.9 <sup>[1,4]</sup>	15.5 <sup>[1,2,3]</sup>
Required Training	50.3	39.7 <sup>[2,4]</sup>	53.8 <sup>[1,4]</sup>	44.2 <sup>[4]</sup>	69.9 <sup>[1,2,3]</sup>
<b>4f. Use of personal protective equipment and/or protective clothing</b>					
No Training	1.1	0.6 <sup>[+]</sup>	1.3	1.4	0.8 <sup>[+]</sup>
Optional Training	6.9	3.8 <sup>[3]</sup>	7.8	11.2 <sup>[1,4]</sup>	3.0 <sup>[3]</sup>
Required Training	92.2	96.0 <sup>[3]</sup>	90.9	87.4 <sup>[1,4]</sup>	96.1 <sup>[3]</sup>
<b>4g. Use of radio communication devices</b>					
No Training	2.3	2.8 <sup>[+]</sup>	1.7	3.3	1.1 <sup>[+]</sup>
Optional Training	15.6	14.0 <sup>[3,4]</sup>	16.8 <sup>[4]</sup>	21.4 <sup>[1,4]</sup>	6.5 <sup>[1,2,3]</sup>
Required Training	82.4	83.4 <sup>[3,4]</sup>	82.2 <sup>[4]</sup>	75.3 <sup>[1,4]</sup>	92.4 <sup>[1,2,3]</sup>

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>					
Our department's Training Officer	90.4	87.8	92.4	88.9	92.4
Other officers within our department	88.2	92.2 <sup>[2,3]</sup>	83.5 <sup>[1,4]</sup>	86.8 <sup>[1,4]</sup>	94.9 <sup>[2,3]</sup>
State fire training agency	78.1	86.4 <sup>[3,4]</sup>	77.6	75.5 <sup>[1]</sup>	68.6 <sup>[1]</sup>
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	34.4	29.5 <sup>[2]</sup>	44.1 <sup>[1,3]</sup>	21.9 <sup>[2,4]</sup>	38.5 <sup>[3]</sup>
Conferences or regional meetings	60.7	54.3 <sup>[4]</sup>	59.9 <sup>[4]</sup>	60.8 <sup>[4]</sup>	74.3 <sup>[1,2,3]</sup>
Other	25.6	31.6 <sup>[3]</sup>	25.1 <sup>[3]</sup>	17.1 <sup>[1,2,4]</sup>	29.8 <sup>[3]</sup>
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>					
Roadside incidents/Motor Vehicle Accidents (MVA)	57.7	64.4 <sup>[2]</sup>	51.8 <sup>[1,4]</sup>	55.2	64.4 <sup>[2]</sup>
Scuba diving	11.9	9.7	15.1	11.7	8.2
Swift water rescue	19.5	12.7 <sup>[2,4]</sup>	23.9 <sup>[1,3]</sup>	12.7 <sup>[2,4]</sup>	31.6 <sup>[1,3]</sup>
Wildland fire fighting	40.3	24.3 <sup>[2,3,4]</sup>	36.9 <sup>[1,4]</sup>	34.1 <sup>[1,4]</sup>	87.0 <sup>[1,2,3]</sup>
HAZMAT	74.3	73.9	75.0	67.8 <sup>[4]</sup>	83.1 <sup>[3]</sup>
Other	38.1	47.1 <sup>[3,4]</sup>	39.5 <sup>[3]</sup>	28.2 <sup>[1,2]</sup>	34.3 <sup>[1]</sup>
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>					
Not at all familiar	4.8	3.2 <sup>[3]</sup>	4.7	7.1 <sup>[1]</sup>	4.6
Not very familiar	17.1	14.1 <sup>[3]</sup>	14.1 <sup>[3]</sup>	24.4 <sup>[1,2]</sup>	18.3
Somewhat familiar	58.1	58.0	60.6	57.2	53.3
Very familiar	20.0	24.7 <sup>[3]</sup>	20.6	11.3 <sup>[1,4]</sup>	23.9 <sup>[3]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>					
Not at all familiar	14.6	11.7 <sup>[3]</sup>	12.4 <sup>[3]</sup>	22.4 <sup>[1,2,4]</sup>	12.8 <sup>[3]</sup>
Not very familiar	27.2	28.6	27.2	29.5	21.0
Somewhat familiar	41.3	42.5	43.1	38.4	38.9
Very familiar	16.9	17.2	17.3	9.8 <sup>[4]</sup>	27.3 <sup>[3]</sup>



Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>					
NIOSH mailings	71.5	71.6	74.5	68.9	68.2
National conference presentations	9.3	5.7 <sup>[2]</sup>	13.2 <sup>[1,3]</sup>	5.8 <sup>[2,4]</sup>	11.5 <sup>[3]</sup>
State-level conference presentations	15.5	13.3	18.2	14.1	15.0
Other firefighters or departments	25.8	27.7	24.9	20.7 <sup>[4]</sup>	33.1 <sup>[3]</sup>
At seminars or other training opportunities (not conferences)	21.4	23.3	24.1	16.4	19.3
Trade publications (such as Firehouse and Fire Engineering)	55.5	54.6	57.4	49.3 <sup>[4]</sup>	62.3 <sup>[3]</sup>
NIOSH website	40.9	41.0 <sup>[3]</sup>	43.0 <sup>[3]</sup>	30.1 <sup>[1,2,4]</sup>	53.2 <sup>[3]</sup>
Links from other websites (such as NFPA and Firehouse)	36.8	41.1 <sup>[3]</sup>	33.8 <sup>[4]</sup>	30.4 <sup>[1,4]</sup>	47.3 <sup>[2,3]</sup>
Media reports - newspaper, television, radio	15.9	22.7 <sup>[2]</sup>	12.1 <sup>[1]</sup>	14.9	15.0
Does not apply. We have not received	2.7	1.1 <sup>[+]</sup>	4.6 <sup>[+]</sup>	0.8	3.8 <sup>[+]</sup>
Other information about NIOSH recommendations.	7.0	2.6 <sup>[2,3,4]</sup>	7.7 <sup>[1]</sup>	9.4 <sup>[1]</sup>	9.7 <sup>[1]</sup>
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>					
Made changes to training program	48.5	46.4	49.4	43.2 <sup>[4]</sup>	58.3 <sup>[3]</sup>
Developed new SOPs/SOGs	35.3	34.8	37.3	29.7	39.5
Made changes to SOPs/SOGs	45.6	46.5	44.8	40.7 <sup>[4]</sup>	53.7 <sup>[3]</sup>
Justified current budget/staffing	10.6	6.4	15.3	7.8	10.6
Made new budget/staffing requests	12.2	8.8	18.5 <sup>[3]</sup>	6.2 <sup>[2]</sup>	11.2
Justified grant applications	19.7	19.5	21.5	18.4	17.6
Does not apply. We have not used NIOSH recommendations.	25.0	29.6	23.1	26.4	19.5
<i>Legitimately Skipped Question</i>	7.3	2.8 <sup>[2,3]</sup>	8.0 <sup>[1]</sup>	9.8 <sup>[1]</sup>	9.9

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>					
Traffic hazards	35.3	31.4	36.8	31.9 <sup>[4]</sup>	44.0 <sup>[3]</sup>
Personal protective equipment and clothing	49.6	52.8	49.7	45.3	50.3
SCBA	49.7	50.6	50.6	46.0	51.4
PASS systems	40.4	42.8	42.3	35.5	39.0
Incident Command systems	40.8	40.4	44.6	36.3	39.2
Radio communications	27.1	30.6	22.7	26.0	34.0
Physical fitness and cardiovascular disease (CVD)	15.9	10.4 <sup>[4]</sup>	18.7	13.2	22.4 <sup>[1]</sup>
Building code compliance (e.g., warning against the use of wooden trusses)	9.9	8.3	11.9	8.5	10.1
Does not apply. We have not used NIOSH recommendations for training purposes.	4.8	2.9	8.1 <sup>[+]</sup>	2.4	3.2
Other	1.8	2.2	2.2	1.5	0.5 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	32.5	32.5	31.1	36.3	29.7
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>					
Yes, it's required	58.8	68.4 <sup>[2,4]</sup>	54.1 <sup>[1,3,4]</sup>	71.4 <sup>[2,4]</sup>	32.5 <sup>[1,2,3]</sup>
No Yes, it's optional	16.9	2.0 <sup>[2,3,4]</sup>	24.5 <sup>[1,3]</sup>	8.1 <sup>[1,2,4]</sup>	39.2 <sup>[1,3]</sup>
	24.3	29.6	21.4	20.4	28.3
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>					
One time, when they first join the department	14.5	18.1 <sup>[2]</sup>	9.4 <sup>[1,3]</sup>	18.4 <sup>[2]</sup>	14.5
Less frequently than once a year	9.2	5.8 <sup>[3]</sup>	9.7	12.2 <sup>[1]</sup>	8.9
One time a year	32.8	42.2 <sup>[3]</sup>	29.9	20.6 <sup>[1,4]</sup>	43.2 <sup>[3]</sup>
More than one time a year	0.4	**	0.7 <sup>[+]</sup>	0.3 <sup>[+]</sup>	0.4 <sup>[+]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	43.2	33.9 <sup>[2,3]</sup>	50.3 <sup>[1,4]</sup>	48.4 <sup>[1,4]</sup>	33.0 <sup>[2,3]</sup>

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>					
Yes, they receive training required by the department	4.1	0.6 <sup>[2,3,4,+]</sup>	2.2 <sup>[1,3]</sup>	10.4 <sup>[1,2]</sup>	5.5 <sup>[1]</sup>
No	88.9	94.3 <sup>[3,4]</sup>	91.7 <sup>[3]</sup>	80.1 <sup>[1,2]</sup>	86.4 <sup>[1]</sup>
Yes, they receive training required by the state	28.3	19.0 <sup>[2,4]</sup>	34.2 <sup>[1]</sup>	24.6 <sup>[4]</sup>	36.0 <sup>[1,3]</sup>
Yes, they receive optional training	13.6	13.8	14.2	13.2	12.3
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>					
Two or more times a year	12.1	13.6	12.2	9.9	12.7
Once every year	43.6	46.3	43.6	44.3	37.8
Less frequently than once a year	28.4	23.7	32.0	23.2 <sup>[4]</sup>	35.5 <sup>[3]</sup>
Does not apply. Firefighters are not required to receive continuing driver training.	15.9	16.3	12.3 <sup>[3]</sup>	22.6 <sup>[2,4]</sup>	14.0 <sup>[3]</sup>
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>					
Yes	89.2	87.0 <sup>[4]</sup>	92.0 <sup>[3,4]</sup>	82.4 <sup>[2,4]</sup>	96.5 <sup>[1,2,3]</sup>
No	10.8	13.0 <sup>[4]</sup>	8.0 <sup>[3,4]</sup>	17.6 <sup>[2,4]</sup>	3.5 <sup>[1,2,3]</sup>
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>					
Strongly disagree	6.8	4.8	8.2	8.5	4.2
Disagree	19.5	25.9 <sup>[4]</sup>	19.0 <sup>[4]</sup>	19.2 <sup>[4]</sup>	9.7 <sup>[1,2,3]</sup>
Neither agree nor disagree	25.2	27.2	23.9	28.5 <sup>[4]</sup>	19.4 <sup>[3]</sup>
Agree	34.8	33.2	36.6	30.3	40.5
Strongly agree	13.7	8.9 <sup>[4]</sup>	12.3 <sup>[4]</sup>	13.5 <sup>[4]</sup>	26.2 <sup>[1,2,3]</sup>

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>					
Some of the time	3.6	4.9 <sup>[2]</sup>	1.4 <sup>[1,3]</sup>	6.5 <sup>[2,4]</sup>	2.0 <sup>[3]</sup>
Never	22.3	32.8 <sup>[4]</sup>	21.2 <sup>[4]</sup>	24.6 <sup>[4]</sup>	2.7 <sup>[1,2,3]</sup>
About half the time	16.5	20.0 <sup>[4]</sup>	17.9 <sup>[4]</sup>	16.3 <sup>[4]</sup>	7.5 <sup>[1,2,3]</sup>
Most of the time	38.1	31.8 <sup>[4]</sup>	37.9 <sup>[4]</sup>	37.6 <sup>[4]</sup>	50.3 <sup>[1,2,3]</sup>
Always	19.6	10.5 <sup>[2,4]</sup>	21.6 <sup>[1,4]</sup>	14.9 <sup>[4]</sup>	37.5 <sup>[1,2,3]</sup>
<b>21. How often is Incident Command established when responding to structure fires?</b>					
Never	1.3	1.0 <sup>[+]</sup>	1.3	0.8	2.2
About half the time	3.6	1.7 <sup>[3]</sup>	3.3 <sup>[3]</sup>	7.1 <sup>[1,2,4]</sup>	2.4 <sup>[3]</sup>
Rarely	4.0	2.5 <sup>[3]</sup>	2.9 <sup>[3]</sup>	6.7 <sup>[1,2]</sup>	4.9
Most of the time	20.3	19.8 <sup>[3,4]</sup>	19.7 <sup>[3,4]</sup>	28.8 <sup>[1,2,4]</sup>	9.1 <sup>[1,2,3]</sup>
Always	70.8	75.1 <sup>[3]</sup>	72.8 <sup>[3,4]</sup>	56.5 <sup>[1,2,4]</sup>	81.4 <sup>[2,3]</sup>
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>					
Fires are not usually big enough to require an Incident Commander	15.1	11.2 <sup>[3]</sup>	15.6 <sup>[3,4]</sup>	22.3 <sup>[1,2,4]</sup>	8.9 <sup>[2,3]</sup>
Not enough firefighters available at the scene of the fire	12.6	8.4 <sup>[3]</sup>	12.0 <sup>[3]</sup>	20.0 <sup>[1,2,4]</sup>	9.8 <sup>[3]</sup>
Other	4.7	5.7 <sup>[4]</sup>	3.9	6.6 <sup>[4]</sup>	2.1 <sup>[1,3]</sup>
Does not apply. My department always assigns an Incident Commander for structure fires.	3.4	5.1	1.6	3.9	4.2
<i>Legitimately Skipped Question</i>	70.8	75.0 <sup>[3]</sup>	72.5 <sup>[3,4]</sup>	56.7 <sup>[1,2,4]</sup>	81.8 <sup>[2,3]</sup>

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>					
Conduct an initial assessment before the other firefighters begin entering the building	91.2	95.3 <sup>[2]</sup>	89.3 <sup>[1]</sup>	91.8	87.8
Develop and coordinate the fire attack strategy	94.2	94.1	94.3	95.2	92.8
Develop and initiate a risk management plan	63.6	64.3 <sup>[3]</sup>	66.9 <sup>[3]</sup>	54.3 <sup>[1,2,4]</sup>	68.4 <sup>[3]</sup>
Document all assessments, plans and events related to the fire	42.2	40.1 <sup>[4]</sup>	39.7 <sup>[4]</sup>	37.5 <sup>[4]</sup>	59.5 <sup>[1,2,3]</sup>
Ensure that at least four (4) firefighters are on the scene before entering the building	70.4	63.0 <sup>[3]</sup>	71.4	75.5 <sup>[1]</sup>	73.4
Establish a collapse zone around the building	53.9	60.9 <sup>[3]</sup>	49.9	51.0 <sup>[1]</sup>	56.0
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	64.6	73.0 <sup>[2,3]</sup>	61.6 <sup>[1,3,4]</sup>	52.3 <sup>[1,2,4]</sup>	76.3 <sup>[2,3]</sup>
Identify and implement a communication strategy	67.5	69.1	63.9	67.6	73.6
Monitor location of all firefighters at the scene	77.2	65.1 <sup>[2,3,4]</sup>	82.7 <sup>[1]</sup>	79.4 <sup>[1]</sup>	81.0 <sup>[1]</sup>
Other	10.4	11.4	7.8 <sup>[4]</sup>	9.1	17.5 <sup>[2]</sup>
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>					
Some of the time	8.2	5.5 <sup>[3]</sup>	7.3 <sup>[3]</sup>	13.1 <sup>[1,2]</sup>	7.4
About half the time	25.1	25.6	22.9	28.1	24.5
Never	8.0	5.1	9.1	7.6	11.2
Most of the time	31.6	29.0	34.7	29.9	31.4
Always	27.2	34.8 <sup>[3]</sup>	26.0	21.3 <sup>[1]</sup>	25.6

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b> Fires are not big enough to require an Incident Safety Officer Not enough firefighters are available at the scene of the fire Other Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires. <i>Legitimately Skipped Question</i>	28.0	18.6 <sup>[2,3,4]</sup>	30.6 <sup>[1]</sup>	29.6 <sup>[1]</sup>	36.0 <sup>[1]</sup>
	42.4	36.5 <sup>[3]</sup>	40.8 <sup>[3]</sup>	54.1 <sup>[1,2,4]</sup>	38.3 <sup>[3]</sup>
	20.4	19.3	23.2 <sup>[3]</sup>	13.0 <sup>[2,4]</sup>	27.1 <sup>[3]</sup>
	2.0	3.1	1.9	1.5	1.4
	27.5	36.0 <sup>[3]</sup>	26.0	21.6 <sup>[1]</sup>	25.7
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>  Some of the time Never About half the time Most of the time Always	17.6	7.0 <sup>[2,3]</sup>	19.5 <sup>[1,3]</sup>	29.7 <sup>[1,2,4]</sup>	13.0 <sup>[3]</sup>
	16.3	16.3	15.2	20.4 <sup>[4]</sup>	12.5 <sup>[3]</sup>
	5.5	3.8	4.8	6.9	8.2
	26.6	23.8	29.6	23.6	28.8
	34.0	49.2 <sup>[2,3]</sup>	30.9 <sup>[1,3]</sup>	19.5 <sup>[1,2,4]</sup>	37.5 <sup>[3]</sup>
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b> When the building has more than one story/floor When there are enough firefighters on and at the scene of the fire Whenever firefighters enter a burning building Other <i>Legitimately Skipped Question</i>	8.6	9.0	7.8	9.8	8.1
	28.7	21.4 <sup>[2,3]</sup>	31.2 <sup>[1]</sup>	32.3 <sup>[1]</sup>	29.4
	26.1	24.4	26.4	24.2	31.1
	6.2	7.7	3.8	6.1	9.7
	51.7	56.6	50.5	49.1	50.1

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>					
The structure fire may not be large enough to need an RIT/RIC	29.7	21.8 <sup>[3]</sup>	28.8 <sup>[3]</sup>	38.2 <sup>[1,2]</sup>	32.5
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	4.9	2.3 <sup>[2,3]</sup>	5.1 <sup>[1,3,4]</sup>	9.3 <sup>[1,2,4]</sup>	2.1 <sup>[2,3]</sup>
We don't have enough firefighters available at the scene of the fire	41.7	25.3 <sup>[2,3]</sup>	46.8 <sup>[1,3,4]</sup>	57.4 <sup>[1,2,4]</sup>	33.5 <sup>[2,3]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	13.6	12.6 <sup>[3]</sup>	10.9 <sup>[3]</sup>	21.3 <sup>[1,2,4]</sup>	9.8 <sup>[3]</sup>
We have never established an RIT/RIC	10.6	7.7 <sup>[3,4]</sup>	10.2 <sup>[3,4]</sup>	19.7 <sup>[1,2,4]</sup>	2.6 <sup>[1,2,3]</sup>
We use other fire departments in the area for RITs/RICs	22.6	34.9 <sup>[2,4]</sup>	14.9 <sup>[1,3]</sup>	29.1 <sup>[2,4]</sup>	10.0 <sup>[1,3]</sup>
We use other safety practices and so we don't need them	2.6	1.2 <sup>[3]</sup>	3.1	4.1 <sup>[1,4]</sup>	1.3 <sup>[3,+]</sup>
Other	5.5	2.1 <sup>[4]</sup>	5.1 <sup>[4]</sup>	3.4 <sup>[4]</sup>	16.1 <sup>[1,2,3]</sup>
<i>Legitimately Skipped Question</i>	34.4	49.8 <sup>[2,3]</sup>	31.4 <sup>[1,3]</sup>	19.9 <sup>[1,2,4]</sup>	37.5 <sup>[3]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>					
	86.4	91.8 <sup>[2,3]</sup>	84.8 <sup>[1]</sup>	82.6 <sup>[1]</sup>	86.9
	13.6	8.2 <sup>[2,3]</sup>	15.2 <sup>[1]</sup>	17.4 <sup>[1]</sup>	
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>					
No	3.7	** <sup>[2,3,4,+]</sup>	4.2 <sup>[1]</sup>	3.7 <sup>[1]</sup>	9.0 <sup>[1]</sup>
Some of the time	2.5	1.3 <sup>[3,+]</sup>	2.9	4.9 <sup>[1,4]</sup>	0.3 <sup>[3,+]</sup>
Never	1.2	0.5 <sup>[3,+]</sup>	1.3	2.3 <sup>[1,4]</sup>	0.3 <sup>[3,+]</sup>
About half the time	8.5	5.1 <sup>[2,3]</sup>	9.6 <sup>[1,4]</sup>	12.9 <sup>[1,4]</sup>	4.7 <sup>[2,3]</sup>
Most of the time	84.1	93.0 <sup>[2,3]</sup>	82.1 <sup>[1]</sup>	76.2 <sup>[1,4]</sup>	85.8 <sup>[3]</sup>
Always					

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>					
They don't have a PASS device to use	8.3	3.4 <sup>[2,3]</sup>	9.5 <sup>[1]</sup>	10.9 <sup>[1]</sup>	10.1
Situation doesn't require them	6.3	2.4 <sup>[2,3]</sup>	7.0 <sup>[1]</sup>	9.8 <sup>[1]</sup>	5.7
Firefighters think the devices do not always work reliably	0.2	0.3 <sup>[+]</sup>	**	0.8 <sup>[+]</sup>	**
Firefighters don't think they need them	3.2	3.2	3.5	4.1 <sup>[4]</sup>	1.3 <sup>[3]</sup>
Devices go off while firefighters are resting	2.6	1.5 <sup>[3]</sup>	2.0 <sup>[3]</sup>	5.8 <sup>[1,2,4]</sup>	0.7 <sup>[3,+]</sup>
<i>Legitimately Skipped Question</i>	84.5	93.1 <sup>[2,3]</sup>	82.4 <sup>[1]</sup>	76.9 <sup>[1,4]</sup>	86.1 <sup>[3]</sup>
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>					
Yes	98.8	99.9	99.9	99.7	92.9
	1.2	0.1 <sup>[+]</sup>	[+]	[+]	[+]
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>					
No	40.2	45.6 <sup>[4]</sup> **	39.2 <sup>[4]</sup>	45.2 <sup>[4]</sup>	25.3 <sup>[1,2,3]</sup>
No	58.6	54.2	60.7	54.4 <sup>[4]</sup>	67.4 <sup>[3]</sup>
Yes	1.2	0.1 <sup>[+]</sup>	** <sup>[+]</sup>	0.3 <sup>[+]</sup> 7.1	7.3 <sup>[+]</sup>
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>			0.3		
Didn't know it was recommended	3.1	2.5 <sup>[+]</sup>	3.3	4.2	2.0 <sup>[+]</sup>
Firefighters don't like using the equipment	0.1	**	**	0.4 <sup>[+]</sup>	0.3 <sup>[+]</sup>
Have never needed them (e.g., we don't do interior attacks)	0.2	0.2 <sup>[+]</sup>	0.3 <sup>[+]</sup>	0.2 <sup>[+]</sup>	0.3 <sup>[+]</sup>
They cost too much, there is not enough money in the budget	25.6	25.6	27.0	28.2 <sup>[4]</sup>	18.1 <sup>[3]</sup>
We don't have enough equipment for all of our firefighters	17.9	12.8 <sup>[3]</sup>	18.9	25.0 <sup>[1,4]</sup>	13.1 <sup>[3]</sup>
Shared systems work fine for our needs	19.3	21.4	18.2	22.4 <sup>[4]</sup>	13.7 <sup>[3]</sup>
Other	7.3	15.2 <sup>[3,4]</sup>	5.1	4.5 <sup>[1]</sup>	3.7 <sup>[1,+]</sup>
<i>Legitimately Skipped Question</i>	59.8	54.5 <sup>[4]</sup>	60.5 <sup>[4]</sup>	54.9 <sup>[4]</sup>	74.8 <sup>[1,2,3]</sup>



Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>					
Some of the time	0.4	**	0.4 <sup>[+]</sup>	0.3 <sup>[+]</sup>	0.9 <sup>[+]</sup>
Never	2.3	0.5 <sup>[2,3,+]</sup>	2.4 <sup>[1]</sup>	4.9 <sup>[1,4]</sup>	1.0 <sup>[3]</sup>
About half the time	1.7	** <sup>[2,3]</sup>	1.7 <sup>[1,3]</sup>	4.4 <sup>[1,2,4]</sup>	0.4 <sup>[3,+]</sup>
Most of the time	22.5	22.9	23.9	23.4	16.8
Always	72.0	76.4	71.5	66.7	73.6
<i>Legitimately Skipped Question</i>	1.2	0.1 <sup>[+]</sup>	** <sup>[+]</sup>	0.3 <sup>[+]</sup>	7.3 <sup>[+]</sup>
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>					
Situation doesn't require them	20.1	19.1	19.4 <sup>[3]</sup>	[2,4]	14.2 <sup>[3]</sup>
Firefighters do not trust that the SCBAs will work reliably	**	**	**	0.2 <sup>[+]</sup>	
Firefighters don't think they need them	11.4	12.6	12.2	10.7	8.2
Firefighters don't like sharing facepieces with others	0.5	** <sup>[3]</sup>	[+] <sup>26.4</sup>	[1]	[+]
Firefighters are concerned that the SCBA may be or become contaminated	**	**	** <sup>[+]</sup>	**	**
Wearing SCBAs makes it more difficult to work	4.4	2.5 <sup>[3]</sup>	4.3	7.0 <sup>[1]</sup>	[+]
Firefighters don't have SCBAs to use	2.7	1.7 <sup>[3]</sup>	1.1	4.3 <sup>[1,4]</sup>	[3,+]
<i>Legitimately Skipped Question</i>	73.9	77.5	72.5	67.8 <sup>[4]</sup>	[3]
<b>36. How often is routine maintenance performed on your SCBAs?</b>					
After every time they are used	46.6	45.1	46.6	51.0	42.9
Once a month or more	16.7	23.0 <sup>[4]</sup>	[4]	3.7 <sup>[4]</sup>	[1,2,3]
Several times a year	14.3	17.5	10.5 <sup>[3]</sup>	17.3 <sup>[2]</sup>	80.9
Once a year	17.6	13.4	23.4 <sup>[3]</sup>	10.3 <sup>[2,4]</sup>	[3]
Less than once a year	2.6	0.7 <sup>[3,+]</sup>	1.8	3.9 <sup>[1]</sup>	
Never. Maintenance has not been done on our SCBAs.	0.8	** <sup>[2,3]</sup>	16.9	1.0 <sup>[1]</sup>	[+]
Does not apply. My department does not have SCBAs.	**	**	**	16.8	
<i>Legitimately Skipped Question</i>	1.5	0.2 <sup>[+]</sup>	[+]	13.5	**

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	29.7 70.3	30.6 69.4	34.7 <sup>[4]</sup> 65.3 <sup>[4]</sup>	26.0	21.7 <sup>[2]</sup> 78.3 <sup>[2]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero CBRN SCBA devices are not needed in our department We didn't know they were available We don't have adequate technical information to purchase them We don't have adequate funding to purchase them <i>Legitimately Skipped Question</i>	16.6 11.2 15.4 50.8 7.1 31.1	14.2 11.4 18.6 <sup>[2]</sup> 51.2 4.5 <sup>[4]</sup> 31.7	15.5 9.0 <sup>[3]</sup> 8.8 <sup>[1,3,4]</sup> 47.7 8.2 36.8 <sup>[4]</sup>	74.0 18.0 14.0 <sup>[2]</sup> 19.4 <sup>[2]</sup> 54.2 4.9 <sup>[4]</sup> 27.0	21.6 11.6 19.7 <sup>[2]</sup> 52.4 12.5 <sup>[1,3]</sup> 22.6 <sup>[2]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> Other Yes No	85.3 14.7	83.7 16.3	86.3 13.7	84.3 15.7	87.2 12.8
<b>38a. At your fire department, where do you have AEDs?</b> At the fire station(s) On the emergency vehicles (or apparatus) Both at the fire station(s) and on the vehicles (or apparatus) <i>Legitimately Skipped Question</i>	2.1 66.1 14.8 17.0	2.1 64.8 14.3 18.8	1.8 70.3 <sup>[4]</sup> 11.8 <sup>[4]</sup> 16.1	1.6 67.3 13.1 <sup>[4]</sup> 18.0	3.8 <sup>[+]</sup> 56.0 <sup>[2]</sup> 25.7 <sup>[2,3]</sup> 14.5

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>					
After every time they are used	20.1	18.3	23.1	14.4	24.0
Once a month or more	24.7	28.3	18.8 <sup>[3]</sup>	29.8 <sup>[2]</sup>	26.9
Several times a year	19.4	17.4	18.9	20.5	23.1
Once a year	23.1	20.0	27.1	21.4	19.7
Less frequently than once a year	6.2	6.7	6.0	7.9 <sup>[4]</sup>	3.0 <sup>[3]</sup>
Never. Maintenance on our AEDs has not been done.	6.5	9.2 <sup>[4]</sup>	6.2	6.0	3.2 <sup>[1]</sup>
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>					
Some of the time	1.5	3.1	0.8 <sup>[+]</sup>	1.5	0.4 <sup>[+]</sup>
Never	3.1	5.0 <sup>[2,4]</sup>	0.7 <sup>[1,3]</sup>	5.4 <sup>[2,4]</sup>	1.6 <sup>[1,3]</sup>
About half the time	1.6	1.1 <sup>[+]</sup>	1.8	2.0	1.3 <sup>[+]</sup>
Most of the time	16.1	18.4 <sup>[4]</sup>	14.0 <sup>[3]</sup>	20.3 <sup>[2,4]</sup>	10.7 <sup>[1,3]</sup>
Always	77.8	72.4 <sup>[2,4]</sup>	82.7 <sup>[1,3]</sup>	70.8 <sup>[2,4]</sup>	86.0 <sup>[1,3]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>					
Never	14.5	12.7	15.0	18.3 <sup>[4]</sup>	10.3 <sup>[3]</sup>
Some of the time	70.7	72.8	69.4	66.8 <sup>[4]</sup>	76.7 <sup>[3]</sup>
About half the time	7.8	8.3	5.6 <sup>[3]</sup>	9.6 <sup>[2]</sup>	9.6
Most of the time	5.7	3.7	8.9 <sup>[+]</sup>	4.4	2.9
Always	1.3	2.4	1.0	0.9	0.6 <sup>[+]</sup>

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>42. How would you rate your department's budget in the following areas?</b>					
<b>42a. Equipment</b>					
Not adequate	38.6	35.4 <sup>[3]</sup>	34.9 <sup>[3]</sup>	47.9 <sup>[1,2]</sup>	39.0
Adequate	54.0	55.3 <sup>[3]</sup>	58.0 <sup>[3]</sup>	45.3 <sup>[1,2]</sup>	55.4
More than adequate	7.4	9.3	7.1	6.8	5.6
<b>42b. Training</b>					
Not adequate	36.0	26.4 <sup>[2,3,4]</sup>	36.9 <sup>[1]</sup>	42.2 <sup>[1]</sup>	40.9 <sup>[1]</sup>
Adequate	56.4	63.2 <sup>[3]</sup>	56.0	52.1 <sup>[1]</sup>	52.0
More than adequate	7.7	10.5	7.2	5.6	7.0 <sup>[+]</sup>
<b>42c. Personnel</b>					
Not adequate	48.8	35.6 <sup>[2,4]</sup>	58.0 <sup>[1,3]</sup>	44.1 <sup>[2]</sup>	55.5 <sup>[1]</sup>
Adequate	46.2	59.0 <sup>[2,4]</sup>	36.6 <sup>[1,3]</sup>	50.4 <sup>[2]</sup>	41.9 <sup>[1]</sup>
More than adequate	5.0	5.4	5.4	5.4	2.6
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>					
One or two times per year	18.7	15.5 <sup>[3]</sup>	20.8	22.1 <sup>[1]</sup>	14.0
Several times per year	30.9	30.4	29.4 <sup>[3]</sup>	38.2 <sup>[2,4]</sup>	23.6 <sup>[3]</sup>
Never	40.4	43.1	41.0	34.2	44.1
Once a month or more	10.0	11.0	8.8	5.6 <sup>[4]</sup>	18.3 <sup>[3]</sup>
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>					
By mail	55.8	56.9	52.7	59.4	56.0
On the Internet	39.8	35.1 <sup>[4]</sup>	44.0 <sup>[3]</sup>	29.3 <sup>[2,4]</sup>	54.2 <sup>[1,3]</sup>
From colleagues in other departments	15.1	15.9	19.1 <sup>[3]</sup>	9.4 <sup>[2]</sup>	12.8
At conferences or other meetings	10.8	8.0	11.3	10.3	15.0
<i>Legitimately Skipped Question</i>	18.3	15.5 <sup>[3]</sup>	19.6	22.1 <sup>[1]</sup>	14.0

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>					
Yes	64.8	63.2	66.4	58.7 <sup>[4]</sup>	73.4 <sup>[3]</sup>
No	16.9	21.2 <sup>[4]</sup>	14.1	19.1	12.9 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.3	15.6 <sup>[3]</sup>	19.6	22.1 <sup>[1,4]</sup>	13.8 <sup>[3]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>					
Yes	67.6	65.2	67.1 <sup>[4]</sup>	64.8 <sup>[4]</sup>	77.2 <sup>[2,3]</sup>
No	13.5	19.1	12.0	12.6	8.7
<i>Legitimately Skipped Question</i>	18.9	15.7 <sup>[3]</sup>	20.8	22.6 <sup>[1,4]</sup>	14.1 <sup>[3]</sup>
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>					
Regular staff meetings	25.4	24.9 <sup>[4]</sup>	29.0 <sup>[4]</sup>	26.2 <sup>[4]</sup>	15.7 <sup>[1,2,3]</sup>
Training sessions	51.5	46.4 <sup>[4]</sup>	56.7 <sup>[3]</sup>	43.9 <sup>[2,4]</sup>	59.8 <sup>[1,3]</sup>
Provide copies of NIOSH reports to firefighters	21.0	18.4	21.4	21.7	23.7
Provide copies of NIOSH report summaries to firefighters	10.2	10.0	12.9	7.3	8.5
Provide summaries prepared by department to firefighters	4.1	4.5	5.1 <sup>[3]</sup>	1.1 <sup>[2,4]</sup>	5.6 <sup>[3]</sup>
Postings on bulletin boards	43.1	51.9 <sup>[4]</sup>	39.3	42.5	37.9 <sup>[1]</sup>
Post report on the department website	3.8	2.8 <sup>[+]</sup>	4.6 <sup>[+]</sup>	0.8	8.6 <sup>[+]</sup>
Send message to firefighters by email	13.8	3.8 <sup>[2,4]</sup>	21.0 <sup>[1,3]</sup>	7.3 <sup>[2,4]</sup>	23.7 <sup>[1,3]</sup>
Other	2.6	1.6 <sup>[+]</sup>	2.6	1.4 <sup>[4]</sup>	6.4 <sup>[3]</sup>
<i>Legitimately Skipped Question</i>	31.8	35.0	31.1	34.9 <sup>[4]</sup>	22.9 <sup>[3]</sup>
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>					
Yes	50.4	49.8	54.6 <sup>[3]</sup>	42.7 <sup>[2]</sup>	52.5
No	30.8	34.5	25.2 <sup>[3]</sup>	34.2 <sup>[2]</sup>	33.1
<i>Legitimately Skipped Question</i>	18.8	15.7 <sup>[3]</sup>	20.1	23.1 <sup>[1,4]</sup>	14.4 <sup>[3]</sup>

No

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>					
<b>52a. Recommendations are practical</b>					
Strongly Disagree	2.5	** <sup>[+]</sup>	5.6 <sup>[+]</sup>	0.2 <sup>[+]</sup>	2.2 <sup>[+]</sup>
Disagree	5.1	9.9 <sup>[+]</sup>	3.2	2.9	4.9
Neither Agree nor Disagree	18.4	12.2 <sup>[3,4]</sup>	17.5	21.1 <sup>[1]</sup>	27.7 <sup>[1]</sup>
Agree	50.3	54.1	49.8	48.5	47.7
Strongly Agree	4.7	7.6 <sup>[4]</sup>	3.6	4.2	2.7 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	19.0	16.0 <sup>[3]</sup>	20.2	23.0 <sup>[1]</sup>	14.8
<b>52b. Recommendations are easy to understand</b>					
Strongly Disagree	2.4	** <sup>[+]</sup>	5.7 <sup>[+]</sup>	**	2.2 <sup>[+]</sup>
Disagree	1.5	1.0	1.4	2.1	1.7 <sup>[+]</sup>
Neither Agree nor Disagree	16.9	14.9 <sup>[3]</sup>	14.1 <sup>[3]</sup>	21.9 <sup>[1,2]</sup>	19.3
Agree	54.2	59.4 <sup>[3]</sup>	54.2	47.2 <sup>[1]</sup>	56.1
Strongly Agree	6.0	8.5	4.3	5.8	5.9
<i>Legitimately Skipped Question</i>	19.1	16.0 <sup>[3]</sup>	20.3	23.1 <sup>[1]</sup>	14.8
<b>52c. Recommendations are specific and concrete</b>					
Strongly Disagree	2.5	0.2 <sup>[+]</sup>	5.8 <sup>[+]</sup>	0.2 <sup>[+]</sup>	1.8 <sup>[+]</sup>
Disagree	6.0	8.7 <sup>[+]</sup>	3.9	4.1	9.8
Neither Agree nor Disagree	24.2	24.1	21.2 <sup>[3]</sup>	29.7 <sup>[2]</sup>	23.2
Agree	43.5	45.4	43.9	38.7	46.8
Strongly Agree	4.7	5.4	4.9	4.1	3.6
<i>Legitimately Skipped Question</i>	19.1	16.1 <sup>[3]</sup>	20.3	23.2 <sup>[1]</sup>	14.8

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>					
Pocket guide to chemical hazards	63.7	69.7 <sup>[3]</sup>	59.9	59.9 <sup>[1]</sup>	68.6
Respirator maintenance program guide	16.6	20.0	13.4	17.1	18.1
CDs of firefighter program materials	32.3	32.8	35.2	28.5	30.1
Hazard IDs	44.2	47.5 <sup>[3]</sup>	47.4 <sup>[3]</sup>	32.9 <sup>[1,2,4]</sup>	47.9 <sup>[3]</sup>
Alerts	18.0	21.9 <sup>[2]</sup>	11.2 <sup>[1,3,4]</sup>	19.3 <sup>[2]</sup>	26.1 <sup>[2]</sup>
Workplace Solutions	14.3	15.1	14.1	11.9	16.7
	1.0	** <sup>[2,3]</sup>	1.5 <sup>[1]</sup>	1.2 <sup>[1]</sup>	1.2 <sup>[+]</sup>
None. I have not seen any NIOSH materials.	18.3	16.3	16.8 <sup>[3]</sup>	23.5 <sup>[2]</sup>	17.5
<b>53b. How satisfied or dissatisfied are you with these NIOSH materials?</b>					
Very dissatisfied	1.5	2.3	0.8	0.6 <sup>[+]</sup>	2.9
Dissatisfied	0.1	0.2 <sup>[+]</sup>	** <sup>[+]</sup>	0.3 <sup>[+]</sup>	**
Neither satisfied nor dissatisfied	19.0	24.4	14.3 <sup>[3]</sup>	20.6 <sup>[2]</sup>	18.7
Satisfied	53.0	50.1	58.2	48.4	52.0
Very satisfied	8.3	6.8	9.8	6.8	9.4
<i>Legitimately Skipped Question</i>	18.1	16.2	16.9 <sup>[3]</sup>	23.2 <sup>[2]</sup>	16.9
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>					
Yes, in the last year	44.0	47.4 <sup>[4]</sup>	38.1 <sup>[3]</sup>	55.3 <sup>[2,4]</sup>	34.5 <sup>[1,3]</sup>
Yes, longer than one year ago	50.0	48.2	54.5 <sup>[3]</sup>	39.7 <sup>[2,4]</sup>	58.0 <sup>[3]</sup>
No	6.1	4.3	7.4	5.0	7.5

Question	Census Region				
	Total	Northeast	South	Midwest	West
<b>55. In which of these ways would you most prefer to receive information about NIOSH recommendations? MARK YOUR THREE (3) FAVORITES.</b>					
Cable television programming	5.2	8.2 <sup>[4]</sup>	4.7 <sup>[4]</sup>	5.2 <sup>[4]</sup>	1.4 <sup>[1,2,3,+]</sup>
CD/DVD	50.6	50.2	49.5	50.5	54.3
Conference presentations or meeting	8.9	9.2	9.9	6.6	9.2
Email	53.8	50.2	56.7	49.2	60.0
Fire Fighter Fatality Investigation Reports	53.6	52.6	57.0	48.4	55.0
NIOSH Website	27.2	27.6	24.0	30.4	29.3
One-page Fact Sheets	30.3	33.2	26.4	31.9	32.6
Pocket Guides	26.7	29.8 <sup>[4]</sup>	26.3	29.1 <sup>[4]</sup>	18.1 <sup>[1,3]</sup>
Posters	12.8	11.3	15.5	11.7	10.5
Summary Reports	25.5	30.9 <sup>[4]</sup>	26.1	22.9	18.3 <sup>[1]</sup>
Training session/class	19.1	24.1 <sup>[3]</sup>	18.7	15.6 <sup>[1]</sup>	16.5
	1.1	0.9 <sup>[+]</sup>	1.4	1.2	0.4 <sup>[+]</sup>

**Note:**

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the “Mark all that Apply” questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.





**Table 16.1 Results from the Fire Department Survey, Percent Estimates by Department Type  
Fire Fighter-Level Estimates**

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>1. Does your department have a Safety Officer?</b>				
Yes	79.0	83.0	79.9	76.8
No	21.0	17.0	20.1	23.2
<b>2. Does your department have a Training Officer?</b>				
Yes	93.3	95.5 <sup>[3]</sup>	94.8 <sup>[3]</sup>	91.3 <sup>[1,2]</sup>
No	6.7	4.5 <sup>[3]</sup>	5.2 <sup>[3]</sup>	8.7 <sup>[1,2]</sup>
<b>Yes</b> <b>Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Incident Command Systems	89.6	93.6 <sup>[3]</sup>	91.4 <sup>[3]</sup>	86.7 <sup>[1,2]</sup>
Maintenance of SCBAs	76.8	89.2 <sup>[2,3]</sup>	77.1 <sup>[1]</sup>	72.1 <sup>[1]</sup>
Motor vehicle safety	83.9	87.7 <sup>[3]</sup>	86.1	80.8 <sup>[1]</sup>
Participation in a personal physical fitness program	24.3	56.7 <sup>[2,3]</sup>	27.8 <sup>[1,3]</sup>	10.0 <sup>[1,2]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	33.5	53.6 <sup>[2,3]</sup>	39.1 <sup>[1,3]</sup>	21.8 <sup>[1,2]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	58.8	83.2 <sup>[2,3]</sup>	66.4 <sup>[1,3]</sup>	44.0 <sup>[1,2]</sup>
Use of Personal Alert Safety System (PASS) devices	81.5	86.9	79.9	80.9
Use of personal protective equipment and protective clothing	93.1	96.4 <sup>[3]</sup>	93.4	91.7 <sup>[1]</sup>
Use of radio communications	88.9	93.5 <sup>[2,3]</sup>	88.2 <sup>[1]</sup>	87.8 <sup>[1]</sup>
Other	10.7	12.7	12.2	8.8
Does not apply. Our fire department does not use SOPs/SOGs.	2.6	0.5 <sup>[2,3,+]</sup>	2.8 <sup>[1]</sup>	3.1 <sup>[1]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.2	3.8 <sup>[+]</sup>	0.8	0.6
Optional Training	11.1	3.2 <sup>[2,3]</sup>	11.8 <sup>[1]</sup>	13.3 <sup>[1]</sup>
Required Training	88.1	93.4 <sup>[3]</sup>	87.5	86.9 <sup>[1]</sup>
<b>4b. Driving safety</b>				
No Training	2.3	2.4	1.7	2.7
Optional Training	12.9	5.3 <sup>[3]</sup>	9.8 <sup>[3]</sup>	18.1 <sup>[1,2]</sup>
Required Training	85.0	92.6 <sup>[3]</sup>	88.5 <sup>[3]</sup>	79.4 <sup>[1,2]</sup>
<b>4c. Incident Command systems</b>				
No Training	1.5	0.5 <sup>[3,+]</sup>	1.3	2.0 <sup>[1]</sup>
Optional Training	19.2	3.8 <sup>[2,3]</sup>	18.3 <sup>[1,3]</sup>	25.5 <sup>[1,2]</sup>
Required Training	79.4	95.7 <sup>[2,3]</sup>	80.6 <sup>[1,3]</sup>	72.6 <sup>[1,2]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	5.1	3.6	6.1	4.7
Optional Training	27.6	16.3 <sup>[3]</sup>	25.1 <sup>[3]</sup>	33.6 <sup>[1,2]</sup>
Required Training	67.7	80.3 <sup>[3]</sup>	68.8	62.3 <sup>[1]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	17.3	7.3 <sup>[3]</sup>	14.3 <sup>[3]</sup>	23.5 <sup>[1,2]</sup>
Optional Training	32.7	15.2 <sup>[3]</sup>	26.2 <sup>[3]</sup>	44.5 <sup>[1,2]</sup>
Required Training	50.3	77.7 <sup>[2,3]</sup>	59.5 <sup>[1,3]</sup>	32.4 <sup>[1,2]</sup>
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.1	1.8	1.2	0.7
Optional Training	6.9	2.9 <sup>[2,3]</sup>	8.5 <sup>[1]</sup>	6.9 <sup>[1]</sup>
Required Training	92.2	95.6	90.2	92.6
<b>4g. Use of radio communication devices</b>				
No Training	2.3	1.5	3.3	1.7
Optional Training	15.6	5.7 <sup>[2,3]</sup>	17.7 <sup>[1]</sup>	17.4 <sup>[1]</sup>
Required Training	82.4	93.1 <sup>[2,3]</sup>	79.6 <sup>[1]</sup>	81.0 <sup>[1]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	90.4	95.4 <sup>[2,3]</sup>	91.9 <sup>[1,3]</sup>	87.4 <sup>[1,2]</sup>
Other officers within our department	88.2	96.2 <sup>[2,3]</sup>	86.9 <sup>[1]</sup>	86.4 <sup>[1]</sup>
State fire training agency	78.1	69.0 <sup>[3]</sup>	76.6	82.5 <sup>[1]</sup>
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	34.4	64.6 <sup>[2,3]</sup>	39.2 <sup>[1,3]</sup>	20.0 <sup>[1,2]</sup>
Conferences or regional meetings	60.7	74.0 <sup>[3]</sup>	64.5 <sup>[3]</sup>	53.0 <sup>[1,2]</sup>
Other	25.6	20.3 <sup>[3]</sup>	23.0	29.6 <sup>[1]</sup>
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	57.7	58.2	51.5 <sup>[3]</sup>	62.6 <sup>[2]</sup>
Scuba diving	11.9	29.7 <sup>[2,3]</sup>	8.2 <sup>[1]</sup>	8.9 <sup>[1]</sup>
Swift water rescue	19.5	46.4 <sup>[2,3]</sup>	16.8 <sup>[1]</sup>	12.5 <sup>[1]</sup>
Wildland fire fighting	40.3	30.1 <sup>[3]</sup>	41.5	43.0 <sup>[1]</sup>
HAZMAT	74.3	93.0 <sup>[2,3]</sup>	70.9 <sup>[1]</sup>	70.5 <sup>[1]</sup>
Other	38.1	50.0 <sup>[3]</sup>	40.6	31.9 <sup>[1]</sup>
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	4.8	1.6 <sup>[3]</sup>	2.7 <sup>[3]</sup>	7.7 <sup>[1,2]</sup>
Not very familiar	17.1	8.6 <sup>[3]</sup>	14.8 <sup>[3]</sup>	21.8 <sup>[1,2]</sup>
Somewhat familiar	58.1	57.5	56.9	59.4
Very familiar	20.0	32.4 <sup>[3]</sup>	25.6 <sup>[3]</sup>	11.1 <sup>[1,2]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	14.6	7.7 <sup>[3]</sup>	11.3 <sup>[3]</sup>	19.7 <sup>[1,2]</sup>
Not very familiar	27.2	17.9 <sup>[3]</sup>	24.4 <sup>[3]</sup>	32.8 <sup>[1,2]</sup>
Somewhat familiar	41.3	50.1	40.5	39.0
Very familiar	16.9	24.4 <sup>[3]</sup>	23.8 <sup>[3]</sup>	8.6 <sup>[1,2]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	71.5	72.5	71.9	70.9
National conference presentations	9.3	18.0 <sup>[3]</sup>	12.2 <sup>[3]</sup>	3.8 <sup>[1,2]</sup>
State-level conference presentations	15.5	18.9	18.0	12.3
Other firefighters or departments	25.8	25.2	29.9	22.6
At seminars or other training opportunities (not conferences)	21.4	22.5	23.8	19.0
Trade publications (such as Firehouse and Fire Engineering)	55.5	62.1 <sup>[3]</sup>	65.1 <sup>[3]</sup>	45.2 <sup>[1,2]</sup>
NIOSH website	40.9	69.0 <sup>[2,3]</sup>	47.4 <sup>[1,3]</sup>	26.0 <sup>[1,2]</sup>
Links from other websites (such as NFPA and Firehouse)	36.8	44.5 <sup>[3]</sup>	40.1	31.4 <sup>[1]</sup>
Media reports - newspaper, television, radio	15.9	16.5	15.6	16.0
Does not apply. We have not received	2.7	10.6 <sup>[+]</sup>	1.9	0.7
Other information about NIOSH recommendations.	7.0	5.7 <sup>[+]</sup>	7.4	7.2
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	48.5	52.3	52.9 <sup>[3]</sup>	43.4 <sup>[2]</sup>
Developed new SOPs/SOGs	35.3	48.1 <sup>[3]</sup>	37.7	28.7 <sup>[1]</sup>
Made changes to SOPs/SOGs	45.6	61.0 <sup>[2,3]</sup>	45.9 <sup>[1]</sup>	40.1 <sup>[1]</sup>
Justified current budget/staffing	10.6	23.8 <sup>[3]</sup>	12.5	4.4 <sup>[1]</sup>
Made new budget/staffing requests	12.2	17.9 <sup>[3]</sup>	15.0	7.7 <sup>[1]</sup>
Justified grant applications	19.7	31.4 <sup>[2]</sup>	15.7 <sup>[1]</sup>	19.1
Does not apply. We have not used NIOSH recommendations.	25.0	14.3 <sup>[2,3]</sup>	24.6 <sup>[1]</sup>	29.0 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	7.3	5.9 <sup>[+]</sup>	7.6	7.6

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	35.3	33.8	39.4	32.2
Personal protective equipment and clothing	49.6	56.9	51.7	45.2
PASS systems	49.7	57.1 <sup>[3]</sup>	52.6	44.6 <sup>[1]</sup>
SCBA Incident Command systems	40.4	43.2	44.3	36.0
Radio communications	40.8	47.6	43.4	36.2
Physical fitness and cardiovascular disease (CVD)	27.1	31.0	26.7	26.2
Building code compliance (e.g., warning against the use of wooden trusses)	15.9	35.9 <sup>[2,3]</sup>	12.2 <sup>[1]</sup>	12.2 <sup>[1]</sup>
Does not apply. We have not used NIOSH recommendations for training purposes.	9.9	12.9	11.6	7.5
Other	4.8	3.5	8.0 <sup>[+]</sup>	2.4
<i>Legitimately Skipped Question</i>	1.8	3.5	0.8	2.0
	32.5	20.4 <sup>[2,3]</sup>	32.2 <sup>[1]</sup>	36.8 <sup>[1]</sup>
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	58.8	23.3 <sup>[2,3]</sup>	46.7 <sup>[1,3]</sup>	80.9 <sup>[1,2]</sup>
No Yes, it's optional	16.9	42.8 <sup>[2,3]</sup>	22.9 <sup>[1,3]</sup>	3.2 <sup>[1,2]</sup>
	24.3	33.9 <sup>[3]</sup>	30.4 <sup>[3]</sup>	15.9 <sup>[1,2]</sup>
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	15.4	15.5	13.3
Less frequently than once a year	9.2	19.0	8.2	6.7
One time a year	32.8	48.3 <sup>[3]</sup>	39.7 <sup>[3]</sup>	21.9 <sup>[1,2]</sup>
More than one time a year	0.4	1.7 <sup>[+]</sup>	0.2 <sup>[+]</sup>	** <sup>[+]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	43.2	15.6 <sup>[2,3]</sup>	36.4 <sup>[1,3]</sup>	58.0 <sup>[1,2]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	4.1	2.5	3.9	4.9
Yes, they receive training required by the department	88.9	93.4 <sup>[3]</sup>	90.8 <sup>[3]</sup>	85.9 <sup>[1,2]</sup>
Yes, they receive training required by the state	28.3	22.1 <sup>[2]</sup>	34.1 <sup>[1]</sup>	25.7
Yes, they receive optional training	13.6	6.3 <sup>[2,3]</sup>	16.5 <sup>[1]</sup>	13.8 <sup>[1]</sup>
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	12.1	11.0	11.4	13.1
Once every year	43.6	33.3 <sup>[2,3]</sup>	47.4 <sup>[1]</sup>	44.0 <sup>[1]</sup>
Less frequently than once a year	28.4	40.8 <sup>[3]</sup>	27.2	25.0 <sup>[1]</sup>
Does not apply. Firefighters are not required to receive continuing driver training.	15.9	15.0	14.0	18.0
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
No	89.2	98.1 <sup>[2,3]</sup>	90.9 <sup>[1,3]</sup>	84.6 <sup>[1,2]</sup>
Yes	10.8	1.9 <sup>[2,3]</sup>	9.1 <sup>[1,3]</sup>	15.4 <sup>[1,2]</sup>
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	6.8	6.2	4.7 <sup>[3]</sup>	8.8 <sup>[2]</sup>
Disagree	19.5	24.3	17.6	19.3
Neither agree nor disagree	25.2	10.2 <sup>[2,3]</sup>	24.4 <sup>[1]</sup>	31.1 <sup>[1]</sup>
Agree	34.8	35.1	39.9	30.5
Strongly agree	13.7	24.3 <sup>[2,3]</sup>	13.5 <sup>[1]</sup>	10.2 <sup>[1]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	3.6	1.2 <sup>[3,+]</sup>	2.2 <sup>[3]</sup>	5.6 <sup>[1,2]</sup>
Never About half the time	22.3	21.4	17.6 <sup>[3]</sup>	26.5 <sup>[2]</sup>
Most of the time	16.5	14.4	15.7	18.0
Always	38.1	38.0	38.2	38.0
	19.6	25.0 <sup>[3]</sup>	26.4 <sup>[3]</sup>	12.0 <sup>[1,2]</sup>
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Never About half the time	1.3	0.6 <sup>[+]</sup>	1.7	1.1
Rarely Most of the time	3.6	1.4 <sup>[3]</sup>	3.1	4.9 <sup>[1]</sup>
Always	4.0	1.0 <sup>[2,3,+]</sup>	3.5 <sup>[1]</sup>	5.4 <sup>[1]</sup>
	20.3	8.2 <sup>[2,3]</sup>	17.4 <sup>[1,3]</sup>	26.9 <sup>[1,2]</sup>
	70.8	88.8 <sup>[2,3]</sup>	74.4 <sup>[1,3]</sup>	61.7 <sup>[1,2]</sup>
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander				
	15.1	5.0 <sup>[2,3]</sup>	14.0 <sup>[1,3]</sup>	19.3 <sup>[1,2]</sup>
Not enough firefighters available at the scene of the fire				
	12.6	2.7 <sup>[2,3]</sup>	10.9 <sup>[1,3]</sup>	17.3 <sup>[1,2]</sup>
Other				
	4.7	5.1	3.4	5.7
Does not apply. My department always assigns an Incident Commander for structure fires.				
	3.4	0.6 <sup>[3,+]</sup>	2.8	4.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>				
	70.8	89.2 <sup>[2,3]</sup>	74.3 <sup>[1,3]</sup>	61.7 <sup>[1,2]</sup>



Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.2	85.3 <sup>[3]</sup>	89.9 <sup>[3]</sup>	94.4 <sup>[1,2]</sup>
Develop and coordinate the fire attack strategy	94.2	95.7	95.6	92.6
Develop and initiate a risk management plan	63.6	73.9 <sup>[3]</sup>	68.5 <sup>[3]</sup>	55.9 <sup>[1,2]</sup>
Document all assessments, plans and events related to the fire	42.2	53.5 <sup>[2]</sup>	37.6 <sup>[1]</sup>	42.1
Ensure that at least four (4) firefighters are on the scene before entering the building	70.4	81.1 <sup>[2,3]</sup>	69.7 <sup>[1]</sup>	67.3 <sup>[1]</sup>
Establish a collapse zone around the building	53.9	62.9	50.1	53.9
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	64.6	89.5 <sup>[2,3]</sup>	68.3 <sup>[1,3]</sup>	52.9 <sup>[1,2]</sup>
Identify and implement a communication strategy	67.5	62.2	71.5	66.0
Monitor location of all firefighters at the scene	77.2	88.8 <sup>[2,3]</sup>	77.7 <sup>[1]</sup>	72.6 <sup>[1]</sup>
Other	10.4	15.2	7.0 <sup>[3]</sup>	11.7 <sup>[2]</sup>
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Never	8.2	7.0	8.3	8.5
Some of the time	25.1	23.3	27.2	24.0
About half the time	8.0	7.9	8.3	7.9
Most of the time	31.6	30.6	30.9	32.4
Always	27.2	31.2	25.4	27.2

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b> Fires are not big enough to require an Incident Safety Officer Not enough firefighters are available at the scene of the fire Other Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires. <i>Legitimately Skipped Question</i>	28.0 42.4 20.4 2.0 27.5	25.2 19.1 <sup>[2,3]</sup> 40.8 <sup>[2,3]</sup> 2.1 <sup>[+]</sup> 31.3	27.1 47.5 <sup>[1]</sup> 22.1 <sup>[1,3]</sup> 0.9 25.8	29.7 46.4 <sup>[1]</sup> 12.0 <sup>[1,2]</sup> 2.9 27.7
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>  Some of the time Never About half the time Most of the time Always	17.6 16.3 5.5 26.6 34.0	6.9 <sup>[2,3]</sup> 5.7 <sup>[2,3]</sup> 5.2 <sup>[+]</sup> 22.7 59.6 <sup>[2,3]</sup>	16.2 <sup>[1,3]</sup> 13.0 <sup>[1,3]</sup> 4.7 32.4 33.7 <sup>[1]</sup>	22.6 <sup>[1,2]</sup> 22.7 <sup>[1,2]</sup> 6.3 23.1 25.3 <sup>[1]</sup>
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b> When the building has more than one story/floor When there are enough firefighters on and at the scene of the fire Whenever firefighters enter a burning building Other <i>Legitimately Skipped Question</i>	8.6 28.7 26.1 6.2 51.7	6.1 17.9 <sup>[2,3]</sup> 14.4 <sup>[2,3]</sup> 9.0 66.3 <sup>[2,3]</sup>	8.5 28.6 <sup>[1]</sup> 29.2 <sup>[1]</sup> 6.5 50.2 <sup>[1]</sup>	9.6 32.4 <sup>[1]</sup> 27.5 <sup>[1]</sup> 5.0 47.8 <sup>[1]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	29.7	25.4	31.4	29.7
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	4.9	** [2,3,+]	3.9 <sup>[1,3]</sup>	7.5 <sup>[1,2]</sup>
We don't have enough firefighters available at the scene of the fire	41.7	16.9 <sup>[2,3]</sup>	43.8 <sup>[1]</sup>	48.6 <sup>[1]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	13.6	4.4 <sup>[2,3]</sup>	10.2 <sup>[1,3]</sup>	19.6 <sup>[1,2]</sup>
We have never established an RIT/RIC	10.6	2.6 <sup>[2,3]</sup>	7.5 <sup>[1,3]</sup>	16.0 <sup>[1,2]</sup>
We use other fire departments in the area for RITs/RICs	22.6	4.1 <sup>[2,3]</sup>	17.6 <sup>[1,3]</sup>	33.3 <sup>[1,2]</sup>
We use other safety practices and so we don't need them	2.6	0.8 <sup>[2,3,+]</sup>	3.1 <sup>[1]</sup>	2.7 <sup>[1]</sup>
Other	5.5	7.4	6.3	4.3
<i>Legitimately Skipped Question</i>	34.4	59.8 <sup>[2,3]</sup>	34.3 <sup>[1]</sup>	25.6 <sup>[1]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	86.4	96.1 <sup>[2,3]</sup>	86.9 <sup>[1]</sup>	82.6 <sup>[1]</sup>
	13.6	3.9 <sup>[2,3,+]</sup>	13.1 <sup>[1]</sup>	17.4 <sup>[1]</sup>
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No	3.7	2.9 <sup>[+]</sup>	4.7	3.1
Some of the time	2.5	0.4 <sup>[3,+]</sup>	2.5 <sup>[+]</sup>	3.3 <sup>[1]</sup>
Never	1.2	** [2,3,+]	1.0 <sup>[1]</sup>	1.7 <sup>[1]</sup>
About half the time	8.5	4.2 <sup>[3]</sup>	6.1 <sup>[3]</sup>	12.0 <sup>[1,2]</sup>
Most of the time	84.1	92.4 <sup>[3]</sup>	85.7 <sup>[3]</sup>	79.8 <sup>[1,2]</sup>
Always				

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	8.3	3.2 <sup>[+]</sup>	9.7	9.0
Situation doesn't require them	6.3	2.0 <sup>[3,+]</sup>	4.7 <sup>[3]</sup>	9.1 <sup>[1,2]</sup>
Firefighters think the devices do not always work reliably	0.2	0.2 <sup>[+]</sup>	0.4 <sup>[+]</sup>	** <sup>[+]</sup>
Firefighters don't think they need them	3.2	0.8 <sup>[3,+]</sup>	2.9	4.4 <sup>[1]</sup>
Devices go off while firefighters are resting	2.6	2.7 <sup>[+]</sup>	1.2 <sup>[3]</sup>	3.6 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	84.5	92.8 <sup>[3]</sup>	85.9 <sup>[3]</sup>	80.3 <sup>[1,2]</sup>
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
Yes	98.8	96.7	98.7	99.7
	1.2	3.3 <sup>[+]</sup>	<sup>[+]</sup>	<sup>[+]</sup>
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	40.2	4.5 <sup>[2,3]</sup>	41.7 <sup>[1,3]</sup>	51.3 <sup>[1,2]</sup>
No	58.6	92.1 <sup>[2,3]</sup>	56.9 <sup>[1]</sup>	48.4 <sup>[1]</sup>
Yes	1.2	3.5 <sup>[+]</sup>	1.4 <sup>[+]</sup>	0.3 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>		1.3	0.3	
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	3.1	** <sup>[2,3]</sup>	3.5 <sup>[1]</sup>	3.9 <sup>[1]</sup>
Firefighters don't like using the equipment	0.1	**	**	0.3 <sup>[+]</sup>
Have never needed them (e.g., we don't do interior attacks)	0.2	**	0.2 <sup>[+]</sup>	0.4 <sup>[+]</sup>
They cost too much, there is not enough money in the budget	25.6	2.6 <sup>[2,3]</sup>	25.8 <sup>[1]</sup>	33.3 <sup>[1]</sup>
We don't have enough equipment for all of our firefighters	17.9	0.7 <sup>[2,3,+]</sup>	16.0 <sup>[1,3]</sup>	25.4 <sup>[1,2]</sup>
Shared systems work fine for our needs	19.3	2.6 <sup>[2,3]</sup>	20.5 <sup>[1]</sup>	24.1 <sup>[1]</sup>
Other	7.3	1.2 <sup>[2,3,+]</sup>	10.1 <sup>[1]</sup>	7.0 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	59.8	95.9 <sup>[2,3]</sup>	57.9 <sup>[1]</sup>	48.9 <sup>[1]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Some of the time	0.4	** [2]	0.6 [1]	0.2 [+]
Never	2.3	** [2,3]	1.5 [1,3]	3.7 [1,2]
About half the time	1.7	0.4 [3,+]	1.2	2.5 [1]
Most of the time	22.5	20.8	21.3	24.1
Always	72.0	75.3	74.0	69.2
<i>Legitimately Skipped Question</i>	1.2	3.5 [+]	1.4 [+]	0.3 [+]
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	20.1	9.5 [2,3]	[1]	[1]
Firefighters do not trust that the SCBAs will work reliably	**	**	**	** [+]
Firefighters don't think they need them	11.4	15.3 [+]		11.0
Firefighters don't like sharing facepieces with others	0.5	** [3]	[+] 19.7	[1]
Firefighters are concerned that the SCBA may be or become contaminated	**	** 10.2	**	** [+]
Wearing SCBAs makes it more difficult to work	4.4	3.2	3.3	5.7
Firefighters don't have SCBAs to use	2.7	** [3]	[+] 0.9	[1]
<i>Legitimately Skipped Question</i>	73.9	78.8	76.5	70.1
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	46.6	49.8	49.4	43.2
Once a month or more	16.7	6.8 [2,3]	[1,3] 1.9	[1,2]
Several times a year	14.3	12.3	16.1	13.5
Once a year	17.6	26.1	15.7	16.1
Less than once a year	2.6	0.8 [3,+]		3.0 [1]
Never. Maintenance has not been done on our SCBAs.	0.8	0.4 [+]	13.4	23.1
Does not apply. My department does not have SCBAs.	**	**	**	**
<i>Legitimately Skipped Question</i>	1.5	3.8 [+]	[+]	[+]

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	29.7 70.3	53.6 <sup>[2,3]</sup> 46.4 <sup>[2,3]</sup>	31.8 <sup>[1,3]</sup> 68.2 <sup>[1,3]</sup>	19.6 <sup>[1,2]</sup> 80.4 <sup>[1,2]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero				
CBRN SCBA devices are not needed in our department	16.6	8.6 <sup>[3]</sup>	15.4	20.5 <sup>[1]</sup>
We didn't know they were available	11.2	5.1 <sup>[2,3]</sup>	9.9 <sup>[1]</sup>	14.4 <sup>[1]</sup>
We don't have adequate technical information to purchase them	15.4	3.4 <sup>[2,3]</sup>	16.5 <sup>[1]</sup>	18.7 <sup>[1]</sup>
We don't have adequate funding to purchase them	50.8	28.4 <sup>[2,3]</sup>	49.9 <sup>[1]</sup>	59.5 <sup>[1]</sup>
Other	7.1	9.0	7.4	6.2
<i>Legitimately Skipped Question</i>	31.1	57.0 <sup>[2,3]</sup>	32.7 <sup>[1,3]</sup>	20.7 <sup>[1,2]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
No	85.3 14.7	94.2 <sup>[2,3]</sup> 5.8 <sup>[2,3,+]</sup>	86.6 <sup>[1,3]</sup> 13.4 <sup>[1,3]</sup>	81.1 <sup>[1,2]</sup> 18.9 <sup>[1,2]</sup>
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	2.1	0.6 <sup>[+]</sup>	3.4	1.6
On the emergency vehicles (or apparatus)	66.1	77.1 <sup>[2,3]</sup>	63.6 <sup>[1]</sup>	64.5 <sup>[1]</sup>
Both at the fire station(s) and on the vehicles (or apparatus)	14.8	15.2	17.5	12.5
<i>Legitimately Skipped Question</i>	17.0	7.1 <sup>[2,3,+]</sup>	15.6 <sup>[1,3]</sup>	21.3 <sup>[1,2]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	20.1	32.5 <sup>[3]</sup>	23.5 <sup>[3]</sup>	12.0 <sup>[1,2]</sup>
Once a month or more	24.7	18.8	26.0	26.0
Several times a year	19.4	15.2 <sup>[3]</sup>	15.5 <sup>[3]</sup>	24.6 <sup>[1,2]</sup>
Once a year	23.1	27.8	24.1	20.2
Less frequently than once a year	6.2	4.0	5.1	8.0
Never. Maintenance on our AEDs has not been done.	6.5	1.7 <sup>[2,3]</sup>	5.8 <sup>[1]</sup>	9.2 <sup>[1]</sup>
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	1.5	0.3 <sup>[3,+]</sup>	0.5 <sup>[3,+]</sup>	2.7 <sup>[1,2]</sup>
Never	3.1	0.1 <sup>[2,3,+]</sup>	1.2 <sup>[1,3]</sup>	5.7 <sup>[1,2]</sup>
About half the time	1.6	0.8 <sup>[3,+]</sup>	0.7 <sup>[3]</sup>	2.7 <sup>[1,2]</sup>
Most of the time	16.1	4.3 <sup>[2,3]</sup>	13.7 <sup>[1,3]</sup>	22.2 <sup>[1,2]</sup>
Always	77.8	94.4 <sup>[2,3]</sup>	83.9 <sup>[1,3]</sup>	66.8 <sup>[1,2]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Never	14.5	12.2	12.7	16.8
Some of the time	70.7	82.0 <sup>[3]</sup>	71.8	66.0 <sup>[1]</sup>
About half the time	7.8	2.8 <sup>[2,3]</sup>	7.4 <sup>[1]</sup>	10.0 <sup>[1]</sup>
Most of the time	5.7	2.5 <sup>[3]</sup>	7.6 <sup>[+]</sup>	5.2 <sup>[1]</sup>
Always	1.3	0.6 <sup>[3,+]</sup>	0.6 <sup>[3,+]</sup>	2.1 <sup>[1,2]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	38.6	27.3 <sup>[3]</sup>	35.4 <sup>[3]</sup>	45.2 <sup>[1,2]</sup>
Adequate	54.0	65.0 <sup>[3]</sup>	57.3 <sup>[3]</sup>	47.4 <sup>[1,2]</sup>
More than adequate	7.4	7.7	7.3	7.3
<b>42b. Training</b>				
Not adequate	36.0	44.0	36.7	32.6
Adequate	56.4	49.8	54.7	60.0
More than adequate	7.7	6.2	8.6	7.3
<b>42c. Personnel</b>				
Not adequate	48.8	49.7	55.5 <sup>[3]</sup>	42.6 <sup>[2]</sup>
Adequate	46.2	46.1	40.6 <sup>[3]</sup>	51.2 <sup>[2]</sup>
More than adequate	5.0	4.2	3.9	6.3
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	18.7	12.9 <sup>[3]</sup>	12.7 <sup>[3]</sup>	25.4 <sup>[1,2]</sup>
Several times per year	30.9	23.0 <sup>[2,3]</sup>	32.5 <sup>[1]</sup>	32.4 <sup>[1]</sup>
Never	40.4	48.0	41.8	36.7
Once a month or more	10.0	16.1 <sup>[3]</sup>	13.0	5.6 <sup>[1]</sup>
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	55.8	47.6	57.8	56.9
On the Internet	39.8	64.4 <sup>[2,3]</sup>	45.6 <sup>[1,3]</sup>	26.4 <sup>[1,2]</sup>
From colleagues in other departments	15.1	13.2	22.3 <sup>[3]</sup>	9.8 <sup>[2]</sup>
At conferences or other meetings	10.8	19.9 <sup>[2,3]</sup>	11.9 <sup>[1,3]</sup>	6.7 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	18.3	12.9 <sup>[3]</sup>	12.1 <sup>[3]</sup>	25.4 <sup>[1,2]</sup>



Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
No	64.8	76.5 <sup>[3]</sup>	72.1 <sup>[3]</sup>	54.7 <sup>[1,2]</sup>
Yes	16.9	10.7 <sup>[3]</sup>	15.9	19.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.3	12.8 <sup>[3]</sup>	12.0 <sup>[3]</sup>	25.5 <sup>[1,2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	67.6	74.0 <sup>[3]</sup>	71.0 <sup>[3]</sup>	62.5 <sup>[1,2]</sup>
No	13.5	13.2	16.3	11.4
<i>Legitimately Skipped Question</i>	18.9	12.8 <sup>[3]</sup>	12.7 <sup>[3]</sup>	26.1 <sup>[1,2]</sup>
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	25.4	19.7	28.6	24.7
Training sessions	51.5	54.9	55.3	47.2
Provide copies of NIOSH reports to firefighters	21.0	21.8	28.1 <sup>[3]</sup>	14.9 <sup>[2]</sup>
Provide copies of NIOSH report summaries to firefighters	10.2	8.2	15.1	6.8
Provide summaries prepared by department to firefighters	4.1	11.0 <sup>[2,3]</sup>	2.4 <sup>[1]</sup>	3.1 <sup>[1]</sup>
Postings on bulletin boards	43.1	39.5	42.3	45.0
Post report on the department website	3.8	5.2	5.9 <sup>[+]</sup>	1.6 <sup>[+]</sup>
Send message to firefighters by email	13.8	34.3 <sup>[2,3]</sup>	17.7 <sup>[1,3]</sup>	3.5 <sup>[1,2]</sup>
Other	2.6	5.7	2.5	1.7
<i>Legitimately Skipped Question</i>	31.8	26.5 <sup>[3]</sup>	27.7 <sup>[3]</sup>	37.1 <sup>[1,2]</sup>
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	50.4	72.6 <sup>[2,3]</sup>	57.2 <sup>[1,3]</sup>	37.1 <sup>[1,2]</sup>
Yes	30.8	14.0 <sup>[2,3]</sup>	30.5 <sup>[1]</sup>	36.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.8	13.4 <sup>[3]</sup>	12.4 <sup>[3]</sup>	26.0 <sup>[1,2]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	2.5	1.3 <sup>[+]</sup>	5.7 <sup>[+]</sup>	0.2 <sup>[+]</sup>
Disagree	5.1	1.5	8.4	3.7
Neither Agree nor Disagree	18.4	14.9	18.2	19.9
Agree	50.3	62.4 <sup>[3]</sup>	50.6	45.9 <sup>[1]</sup>
Strongly Agree	4.7	6.8	4.6	3.9
<i>Legitimately Skipped Question</i>	19.0	13.1 <sup>[3]</sup>	12.6 <sup>[3]</sup>	26.5 <sup>[1,2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	2.4	0.7 <sup>[+]</sup>	5.8 <sup>[+]</sup>	0.1 <sup>[+]</sup>
Disagree	1.5	1.1	1.5	1.6
Neither Agree nor Disagree	16.9	10.6 <sup>[3]</sup>	14.6 <sup>[3]</sup>	21.0 <sup>[1,2]</sup>
Agree	54.2	65.8 <sup>[3]</sup>	59.6 <sup>[3]</sup>	45.6 <sup>[1,2]</sup>
Strongly Agree	6.0	8.7	5.8	5.1
<i>Legitimately Skipped Question</i>	19.1	13.1 <sup>[3]</sup>	12.6 <sup>[3]</sup>	26.6 <sup>[1,2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	2.5	1.3 <sup>[+]</sup>	5.9 <sup>[+]</sup>	0.1 <sup>[+]</sup>
Disagree	6.0	7.7	7.8	3.9
Neither Agree nor Disagree	24.2	14.8 <sup>[2,3]</sup>	23.9 <sup>[1]</sup>	27.7 <sup>[1]</sup>
Agree	43.5	54.7 <sup>[3]</sup>	45.6	37.8 <sup>[1]</sup>
Strongly Agree	4.7	8.4 <sup>[3]</sup>	4.0	3.9 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	19.1	13.2 <sup>[3]</sup>	12.7 <sup>[3]</sup>	26.5 <sup>[1,2]</sup>

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	63.7	81.0 <sup>[2,3]</sup>	64.5 <sup>[1]</sup>	57.0 <sup>[1]</sup>
Respirator maintenance program guide	16.6	20.9	13.6	17.7
CDs of firefighter program materials	32.3	42.4	31.5	29.5
Hazard IDs	44.2	58.8 <sup>[3]</sup>	49.4 <sup>[3]</sup>	34.7 <sup>[1,2]</sup>
Hazard IDs	18.0	18.4	17.9	17.9
Alerts Workplace Solutions	14.3	13.5	15.2	13.7
	1.0	1.1 <sup>[+]</sup>	1.3	0.7
None. I have not seen any NIOSH materials.	18.3	10.0 <sup>[3]</sup>	15.4 <sup>[3]</sup>	23.7 <sup>[1,2]</sup>
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.5	1.8	1.3 <sup>[+]</sup>	1.5
Dissatisfied	0.1	**	** <sup>[+]</sup>	0.3 <sup>[+]</sup>
Neither satisfied nor dissatisfied	19.0	9.1 <sup>[2,3]</sup>	18.4 <sup>[1]</sup>	23.0 <sup>[1]</sup>
Satisfied	53.0	68.0 <sup>[2,3]</sup>	54.2 <sup>[1]</sup>	46.7 <sup>[1]</sup>
Very satisfied	8.3	10.9 <sup>[3]</sup>	10.9	5.1 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.1	10.1 <sup>[3]</sup>	15.2 <sup>[3]</sup>	23.4 <sup>[1,2]</sup>
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	44.0	16.7 <sup>[2,3]</sup>	38.8 <sup>[1,3]</sup>	57.8 <sup>[1,2]</sup>
Yes, longer than one year ago	50.0	76.7 <sup>[2,3]</sup>	54.7 <sup>[1,3]</sup>	36.7 <sup>[1,2]</sup>
No	6.1	6.5	6.5	5.5

Question	Department Type			
	Total	All Career	All Volunteer	Combination
<b>55. In which of these ways would you most prefer to receive information about NIOSH recommendations? MARK YOUR THREE (3) FAVORITES.</b>				
Cable television programming	5.2	4.5	3.4 <sup>[3]</sup>	7.1 <sup>[2]</sup>
CD/DVD	50.6	35.4 <sup>[2,3]</sup>	50.2 <sup>[1]</sup>	56.2 <sup>[1]</sup>
Conference presentations or meeting	8.9	10.8	9.6	7.6
Email	53.8	71.9 <sup>[2,3]</sup>	56.1 <sup>[1,3]</sup>	45.5 <sup>[1,2]</sup>
Fire Fighter Fatality Investigation Reports	53.6	59.5 <sup>[3]</sup>	60.0 <sup>[3]</sup>	46.1 <sup>[1,2]</sup>
NIOSH Website	27.2	40.3 <sup>[2,3]</sup>	23.7 <sup>[1]</sup>	25.5 <sup>[1]</sup>
One-page Fact Sheets	30.3	30.9	27.8	32.3
Pocket Guides	26.7	27.1	23.9	28.9
Summary Reports	12.8	4.5 <sup>[2,3]</sup>	14.4 <sup>[1]</sup>	14.4 <sup>[1]</sup>
Training session/class	25.5	17.4 <sup>[2]</sup>	31.0 <sup>[1]</sup>	23.7
Posters	19.1	12.8 <sup>[3]</sup>	20.0	20.5 <sup>[1]</sup>
Other	1.1	** <sup>[2,3]</sup>	1.2 <sup>[1]</sup>	1.4 <sup>[1]</sup>

**Note:**

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the “Mark all that Apply” questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.



**Table 17.1 Results from the Fire Department Survey, Percent Estimates by Rural/Urban Fire Fighter-Level Estimates**

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>1. Does your department have a Safety Officer?</b>				
	79.0	76.1 <sup>[2]</sup>	84.1 <sup>[1]</sup>	77.4
	21.0	23.9 <sup>[2]</sup>	15.9 <sup>[1]</sup>	22.6
<b>2. Does your department have a Training Officer?</b>				
Yes	93.3	92.7	94.7	92.5
No	6.7	7.3	5.3	7.5
<b>3. Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Incident Command Systems	89.6	87.6 <sup>[2]</sup>	96.1 <sup>[1,3]</sup>	81.9 <sup>[2]</sup>
Maintenance of SCBAs	76.8	70.8 <sup>[2]</sup>	86.0 <sup>[1]</sup>	77.1
Motor vehicle safety	83.9	82.8	87.1	80.5
Participation in a personal physical fitness program	24.3	14.5 <sup>[2]</sup>	40.3 <sup>[1]</sup>	23.4
Participation in regular health screenings for cardiovascular disease (CVD)	33.5	26.7 <sup>[2]</sup>	46.5 <sup>[1]</sup>	28.5
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	58.8	47.5 <sup>[2]</sup>	82.6 <sup>[1,3]</sup>	45.5 <sup>[2]</sup>
Use of Personal Alert Safety System (PASS) devices	81.5	78.1 <sup>[2]</sup>	90.4 <sup>[1,3]</sup>	73.1 <sup>[2]</sup>
Use of personal protective equipment and protective clothing	93.1	92.2 <sup>[2]</sup>	95.2 <sup>[1]</sup>	91.5
Use of radio communications	88.9	86.9 <sup>[2]</sup>	91.5 <sup>[1]</sup>	90.4
Other	10.7	8.7 <sup>[2]</sup>	15.7 <sup>[1,3]</sup>	6.5 <sup>[2]</sup>
Does not apply. Our fire department does not use SOPs/SOGs.	2.6	3.4 <sup>[2]</sup>	0.7 <sup>[1]</sup>	3.9

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.2	0.6	0.3 <sup>[+]</sup>	5.6 <sup>[+]</sup>
Optional Training	11.1	14.3 <sup>[2]</sup>	4.1 <sup>[1,3]</sup>	15.8 <sup>[2]</sup>
Required Training	88.1	85.8 <sup>[2]</sup>	95.8 <sup>[1,3]</sup>	78.7 <sup>[2]</sup>
<b>4b. Driving safety</b>				
No Training	2.3	2.4	1.3	4.0
Optional Training	12.9	15.2 <sup>[2]</sup>	7.4 <sup>[1,3]</sup>	17.2 <sup>[2]</sup>
Required Training	85.0	82.5 <sup>[2]</sup>	91.5 <sup>[1,3]</sup>	78.8 <sup>[2]</sup>
<b>4c. Incident Command systems</b>				
No Training	1.5	1.9 <sup>[2]</sup>	0.2 <sup>[1,+]</sup>	2.9
Optional Training	19.2	24.6 <sup>[2]</sup>	7.4 <sup>[1,3]</sup>	27.0 <sup>[2]</sup>
Required Training	79.4	73.7 <sup>[2]</sup>	92.4 <sup>[1,3]</sup>	70.1 <sup>[2]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	5.1	6.1 <sup>[2]</sup>	2.4 <sup>[1]</sup>	7.8
Optional Training	27.6	33.2 <sup>[2]</sup>	18.3 <sup>[1]</sup>	28.1
Required Training	67.7	61.0 <sup>[2]</sup>	79.7 <sup>[1,3]</sup>	64.0 <sup>[2]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	17.3	22.6 <sup>[2]</sup>	3.5 <sup>[1,3]</sup>	31.6 <sup>[2]</sup>
Optional Training	32.7	39.4 <sup>[2,3]</sup>	25.4 <sup>[1]</sup>	24.8 <sup>[1]</sup>
Required Training	50.3	38.1 <sup>[2]</sup>	71.6 <sup>[1,3]</sup>	43.6 <sup>[2]</sup>
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.1	0.9	1.4	1.3 <sup>[+]</sup>
Optional Training	6.9	8.6 <sup>[2]</sup>	3.2 <sup>[1,3]</sup>	9.2 <sup>[2]</sup>
Required Training	92.2	90.7 <sup>[2]</sup>	95.6 <sup>[1]</sup>	89.6
<b>4g. Use of radio communication devices</b>				
No Training	2.3	2.7	1.4	2.7 <sup>[+]</sup>
Optional Training	15.6	17.8 <sup>[2]</sup>	10.0 <sup>[1,3]</sup>	20.8 <sup>[2]</sup>
Required Training	82.4	79.7 <sup>[2]</sup>	89.3 <sup>[1,3]</sup>	76.5 <sup>[2]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	90.4	88.7 <sup>[2]</sup>	93.7 <sup>[1]</sup>	88.8
Other officers within our department	88.2	85.8 <sup>[2]</sup>	94.9 <sup>[1,3]</sup>	81.3 <sup>[2]</sup>
State fire training agency	78.1	80.4	73.9	79.1
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	34.4	28.0 <sup>[2]</sup>	50.3 <sup>[1,3]</sup>	21.1 <sup>[2,+]</sup>
Conferences or regional meetings	60.7	57.3 <sup>[2]</sup>	69.4 <sup>[1]</sup>	52.9
Other	25.6	23.9	30.9	19.3
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	57.7	62.7 <sup>[3]</sup>	57.5 <sup>[3]</sup>	38.4 <sup>[1,2]</sup>
Scuba diving	11.9	8.8 <sup>[2]</sup>	19.8 <sup>[1,3]</sup>	5.0 <sup>[2]</sup>
Swift water rescue	19.5	14.3 <sup>[2,3]</sup>	34.5 <sup>[1,3]</sup>	3.8 <sup>[1,2]</sup>
Wildland fire fighting	40.3	49.8 <sup>[2]</sup>	23.4 <sup>[1,3]</sup>	44.8 <sup>[2]</sup>
HAZMAT	74.3	71.1 <sup>[2]</sup>	83.1 <sup>[1,3]</sup>	65.0 <sup>[2]</sup>
Other	38.1	31.8 <sup>[2]</sup>	48.7 <sup>[1]</sup>	36.9
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	4.8	6.3 <sup>[2]</sup>	2.2 <sup>[1,+]</sup>	5.5
Not very familiar	17.1	20.3 <sup>[2]</sup>	8.7 <sup>[1,3]</sup>	24.6 <sup>[2]</sup>
Somewhat familiar	58.1	60.3	57.3	51.8
Very familiar	20.0	13.1 <sup>[2]</sup>	31.8 <sup>[1]</sup>	18.1 <sup>[+]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	14.6	18.5 <sup>[2]</sup>	6.7 <sup>[1,3]</sup>	18.2 <sup>[2]</sup>
Not very familiar	27.2	30.3 <sup>[2]</sup>	19.9 <sup>[1]</sup>	33.2
Somewhat familiar	41.3	39.1 <sup>[2]</sup>	48.4 <sup>[1,3]</sup>	32.3 <sup>[2]</sup>
Very familiar	16.9	12.1 <sup>[2]</sup>	25.0 <sup>[1]</sup>	16.3 <sup>[+]</sup>



Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	71.5	73.4	73.3	60.1
National conference presentations	9.3	8.4 <sup>[3]</sup>	13.9 <sup>[3]</sup>	1.5 <sup>[1,2,+]</sup>
State-level conference presentations	15.5	14.3	18.5	13.0
Other firefighters or departments	25.8	23.4	23.9	40.3
At seminars or other training opportunities (not conferences)	21.4	20.9	20.9	24.6
Trade publications (such as Firehouse and Fire Engineering)	55.5	52.2 <sup>[2]</sup>	62.7 <sup>[1]</sup>	51.0
NIOSH website	40.9	31.6 <sup>[2]</sup>	58.6 <sup>[1,3]</sup>	34.6 <sup>[2]</sup>
Links from other websites (such as NFPA and Firehouse)	36.8	33.8 <sup>[2]</sup>	43.7 <sup>[1]</sup>	32.1
Media reports - newspaper, television, radio	15.9	15.3	16.5	16.8
Does not apply. We have not received	2.7	0.6	7.1 <sup>[+]</sup>	0.4 <sup>[+]</sup>
Other information about NIOSH recommendations.	7.0	6.7 <sup>[2,3]</sup>	3.2 <sup>[1,3]</sup>	17.9 <sup>[1,2]</sup>
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	48.5	47.3	54.6	38.1
Developed new SOPs/SOGs	35.3	31.1 <sup>[2]</sup>	41.8 <sup>[1]</sup>	35.4
Made changes to SOPs/SOGs	45.6	42.3 <sup>[2]</sup>	54.2 <sup>[1]</sup>	37.7
Justified current budget/staffing	10.6	5.2 <sup>[2]</sup>	16.7 <sup>[1]</sup>	16.9 <sup>[+]</sup>
Made new budget/staffing requests	12.2	10.1	14.4	14.9 <sup>[+]</sup>
Justified grant applications	19.7	20.3 <sup>[3]</sup>	23.2 <sup>[3]</sup>	8.7 <sup>[1,2]</sup>
Does not apply. We have not used NIOSH recommendations.	25.0	27.0	20.7	27.9
<i>Legitimately Skipped Question</i>	7.3	7.0 <sup>[2,3]</sup>	3.3 <sup>[1,3]</sup>	18.6 <sup>[1,2]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	35.3	35.8	34.2	35.9
Personal protective equipment and clothing	49.6	48.0	54.8	43.0
SCBA	49.7	47.8	56.5	40.1
PASS systems	40.4	37.8	46.6	35.5
Incident Command systems	40.8	36.4 <sup>[2]</sup>	48.3 <sup>[1]</sup>	40.1
Radio communications	27.1	25.3 <sup>[2]</sup>	34.9 <sup>[1,3]</sup>	15.5 <sup>[2]</sup>
Physical fitness and cardiovascular disease (CVD)	15.9	11.8 <sup>[2]</sup>	26.1 <sup>[1,3]</sup>	6.8 <sup>[2]</sup>
Building code compliance (e.g., warning against the use of wooden trusses)	9.9	8.6	9.1	17.0 <sup>[+]</sup>
Other	4.8	2.2	4.6	15.0 <sup>[+]</sup>
Does not apply. We have not used NIOSH recommendations for training purposes.	1.8	1.8 <sup>[3]</sup>	2.2	0.5 <sup>[1,+]</sup>
<i>Legitimately Skipped Question</i>	32.5	33.9 <sup>[2]</sup>	24.3 <sup>[1,3]</sup>	46.6 <sup>[2]</sup>
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	58.8	72.4 <sup>[2]</sup>	31.9 <sup>[1,3]</sup>	70.3 <sup>[2]</sup>
No Yes, it's optional	16.9	9.6 <sup>[2]</sup>	26.3 <sup>[1]</sup>	23.3
	24.3	18.1 <sup>[2,3]</sup>	41.9 <sup>[1,3]</sup>	6.4 <sup>[1,2]</sup>
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	14.1 <sup>[3]</sup>	18.8 <sup>[3]</sup>	5.4 <sup>[1,2]</sup>
Less frequently than once a year	9.2	7.9 <sup>[3]</sup>	13.7 <sup>[3]</sup>	3.1 <sup>[1,2,+]</sup>
One time a year	32.8	25.6 <sup>[2]</sup>	45.1 <sup>[1]</sup>	31.3
More than one time a year	0.4	0.2 <sup>[+]</sup>	0.9 <sup>[+]</sup>	**
Does not apply. Firefighters are not required to receive CVD screenings	43.2	52.2 <sup>[2]</sup>	21.6 <sup>[1,3]</sup>	60.2 <sup>[2]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
No	4.1	4.9	2.8	4.4
Yes, they receive training required by the department	88.9	86.5 <sup>[2]</sup>	93.1 <sup>[1]</sup>	88.4
Yes, they receive training required by the state	28.3	27.9	26.7	34.0
Yes, they receive optional training	13.6	12.1	11.3	25.0
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	12.1	12.5	10.2	15.2
Once every year	43.6	41.2	45.5	48.3
Less frequently than once a year	28.4	28.4	31.1	21.2
Does not apply. Firefighters are not required to receive continuing driver training.	15.9	17.8	13.2	15.3
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
	89.2	87.0 <sup>[2]</sup>	93.8 <sup>[1]</sup>	86.5
	10.8	13.0 <sup>[2]</sup>	6.2 <sup>[1]</sup>	13.5
<b>Yes</b>				
<b>No</b>				
<b>To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	6.8	8.0 <sup>[3]</sup>	6.4	3.3 <sup>[1,+]</sup>
Disagree	19.5	17.7	23.6	16.1
Neither agree nor disagree	25.2	29.1 <sup>[2]</sup>	18.6 <sup>[1]</sup>	26.2
Agree	34.8	33.0	35.6	40.0
Strongly agree	13.7	12.2	15.8	14.4

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	3.6	4.6 <sup>[2]</sup>	1.8 <sup>[1]</sup>	3.7
Never About half the time	22.3	19.3	28.2	19.0
Most of the time	16.5	17.7	14.8	16.4
Always	38.1	39.8	36.7	34.6
	19.6	18.5	18.5	26.3
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Never	1.3	1.1	0.6 <sup>[+]</sup>	3.5
About half the time	3.6	5.3 <sup>[2]</sup>	0.7 <sup>[1,3]</sup>	4.4 <sup>[2]</sup>
Rarely	4.0	5.5 <sup>[2]</sup>	1.2 <sup>[1]</sup>	4.7
Most of the time	20.3	24.9 <sup>[2]</sup>	10.7 <sup>[1,3]</sup>	26.5 <sup>[2]</sup>
Always	70.8	63.2 <sup>[2]</sup>	86.8 <sup>[1,3]</sup>	60.9 <sup>[2]</sup>
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	15.1	19.7 <sup>[2]</sup>	4.8 <sup>[1,3]</sup>	22.0 <sup>[2]</sup>
Not enough firefighters available at the scene of the fire	12.6	16.9 <sup>[2]</sup>	3.3 <sup>[1,3]</sup>	18.5 <sup>[2]</sup>
Other	4.7	4.8	5.0	3.6
Does not apply. My department always assigns an Incident Commander for structure fires.	3.4	4.2	2.0 <sup>[+]</sup>	3.8
<i>Legitimately Skipped Question</i>	70.8	63.1 <sup>[2]</sup>	87.1 <sup>[1,3]</sup>	60.6 <sup>[2]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.2	93.4	90.1	85.5
Develop and coordinate the fire attack strategy	94.2	93.4	96.7	91.1
Develop and initiate a risk management plan	63.6	58.3 <sup>[2]</sup>	74.1 <sup>[1,3]</sup>	58.2 <sup>[2]</sup>
Document all assessments, plans and events related to the fire	42.2	41.3 <sup>[3]</sup>	50.0 <sup>[3]</sup>	26.5 <sup>[1,2]</sup>
Ensure that at least four (4) firefighters are on the scene before entering the building	70.4	67.9	74.1	71.4
Establish a collapse zone around the building	53.9	52.0 <sup>[2,3]</sup>	63.6 <sup>[1,3]</sup>	37.3 <sup>[1,2]</sup>
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	64.6	52.9 <sup>[2]</sup>	88.7 <sup>[1,3]</sup>	51.0 <sup>[2]</sup>
Identify and implement a communication strategy	67.5	65.7	66.8	76.0
Monitor location of all firefighters at the scene	77.2	73.2 <sup>[2]</sup>	85.4 <sup>[1]</sup>	72.5
	10.4	10.0	12.3	7.9
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Other				
Some of the time	8.2	8.9 <sup>[2]</sup>	5.4 <sup>[1]</sup>	12.5
Never	25.1	25.2	25.8	22.6
About half the time	8.0	9.2	5.8	8.7
Most of the time	31.6	31.0	34.3	25.9
Always	27.2	25.6	28.6	30.3

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	28.0	29.6	25.1	29.6
Not enough firefighters are available at the scene of the fire	42.4	50.9 <sup>[2]</sup>	28.1 <sup>[1,3]</sup>	44.9 <sup>[2]</sup>
Other	20.4	12.2 <sup>[2]</sup>	36.0 <sup>[1,3]</sup>	12.1 <sup>[2]</sup>
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	2.0	2.0	2.1 <sup>[+]</sup>	1.9 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	27.5	25.9	28.9	31.1
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Some of the time	17.6	21.4 <sup>[2,3]</sup>	4.1 <sup>[1,3]</sup>	36.0 <sup>[1,2]</sup>
Never	16.3	22.5 <sup>[2,3]</sup>	7.8 <sup>[1]</sup>	12.6 <sup>[1]</sup>
About half the time	5.5	6.8 <sup>[3]</sup>	4.5	3.1 <sup>[1]</sup>
Most of the time	26.6	26.3	25.6	30.3
Always	34.0	23.0 <sup>[2]</sup>	58.0 <sup>[1,3]</sup>	18.0 <sup>[2]</sup>
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	8.6	11.0 <sup>[2]</sup>	5.7 <sup>[1]</sup>	6.4
When there are enough firefighters on and at the scene of the fire	28.7	35.7 <sup>[2,3]</sup>	20.6 <sup>[1]</sup>	20.8 <sup>[1]</sup>
Whenever firefighters enter a burning building	26.1	28.4 <sup>[2]</sup>	19.5 <sup>[1]</sup>	33.2
Other	6.2	4.7 <sup>[2,3]</sup>	10.5 <sup>[1,3]</sup>	1.5 <sup>[1,2,+]</sup>
<i>Legitimately Skipped Question</i>	51.7	44.6 <sup>[2]</sup>	61.8 <sup>[1]</sup>	54.4

Other

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	29.7	32.5 <sup>[2]</sup>	24.9 <sup>[1]</sup>	30.2
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	4.9	7.3 <sup>[2]</sup>	0.3 <sup>[1,3,+]</sup>	7.0 <sup>[2]</sup>
We don't have enough firefighters available at the scene of the fire	41.7	51.2 <sup>[2]</sup>	22.3 <sup>[1,3]</sup>	52.5 <sup>[2]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	13.6	18.7 <sup>[2]</sup>	5.7 <sup>[1,3]</sup>	13.3 <sup>[2]</sup>
We have never established an RIT/RIC	10.6	13.6 <sup>[2]</sup>	3.6 <sup>[1,3]</sup>	16.3 <sup>[2]</sup>
We use other fire departments in the area for RITs/RICs	22.6	30.2 <sup>[2,3]</sup>	13.0 <sup>[1]</sup>	16.6 <sup>[1]</sup>
We use other safety practices and so we don't need them	2.6	2.8 <sup>[2]</sup>	0.6 <sup>[1,3]</sup>	6.5 <sup>[2]</sup>
Other	5.5	5.2	5.2	7.8 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	34.4	23.5 <sup>[2]</sup>	58.1 <sup>[1,3]</sup>	18.2 <sup>[2]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	86.4	83.5 <sup>[2,3]</sup>	99.1 <sup>[1,3]</sup>	66.3 <sup>[1,2]</sup>
	13.6	16.5 <sup>[2,3]</sup>	0.9 <sup>[1,3]</sup>	33.7 <sup>[1,2]</sup>
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No	3.7	2.9 <sup>[2,3]</sup>	** <sup>[1,3,+]</sup>	16.0 <sup>[1,2]</sup>
Some of the time	2.5	4.0 <sup>[2]</sup>	0.1 <sup>[1,3,+]</sup>	3.1 <sup>[2]</sup>
Never	1.2	1.7 <sup>[2]</sup>	** <sup>[1,+]</sup>	2.1 <sup>[+]</sup>
About half the time	8.5	11.5 <sup>[2]</sup>	3.1 <sup>[1,3]</sup>	10.1 <sup>[2]</sup>
Most of the time	84.1	80.0 <sup>[2]</sup>	96.8 <sup>[1,3]</sup>	68.7 <sup>[2]</sup>
Always				

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	8.3	9.2 <sup>[2,3]</sup>	0.3 <sup>[1,3,+]</sup>	25.1 <sup>[1,2]</sup>
Situation doesn't require them	6.3	8.7 <sup>[2]</sup>	1.4 <sup>[1,3]</sup>	9.1 <sup>[2]</sup>
Firefighters think the devices do not always work reliably	0.2	0.2 <sup>[+]</sup>	** <sup>[+]</sup>	0.8 <sup>[+]</sup>
Firefighters don't think they need them	3.2	5.4 <sup>[2,3]</sup>	1.0 <sup>[1,+]</sup>	0.4 <sup>[1,+]</sup>
Devices go off while firefighters are resting	2.6	3.7 <sup>[2,3]</sup>	1.3 <sup>[1,+]</sup>	1.4 <sup>[1,+]</sup>
<i>Legitimately Skipped Question</i>	84.5	80.6 <sup>[2]</sup>	96.8 <sup>[1,3]</sup>	68.7 <sup>[2]</sup>
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
Yes	98.8	99.7	99.7	93.3
	1.2	0.3	0.3 <sup>[+]</sup>	<sup>[+]</sup>
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	40.2	48.6 <sup>[2]</sup>	22.7 <sup>[1,3]</sup>	48.5 <sup>[2]</sup>
No	58.6	51.1 <sup>[2]</sup>	77.0 <sup>[1,3]</sup>	44.7 <sup>[2]</sup>
Yes	1.2	0.3	0.3 <sup>[+]</sup> 6.7	6.8 <sup>[+]</sup>
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	3.1	3.5 <sup>[2]</sup>	1.1 <sup>[1,+]</sup>	6.1
Firefighters don't like using the equipment	0.1	0.3 <sup>[+]</sup>	**	**
Have never needed them (e.g., we don't do interior attacks)	0.2	0.4 <sup>[2]</sup>	** <sup>[1]</sup>	0.2 <sup>[+]</sup>
They cost too much, there is not enough money in the budget	25.6	32.2 <sup>[2]</sup>	11.1 <sup>[1,3]</sup>	33.6 <sup>[2]</sup>
We don't have enough equipment for all of our firefighters	17.9	24.1 <sup>[2]</sup>	5.4 <sup>[1,3]</sup>	22.9 <sup>[2]</sup>
Shared systems work fine for our needs	19.3	22.6 <sup>[2]</sup>	11.4 <sup>[1,3]</sup>	24.8 <sup>[2]</sup>
Other	7.3	7.9 <sup>[3]</sup>	8.1 <sup>[+]</sup>	3.1 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	59.8	51.5 <sup>[2]</sup>	77.4 <sup>[1,3]</sup>	50.8 <sup>[2]</sup>



Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Some of the time	0.4	0.4 <sup>[2]</sup>	** <sup>[1]</sup>	1.2 <sup>[+]</sup>
Never	2.3	3.2 <sup>[2]</sup>	** <sup>[1,3]</sup>	4.0 <sup>[2]</sup>
About half the time	1.7	2.3 <sup>[2]</sup>	** <sup>[1,3]</sup>	3.3 <sup>[2]</sup>
Most of the time	22.5	23.6	20.9	21.9
Always	72.0	70.2	78.8	63.0
<i>Legitimately Skipped Question</i>	1.2	0.3	0.3 <sup>[+]</sup>	6.7 <sup>[+]</sup>
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	20.1	22.7	14.6	23.3
Firefighters do not trust that the SCBAs will work reliably	**	** <sup>[+]</sup>		**
Firefighters don't think they need them	11.4	9.9	15.2	7.7
Firefighters don't like sharing facepieces with others	0.5	0.8 <sup>[2]</sup>	<sup>[1]</sup>	<sup>[+]</sup>
Firefighters are concerned that the SCBA may be or become contaminated	**	** <sup>[+]</sup>	**	**
Wearing SCBAs makes it more difficult to work	4.4	** <sup>[2]</sup>	<sup>[1]</sup>	
Firefighters don't have SCBAs to use	2.7	6.3 <sup>[2]**</sup>	** <sup>[1,3]</sup>	<sup>[2]</sup>
<i>Legitimately Skipped Question</i>	73.9	4.3 <sup>[2]</sup>	79.0	71.5
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	46.6	47.7 1.8	46.2 3.1	42.8
Once a month or more	16.7	17.4	16.0	15.8
Several times a year	14.3	13.0	17.0	12.0
Once a year	17.6	17.5	18.6	15.6
Less than once a year	2.6	3.1	1.3 <sup>[+]</sup>	
Never. Maintenance has not been done on our SCBAs.	0.8	0.9	0.6 <sup>[+]</sup>	<sup>[+]</sup>
Does not apply. My department does not have SCBAs.	**	**	**	**
<i>Legitimately Skipped Question</i>	1.5	0.4	0.4 <sup>[+]</sup>	<sup>[+]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	29.7 70.3	20.3 <sup>[2]</sup> 79.7 <sup>[2]</sup>	47.5 <sup>[1,3]</sup> 52.5 <sup>[1,3]</sup>	23.4 <sup>[2]</sup> 76.6 <sup>[2]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero CBRN SCBA devices are not needed in our department We didn't know they were available We don't have adequate technical information to purchase them We don't have adequate funding to purchase them Other <i>Legitimately Skipped Question</i>	16.6 11.2 15.4 50.8 7.1 31.1	17.7 <sup>[2]</sup> 13.6 <sup>[2]</sup> 18.5 <sup>[2]</sup> 60.6 <sup>[2]</sup> 5.7 <sup>[2]</sup> 21.4 <sup>[2]</sup>	10.7 <sup>[1,3]</sup> 6.9 <sup>[1]</sup> 9.5 <sup>[1]</sup> 33.9 <sup>[1,3]</sup> 10.7 <sup>[1,3]</sup> 49.6 <sup>[1,3]</sup>	26.4 <sup>[2]</sup> 12.1 18.1 53.9 <sup>[2]</sup> 3.7 <sup>[2]</sup> 23.8 <sup>[2]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>  No	85.3 14.7	83.0 <sup>[2]</sup> 17.0 <sup>[2]</sup>	93.5 <sup>[1,3]</sup> 6.5 <sup>[1,3]</sup>	74.3 <sup>[2]</sup> 25.7 <sup>[2]</sup>
<b>38a. At your fire department, where do you have AEDs?</b> At the fire station(s) On the emergency vehicles (or apparatus) Both at the fire station(s) and on the vehicles (or apparatus) <i>Legitimately Skipped Question</i>	2.1 66.1 14.8 17.0	2.2 <sup>[2]</sup> 62.6 <sup>[2]</sup> 16.5 <sup>[3]</sup> 18.8 <sup>[2,3]</sup>	0.3 <sup>[1,+]</sup> 77.3 <sup>[1,3]</sup> 14.6 7.9 <sup>[1,3]</sup>	6.6 <sup>[+]</sup> 53.4 <sup>[2]</sup> 8.4 <sup>[1]</sup> 31.7 <sup>[1,2]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	20.1	13.4 <sup>[2]</sup>	26.0 <sup>[1]</sup>	30.9
Once a month or more	24.7	25.6	24.0	23.1
Several times a year	19.4	22.3 <sup>[3]</sup>	18.0	11.4 <sup>[1]</sup>
Once a year	23.1	22.8	24.9	18.9
Less frequently than once a year	6.2	8.0	4.4	3.9 <sup>[+]</sup>
Never. Maintenance on our AEDs has not been done.	6.5	8.0 <sup>[2]</sup>	2.6 <sup>[1,3]</sup>	11.9 <sup>[2]</sup>
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	1.5	2.4 <sup>[2]</sup>	0.3 <sup>[1,+]</sup>	1.0 <sup>[+]</sup>
Never	3.1	4.8 <sup>[2,3]</sup>	0.8 <sup>[1]</sup>	1.8 <sup>[1,+]</sup>
About half the time	1.6	2.2 <sup>[2]</sup>	0.8 <sup>[1,+]</sup>	1.3 <sup>[+]</sup>
Most of the time	16.1	21.3 <sup>[2]</sup>	7.1 <sup>[1,3]</sup>	18.0 <sup>[2]</sup>
Always	77.8	69.3 <sup>[2]</sup>	91.1 <sup>[1,3]</sup>	78.0 <sup>[2]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Never	14.5	15.2	13.8	13.3
Some of the time	70.7	68.9 <sup>[2]</sup>	78.1 <sup>[1]</sup>	59.7
About half the time	7.8	9.0	5.8	8.3
Most of the time	5.7	5.3 <sup>[2]</sup>	2.0 <sup>[1]</sup>	16.0 <sup>[+]</sup>
Always	1.3	1.6 <sup>[2]</sup>	0.3 <sup>[1,+]</sup>	2.6 <sup>[+]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	38.6	43.7 <sup>[2]</sup>	29.4 <sup>[1]</sup>	41.6
	54.0	50.5 <sup>[2]</sup>	59.8 <sup>[1]</sup>	53.2
More than adequate	7.4	5.8 <sup>[2]</sup>	10.8 <sup>[1]</sup>	5.2
Adequate				
<b>42b. Training</b>				
Not adequate	36.0	37.3	35.9	30.9
Adequate	56.4	55.0	56.8	60.7
More than adequate	7.7	7.7	7.3	8.4
<b>42c. Personnel</b>				
Not adequate	48.8	52.5 <sup>[2]</sup>	42.9 <sup>[1]</sup>	49.4
Adequate	46.2	44.3	49.9	44.4
More than adequate	5.0	3.3	7.2	6.1
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
	18.7	22.2 <sup>[2]</sup>	8.2 <sup>[1,3]</sup>	32.3 <sup>[2]</sup>
One or two times per year	30.9	33.2	27.6	29.8
Never	40.4	37.1 <sup>[2]</sup>	49.4 <sup>[1,3]</sup>	30.0 <sup>[2]</sup>
Several times per year				
Once a month or more	10.0	7.5	14.7	7.9
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	55.8	56.1	55.8	54.6
On the Internet	39.8	33.6 <sup>[2]</sup>	53.2 <sup>[1,3]</sup>	31.3 <sup>[2]</sup>
From colleagues in other departments	15.1	10.3 <sup>[2]</sup>	17.4 <sup>[1]</sup>	28.5
At conferences or other meetings	10.8	7.6 <sup>[2]</sup>	17.0 <sup>[1,3]</sup>	8.1 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	18.3	22.2 <sup>[2]</sup>	8.2 <sup>[1,3]</sup>	27.8 <sup>[2]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
No	64.8	58.8 <sup>[2]</sup>	78.7 <sup>[1,3]</sup>	54.5 <sup>[2]</sup>
Yes	16.9	18.9 <sup>[2]</sup>	13.1 <sup>[1]</sup>	18.1
<i>Legitimately Skipped Question</i>	18.3	22.3 <sup>[2]</sup>	8.2 <sup>[1,3]</sup>	27.4 <sup>[2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	67.6	67.3 <sup>[3]</sup>	72.2 <sup>[3]</sup>	55.2 <sup>[1,2]</sup>
No	13.5	10.0 <sup>[2]</sup>	19.6 <sup>[1]</sup>	12.0
<i>Legitimately Skipped Question</i>	18.9	22.6 <sup>[2]</sup>	8.2 <sup>[1,3]</sup>	32.8 <sup>[2]</sup>
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	25.4	27.1 <sup>[2]</sup>	19.1 <sup>[1]</sup>	34.2
Training sessions	51.5	51.2	51.9	52.1
Provide copies of NIOSH reports to firefighters	21.0	17.9	24.2	25.9
Provide copies of NIOSH report summaries to firefighters	10.2	8.7	9.1	19.2 <sup>[+]</sup>
Provide summaries prepared by department to firefighters	4.1	2.2 <sup>[2,3]</sup>	8.7 <sup>[1,3]</sup>	** <sup>[1,2,+]</sup>
Postings on bulletin boards	43.1	41.6	44.9	44.5
Post report on the department website	3.8	4.5 <sup>[3]</sup>	4.2 <sup>[3]</sup>	** <sup>[1,2]</sup>
Send message to firefighters by email	13.8	7.6 <sup>[2]</sup>	23.2 <sup>[1]</sup>	15.2 <sup>[+]</sup>
Other	2.6	2.1 <sup>[3]</sup>	4.6 <sup>[3]</sup>	** <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	31.8	32.3	28.2	38.8
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	50.4	42.3 <sup>[2]</sup>	70.2 <sup>[1,3]</sup>	33.5 <sup>[2]</sup>
Yes	30.8	34.9 <sup>[2]</sup>	21.3 <sup>[1,3]</sup>	37.9 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	18.8	22.8 <sup>[2]</sup>	8.4 <sup>[1,3]</sup>	28.6 <sup>[2]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	2.5	0.6 <sup>[+]</sup>	0.7 <sup>[+]</sup>	14.1 <sup>[+]</sup>
Disagree	5.1	4.1 <sup>[3]</sup>	8.4	1.0 <sup>[1,+]</sup>
Neither Agree nor Disagree	18.4	19.7	16.9	17.2
Strongly Agree	50.3	48.9 <sup>[2]</sup>	58.8 <sup>[1,3]</sup>	35.3 <sup>[2]</sup>
Agree	4.7	3.7	6.7	3.5 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	19.0	23.0 <sup>[2]</sup>	8.5 <sup>[1,3]</sup>	28.9 <sup>[2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	2.4	0.5 <sup>[+]</sup>	0.7 <sup>[+]</sup>	14.2 <sup>[+]</sup>
Disagree	1.5	1.5	1.8	0.8 <sup>[+]</sup>
Neither Agree nor Disagree	16.9	20.7 <sup>[2]</sup>	12.2 <sup>[1]</sup>	13.3
Strongly Agree	54.2	49.6 <sup>[2]</sup>	68.0 <sup>[1,3]</sup>	38.3 <sup>[2]</sup>
Agree	6.0	4.6 <sup>[2]</sup>	8.9 <sup>[1]</sup>	4.3
<i>Legitimately Skipped Question</i>	19.1	23.1 <sup>[2]</sup>	8.5 <sup>[1,3]</sup>	29.2 <sup>[2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	2.5	0.4 <sup>[+]</sup>	1.2	14.1 <sup>[+]</sup>
Disagree	6.0	4.8 <sup>[3]</sup>	10.1 <sup>[3]</sup>	0.7 <sup>[1,2,+]</sup>
Neither Agree nor Disagree	24.2	26.8	21.6	20.3
Strongly Agree	43.5	41.4 <sup>[2]</sup>	51.1 <sup>[1,3]</sup>	33.1 <sup>[2]</sup>
Agree	4.7	3.4 <sup>[2]</sup>	7.4 <sup>[1,3]</sup>	2.8 <sup>[2,+]</sup>
<i>Legitimately Skipped Question</i>	19.1	23.1 <sup>[2]</sup>	8.5 <sup>[1,3]</sup>	28.9 <sup>[2]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	63.7	59.7 <sup>[2]</sup>	75.7 <sup>[1,3]</sup>	49.8 <sup>[2]</sup>
Respirator maintenance program guide	16.6	15.6	21.2 <sup>[3]</sup>	9.1 <sup>[2]</sup>
CDs of firefighter program materials	32.3	30.3 <sup>[2,3]</sup>	41.1 <sup>[1,3]</sup>	18.4 <sup>[1,2]</sup>
Alerts	44.2	37.8 <sup>[2]</sup>	57.6 <sup>[1,3]</sup>	36.2 <sup>[2]</sup>
Hazard IDs	18.0	17.3	20.2	15.2
Workplace Solutions	14.3	15.6 <sup>[3]</sup>	15.1 <sup>[3]</sup>	7.0 <sup>[1,2]</sup>
Other	1.0	0.9 <sup>[3]</sup>	1.6 <sup>[3]</sup>	** <sup>[1,2]</sup>
None. I have not seen any NIOSH materials.	18.3	20.9 <sup>[2]</sup>	10.5 <sup>[1,3]</sup>	27.7 <sup>[2]</sup>
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.5	1.3	1.3	2.6 <sup>[+]</sup>
Dissatisfied	0.1	0.3 <sup>[+]</sup>	**	**
Neither satisfied nor dissatisfied	19.0	21.0 <sup>[3]</sup>	18.6	12.3 <sup>[1]</sup>
Satisfied	53.0	51.5	60.6 <sup>[3]</sup>	39.9 <sup>[2]</sup>
Very satisfied	8.3	5.3 <sup>[2]</sup>	9.2 <sup>[1]</sup>	17.7 <sup>[+]</sup>
<i>Legitimately Skipped Question</i>	18.1	20.7 <sup>[2]</sup>	10.4 <sup>[1,3]</sup>	27.5 <sup>[2]</sup>
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	44.0	51.4 <sup>[2]</sup>	26.9 <sup>[1,3]</sup>	57.3 <sup>[2]</sup>
No Yes, longer than one year ago	50.0	41.2 <sup>[2]</sup>	68.1 <sup>[1,3]</sup>	39.4 <sup>[2]</sup>
	6.1	7.4 <sup>[3]</sup>	5.0	3.3 <sup>[1]</sup>

Question	Rural/Urban			
	Total	Rural	Urban	Unknown
<b>55. In which of these ways would you most prefer to receive information about NIOSH recommendations? MARK YOUR THREE (3) FAVORITES.</b>				
Cable television programming	5.2	5.6	4.7	5.0
Conference presentations or meeting	50.6	57.5 <sup>[2]</sup>	41.6 <sup>[1]</sup>	46.0
CD/DVD	8.9	5.4 <sup>[2]</sup>	10.9 <sup>[1]</sup>	17.3 <sup>[+]</sup>
Email	53.8	47.4 <sup>[2]</sup>	65.8 <sup>[1]</sup>	48.9
Fire Fighter Fatality Investigation Reports	53.6	48.8 <sup>[2]</sup>	61.7 <sup>[1]</sup>	52.1
NIOSH Website	27.2	24.1 <sup>[2]</sup>	35.4 <sup>[1,3]</sup>	19.1 <sup>[2]</sup>
One-page Fact Sheets	30.3	28.8	33.5	28.4
Pocket Guides	26.7	29.2	21.8	28.7
Summary Reports	12.8	12.7 <sup>[2]</sup>	7.3 <sup>[1]</sup>	27.0
Training session/class	25.5	23.1	25.9	34.1
Posters	19.1	18.3	14.3	33.7
	1.1	0.9	0.9 <sup>[+]</sup>	2.3 <sup>[+]</sup>

**Note:**

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the “Mark all that Apply” questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.





**Table 18.1 Results from the Fire Department Survey, Percent Estimates by Population Protected  
Fire Fighter-Level Estimates**

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>1. Does your department have a Safety Officer?</b>				
No	79.0 21.0	92.8 <sup>[2,3]</sup> 7.2 <sup>[2,3]</sup>	77.2 <sup>[1]</sup> 22.8 <sup>[1]</sup>	75.3 <sup>[1]</sup> 24.7 <sup>[1]</sup>
<b>Yes Does your department have a Training Officer?</b>				
No	93.3 6.7	99.6 <sup>[2,3]</sup> 0.4 <sup>[2,3,+]</sup>	93.6 <sup>[1]</sup> 6.4 <sup>[1]</sup>	90.8 <sup>[1]</sup> 9.2 <sup>[1]</sup>
<b>Yes Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Incident Command Systems	89.6	97.9 <sup>[3]</sup>	95.2 <sup>[3]</sup>	82.5 <sup>[1,2]</sup>
Maintenance of SCBAs	76.8	89.2 <sup>[2,3]</sup>	77.5 <sup>[1]</sup>	71.8 <sup>[1]</sup>
Motor vehicle safety	83.9	92.1 <sup>[2,3]</sup>	84.7 <sup>[1]</sup>	80.5 <sup>[1]</sup>
Participation in a personal physical fitness program		48.8 <sup>[2,3]</sup>	24.3 <sup>[1]</sup>	15.6 <sup>[1]</sup>
Participation in regular health screenings for cardiovascular disease (CVD)	33.5	60.8 <sup>[2,3]</sup>	35.7 <sup>[1,3]</sup>	22.2 <sup>[1,2]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	58.8	90.5 <sup>[2,3]</sup>	67.7 <sup>[1,3]</sup>	40.9 <sup>[1,2]</sup>
Use of Personal Alert Safety System (PASS) devices	81.5	90.1 <sup>[3]</sup>	85.0 <sup>[3]</sup>	75.8 <sup>[1,2]</sup>
Use of personal protective equipment and protective clothing	93.1	97.5 <sup>[2,3]</sup>	94.3 <sup>[1,3]</sup>	90.7 <sup>[1,2]</sup>
Use of radio communications	88.9	96.5 <sup>[2,3]</sup>	90.3 <sup>[1,3]</sup>	85.2 <sup>[1,2]</sup>
Other	10.7	15.9 <sup>[3]</sup>	14.4 <sup>[3]</sup>	6.1 <sup>[1,2]</sup>
Does not apply. Our fire department does not use SOPs/SOGs.	2.6	** <sup>[2,3]</sup>	1.4 <sup>[1,3]</sup>	4.3 <sup>[1,2]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.2	0.4 <sup>[+]</sup>	** <sup>[3,+]</sup>	2.3 <sup>[2]</sup>
Optional Training	11.1	1.7 <sup>[2,3]</sup>	8.3 <sup>[1,3]</sup>	16.6 <sup>[1,2]</sup>
Required Training	88.1	97.9 <sup>[2,3]</sup>	92.0 <sup>[1,3]</sup>	81.8 <sup>[1,2]</sup>
<b>4b. Driving safety</b>				
No Training	2.3	1.3 <sup>[3,+]</sup>	0.9 <sup>[3]</sup>	3.6 <sup>[1,2]</sup>
Optional Training	12.9	3.9 <sup>[2,3]</sup>	10.1 <sup>[1,3]</sup>	18.2 <sup>[1,2]</sup>
Required Training	85.0	94.8 <sup>[2,3]</sup>	89.2 <sup>[1,3]</sup>	78.3 <sup>[1,2]</sup>
<b>4c. Incident Command systems</b>				
No Training	1.5	0.5 <sup>[3,+]</sup>	0.5 <sup>[3]</sup>	2.6 <sup>[1,2]</sup>
Optional Training	19.2	5.3 <sup>[2,3]</sup>	14.1 <sup>[1,3]</sup>	28.2 <sup>[1,2]</sup>
Required Training	79.4	94.2 <sup>[2,3]</sup>	85.4 <sup>[1,3]</sup>	69.4 <sup>[1,2]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	5.1	4.5 <sup>[+]</sup>	3.9	6.2
Optional Training	27.6	8.8 <sup>[2,3]</sup>	26.0 <sup>[1,3]</sup>	35.4 <sup>[1,2]</sup>
Required Training	67.7	87.5 <sup>[2,3]</sup>	70.4 <sup>[1,3]</sup>	58.6 <sup>[1,2]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	17.3	1.1 <sup>[2,3,+]</sup>	8.7 <sup>[1,3]</sup>	30.3 <sup>[1,2]</sup>
Optional Training	32.7	10.1 <sup>[2,3]</sup>	35.2 <sup>[1]</sup>	39.1 <sup>[1]</sup>
Required Training	50.3	88.8 <sup>[2,3]</sup>	56.7 <sup>[1,3]</sup>	30.6 <sup>[1,2]</sup>
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.1	0.8 <sup>[+]</sup>	1.0	1.3
Optional Training	6.9	1.8 <sup>[3]</sup>	6.9	8.7 <sup>[1]</sup>
Required Training	92.2	97.4 <sup>[3]</sup>	92.4	90.1 <sup>[1]</sup>
<b>4g. Use of radio communication devices</b>				
No Training	2.3	1.3 <sup>[+]</sup>	2.3	2.6
Optional Training	15.6	4.8 <sup>[2,3]</sup>	14.3 <sup>[1]</sup>	20.5 <sup>[1]</sup>
Required Training	82.4	94.9 <sup>[2,3]</sup>	83.5 <sup>[1]</sup>	77.2 <sup>[1]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b>				
Our department's Training Officer	90.4	99.1 <sup>[2,3]</sup>	90.9 <sup>[1]</sup>	86.9 <sup>[1]</sup>
Other officers within our department	88.2	97.5 <sup>[2,3]</sup>	90.0 <sup>[1,3]</sup>	83.5 <sup>[1,2]</sup>
State fire training agency	78.1	64.6 <sup>[2,3]</sup>	83.4 <sup>[1]</sup>	78.8 <sup>[1]</sup>
United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD	34.4	62.5 <sup>[2,3]</sup>	40.3 <sup>[1,3]</sup>	20.1 <sup>[1,2]</sup>
Conferences or regional meetings	60.7	71.5 <sup>[3]</sup>	64.7 <sup>[3]</sup>	53.9 <sup>[1,2]</sup>
Other	25.6	21.5 <sup>[2]</sup>	32.2 <sup>[1,3]</sup>	22.0 <sup>[2]</sup>
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b>				
Roadside incidents/Motor Vehicle Accidents (MVA)	57.7	52.9	65.6 <sup>[3]</sup>	53.3 <sup>[2]</sup>
Scuba diving	11.9	22.3 <sup>[2,3]</sup>	11.4 <sup>[1]</sup>	8.6 <sup>[1]</sup>
Swift water rescue	19.5	47.5 <sup>[2,3]</sup>	18.8 <sup>[1,3]</sup>	10.1 <sup>[1,2]</sup>
Wildland fire fighting	40.3	32.6 <sup>[3]</sup>	36.3 <sup>[3]</sup>	46.2 <sup>[1,2]</sup>
HAZMAT	74.3	85.6 <sup>[3]</sup>	80.1 <sup>[3]</sup>	65.7 <sup>[1,2]</sup>
Other	38.1	50.2 <sup>[3]</sup>	37.6	34.2 <sup>[1]</sup>
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b>				
Not at all familiar	4.8	0.4 <sup>[2,3,+]</sup>	3.2 <sup>[1,3]</sup>	7.7 <sup>[1,2]</sup>
Not very familiar	17.1	4.1 <sup>[2,3]</sup>	13.8 <sup>[1,3]</sup>	24.1 <sup>[1,2]</sup>
Somewhat familiar	58.1	47.6 <sup>[2]</sup>	62.9 <sup>[1]</sup>	58.1
Very familiar	20.0	47.9 <sup>[2,3]</sup>	20.2 <sup>[1,3]</sup>	10.1 <sup>[1,2]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b>				
Not at all familiar	14.6	4.9 <sup>[2,3]</sup>	11.7 <sup>[1,3]</sup>	20.2 <sup>[1,2]</sup>
Not very familiar	27.2	14.3 <sup>[2,3]</sup>	26.6 <sup>[1]</sup>	32.2 <sup>[1]</sup>
Somewhat familiar	41.3	41.5	45.2	38.2
Very familiar	16.9	39.3 <sup>[2,3]</sup>	16.6 <sup>[1]</sup>	9.4 <sup>[1]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	71.5	76.6	73.1	68.6
National conference presentations	9.3	24.7 <sup>[2,3]</sup>	12.0 <sup>[1,3]</sup>	1.8 <sup>[1,2]</sup>
State-level conference presentations	15.5	20.3 <sup>[3]</sup>	17.7	12.1 <sup>[1]</sup>
Other firefighters or departments	25.8	24.3	22.7	28.8
At seminars or other training opportunities (not conferences)	21.4	24.7	22.2	19.6
Trade publications (such as Firehouse and Fire Engineering)	55.5	64.4 <sup>[3]</sup>	62.3 <sup>[3]</sup>	47.1 <sup>[1,2]</sup>
NIOSH website	40.9	75.3 <sup>[2,3]</sup>	41.2 <sup>[1,3]</sup>	28.7 <sup>[1,2]</sup>
Links from other websites (such as NFPA and Firehouse)	36.8	56.6 <sup>[2,3]</sup>	36.9 <sup>[1]</sup>	29.8 <sup>[1]</sup>
Media reports - newspaper, television, radio	15.9	15.4	17.0	15.3
Other	2.7	3.6 <sup>[+]</sup>	1.3	3.5 <sup>[+]</sup>
Does not apply. We have not received information about NIOSH recommendations.	7.0	0.8 <sup>[2,3,+]</sup>	3.2 <sup>[1,3]</sup>	12.2 <sup>[1,2]</sup>
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	48.5	56.9 <sup>[3]</sup>	56.1 <sup>[3]</sup>	39.6 <sup>[1,2]</sup>
Developed new SOPs/SOGs	35.3	39.2	39.0	30.9
Made changes to SOPs/SOGs	45.6	58.7 <sup>[3]</sup>	50.6 <sup>[3]</sup>	37.1 <sup>[1,2]</sup>
Justified current budget/staffing	10.6	14.9	8.7	10.6
Made new budget/staffing requests	12.2	19.7 <sup>[3]</sup>	14.9	7.4 <sup>[1,+]</sup>
Justified grant applications	19.7	28.0 <sup>[3]</sup>	20.4	16.1 <sup>[1]</sup>
Does not apply. We have not used NIOSH recommendations.	25.0	22.0	22.3	28.2
<i>Legitimately Skipped Question</i>	7.3	0.8 <sup>[2,3,+]</sup>	3.3 <sup>[1,3]</sup>	12.8 <sup>[1,2]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	35.3	39.2	38.3	31.6
Personal protective equipment and clothing	49.6	55.3	55.2 <sup>[3]</sup>	43.1 <sup>[2]</sup>
SCBA	49.7	55.2	57.2 <sup>[3]</sup>	41.7 <sup>[2]</sup>
PASS systems	40.4	39.6	48.1 <sup>[3]</sup>	34.6 <sup>[2]</sup>
Incident Command systems	40.8	42.3	46.0	36.2
Radio communications	27.1	34.9 <sup>[3]</sup>	33.7 <sup>[3]</sup>	19.2 <sup>[1,2]</sup>
Physical fitness and cardiovascular disease (CVD)	15.9	29.6 <sup>[2,3]</sup>	16.9 <sup>[1]</sup>	10.2 <sup>[1]</sup>
Building code compliance (e.g., warning against the use of wooden trusses)	9.9	10.6	9.3	10.2
Other	4.8	4.3	4.1	5.4 <sup>[+]</sup>
Does not apply. We have not used NIOSH recommendations for training purposes.	1.8	2.3 <sup>[+]</sup>	1.4	1.9
<i>Legitimately Skipped Question</i>	32.5	23.1 <sup>[3]</sup>	25.6 <sup>[3]</sup>	41.2 <sup>[1,2]</sup>
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	58.8	21.5 <sup>[2,3]</sup>	49.3 <sup>[1,3]</sup>	78.9 <sup>[1,2]</sup>
Yes, it's optional	16.9	33.6 <sup>[2,3]</sup>	14.7 <sup>[1]</sup>	12.9 <sup>[1]</sup>
No	24.3	44.8 <sup>[3]</sup>	36.0 <sup>[3]</sup>	8.3 <sup>[1,2]</sup>
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	13.2 <sup>[2]</sup>	23.4 <sup>[1,3]</sup>	8.1 <sup>[2]</sup>
Less frequently than once a year	9.2	12.6	8.0	8.8
One time a year	32.8	59.1 <sup>[2,3]</sup>	35.4 <sup>[1,3]</sup>	21.8 <sup>[1,2]</sup>
More than one time a year	0.4	0.9 <sup>[+]</sup>	0.6 <sup>[+]</sup>	** <sup>[+]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	43.2	14.2 <sup>[2,3]</sup>	32.6 <sup>[1,3]</sup>	61.3 <sup>[1,2]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
Yes, they receive training required by the department	4.1	3.6 <sup>[+]</sup>	2.1 <sup>[3]</sup>	5.9 <sup>[2]</sup>
No	88.9	93.7 <sup>[3]</sup>	93.8 <sup>[3]</sup>	83.5 <sup>[1,2]</sup>
Yes, they receive training required by the state	28.3	25.1	30.8	27.6
Yes, they receive optional training	13.6	6.4 <sup>[2,3]</sup>	12.8 <sup>[1]</sup>	16.8 <sup>[1]</sup>
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	12.1	9.3	10.0	14.7
Once every year	43.6	42.1	49.4 <sup>[3]</sup>	39.7 <sup>[2]</sup>
Less frequently than once a year	28.4	33.3	29.3	25.8
Does not apply. Firefighters are not required to receive continuing driver training.	15.9	15.3	11.3 <sup>[3]</sup>	19.7 <sup>[2]</sup>
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
No	89.2	98.3 <sup>[2,3]</sup>	91.3 <sup>[1,3]</sup>	84.2 <sup>[1,2]</sup>
	10.8	1.7 <sup>[2,3,+]</sup>	8.7 <sup>[1,3]</sup>	15.8 <sup>[1,2]</sup>
<b>Yes</b> <b>To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	6.8	6.4	6.7	7.1
Disagree	19.5	25.4	15.5	20.3
Neither agree nor disagree	25.2	10.7 <sup>[2,3]</sup>	27.7 <sup>[1]</sup>	28.4 <sup>[1]</sup>
Agree	34.8	36.5	36.4	33.1
Strongly agree	13.7	20.9 <sup>[3]</sup>	13.7	11.1 <sup>[1]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	3.6	0.2 <sup>[2,3,+]</sup>	2.2 <sup>[1,3]</sup>	5.8 <sup>[1,2]</sup>
Never About half the time	22.3	20.4	21.1	23.8
Most of the time	16.5	16.7	16.8	16.3
Always	38.1	43.1	37.1	37.0
	19.6	19.5	22.7	17.1
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Rarely	1.3	0.7 <sup>[+]</sup>	0.5 <sup>[3,+]</sup>	2.0 <sup>[2]</sup>
Never About half the time	3.6	0.2 <sup>[2,3,+]</sup>	1.7 <sup>[1,3]</sup>	6.4 <sup>[1,2]</sup>
Most of the time	4.0	1.2 <sup>[3,+]</sup>	1.8 <sup>[3]</sup>	6.6 <sup>[1,2]</sup>
Always	20.3	7.4 <sup>[2,3]</sup>	15.9 <sup>[1,3]</sup>	28.4 <sup>[1,2]</sup>
	70.8	90.6 <sup>[2,3]</sup>	80.0 <sup>[1,3]</sup>	56.6 <sup>[1,2]</sup>
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	15.1	4.4 <sup>[3]</sup>	8.2 <sup>[3]</sup>	24.2 <sup>[1,2]</sup>
Not enough firefighters available at the scene of the fire	12.6	1.4 <sup>[2,3,+]</sup>	7.4 <sup>[1,3]</sup>	20.7 <sup>[1,2]</sup>
Other	4.7	3.3	4.2	5.6
Does not apply. My department always assigns an Incident Commander for structure fires.	3.4	1.3 <sup>[3,+]</sup>	4.0	3.7 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	70.8	90.9 <sup>[2,3]</sup>	80.1 <sup>[1,3]</sup>	56.4 <sup>[1,2]</sup>



Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.2	90.7	94.4 <sup>[3]</sup>	88.9 <sup>[2]</sup>
Develop and coordinate the fire attack strategy	94.2	99.2 <sup>[2,3]</sup>	95.0 <sup>[1]</sup>	91.8 <sup>[1]</sup>
Develop and initiate a risk management plan	63.6	80.9 <sup>[2,3]</sup>	68.0 <sup>[1,3]</sup>	53.9 <sup>[1,2]</sup>
Document all assessments, plans and events related to the fire	42.2	48.6	42.1	39.9
Ensure that at least four (4) firefighters are on the scene before entering the building	70.4	76.0	66.6	71.4
Establish a collapse zone around the building	53.9	66.9 <sup>[3]</sup>	55.8	47.7 <sup>[1]</sup>
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	64.6	96.3 <sup>[2,3]</sup>	71.3 <sup>[1,3]</sup>	47.9 <sup>[1,2]</sup>
Identify and implement a communication strategy	67.5	71.8	67.5	65.9
Monitor location of all firefighters at the scene	77.2	89.3 <sup>[2,3]</sup>	74.8 <sup>[1]</sup>	74.5 <sup>[1]</sup>
Other	10.4	12.6	12.6	8.0
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Some of the time	8.2	3.3 <sup>[3]</sup>	6.1 <sup>[3]</sup>	11.7 <sup>[1,2]</sup>
Never	25.1	35.4 <sup>[2]</sup>	20.4 <sup>[1]</sup>	24.9
About half the time	8.0	8.4	8.7	7.3
Most of the time	31.6	21.6 <sup>[2]</sup>	36.9 <sup>[1]</sup>	31.0
Always	27.2	31.3	27.8	25.1

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b>				
Fires are not big enough to require an Incident Safety Officer	28.0	23.8	26.4	31.0
Not enough firefighters are available at the scene of the fire	42.4	20.8 <sup>[2,3]</sup>	45.2 <sup>[1]</sup>	48.5 <sup>[1]</sup>
Other	20.4	40.1 <sup>[2,3]</sup>	18.9 <sup>[1]</sup>	13.9 <sup>[1]</sup>
Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires.	2.0	2.1 <sup>[+]</sup>	2.1	1.9
<i>Legitimately Skipped Question</i>	27.5	31.4	28.1	25.6
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b>				
Some of the time	17.6	1.4 <sup>[2,3]</sup>	8.9 <sup>[1,3]</sup>	30.2 <sup>[1,2]</sup>
Never	16.3	3.7 <sup>[2,3]</sup>	17.0 <sup>[1]</sup>	20.2 <sup>[1]</sup>
About half the time	5.5	4.9 <sup>[+]</sup>	6.1	5.3
Most of the time	26.6	28.2	28.8	24.3
Always	34.0	61.7 <sup>[2,3]</sup>	39.1 <sup>[1,3]</sup>	20.0 <sup>[1,2]</sup>
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b>				
When the building has more than one story/floor	8.6	5.0 <sup>[2,3]</sup>	9.5 <sup>[1]</sup>	9.2 <sup>[1]</sup>
When there are enough firefighters on and at the scene of the fire	28.7	19.2 <sup>[2,3]</sup>	32.8 <sup>[1]</sup>	28.9 <sup>[1]</sup>
Whenever firefighters enter a burning building	26.1	18.8 <sup>[3]</sup>	25.5	29.1 <sup>[1]</sup>
Other	6.2	9.2	7.7 <sup>[3]</sup>	3.9 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	51.7	63.1 <sup>[2,3]</sup>	48.1 <sup>[1]</sup>	50.3 <sup>[1]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	29.7	29.1	26.5	32.3
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	4.9	** [2,3]	3.1 [1,3]	8.0 [1,2]
We don't have enough firefighters available at the scene of the fire	41.7	17.8 [2,3]	39.8 [1,3]	51.8 [1,2]
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	13.6	3.9 [2,3,+]	10.6 [1,3]	19.4 [1,2]
We have never established an RIT/RIC	10.6	0.9 [2,3]	6.3 [1,3]	17.4 [1,2]
We use other fire departments in the area for RITs/RICs	22.6	2.6 [2,3]	25.5 [1]	27.6 [1]
We use other safety practices and so we don't need them	2.6	1.1 [3]	0.9 [3]	4.3 [1,2]
Other	5.5	8.0	3.4	6.4
<i>Legitimately Skipped Question</i>	34.4	62.1 [2,3]	39.6 [1,3]	20.4 [1,2]
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	86.4	96.7 [3]	94.3 [3]	76.6 [1,2]
	13.6	3.3 [3,+]	5.7 [3]	23.4 [1,2]
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No	3.7	** [2,3]	0.6 [1,3]	7.5 [1,2]
Some of the time	2.5	2.8 [+]	0.3 [3,+]	4.2 [2]
Never About half the time	1.2	** [2,3]	1.1 [1]	1.7 [1]
Most of the time	8.5	1.7 [2,3,+]	7.3 [1,3]	11.8 [1,2]
Always	84.1	95.5 [3]	90.7 [3]	74.9 [1,2]

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	8.3	2.8 <sup>[3,+]</sup>	2.0 <sup>[3]</sup>	15.2 <sup>[1,2]</sup>
Situation doesn't require them	6.3	1.4 <sup>[3,+]</sup>	3.9 <sup>[3]</sup>	9.9 <sup>[1,2]</sup>
Firefighters think the devices do not always work reliably	0.2	**	0.1 <sup>[+]</sup>	0.4 <sup>[+]</sup>
Firefighters don't think they need them	3.2	2.7 <sup>[+]</sup>	2.2	4.2
Devices go off while firefighters are resting	2.6	1.2 <sup>[+]</sup>	2.5	3.1
<i>Legitimately Skipped Question</i>	84.5	95.5 <sup>[3]</sup>	91.5 <sup>[3]</sup>	75.1 <sup>[1,2]</sup>
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
Yes	98.8	99.8	99.8	97.8
	1.2	0.2 <sup>[+]</sup>	<sup>[+]</sup>	<sup>[+]</sup>
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	40.2	19.1 <sup>[2,3]</sup>	35.5 <sup>[1,3]</sup>	51.1 <sup>[1,2]</sup>
No	58.6	80.7 <sup>[2,3]</sup>	64.2 <sup>[1,3]</sup>	46.6 <sup>[1,2]</sup>
Yes	1.2	0.2 <sup>[+]</sup> 0.2	0.3 <sup>[+]</sup> 2.2	2.3 <sup>[+]</sup>
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>				
Didn't know it was recommended	3.1	** <sup>[2,3]</sup>	2.3 <sup>[1,3]</sup>	4.9 <sup>[1,2]</sup>
Firefighters don't like using the equipment	0.1	**	**	0.3 <sup>[+]</sup>
Have never needed them (e.g., we don't do interior attacks)	0.2	** <sup>[3]</sup>	** <sup>[3]</sup>	0.5 <sup>[1,2]</sup>
They cost too much, there is not enough money in the budget	25.6	8.1 <sup>[2,3]</sup>	22.9 <sup>[1,3]</sup>	33.8 <sup>[1,2]</sup>
We don't have enough equipment for all of our firefighters	17.9	3.2 <sup>[2,3,+]</sup>	13.1 <sup>[1,3]</sup>	26.7 <sup>[1,2]</sup>
Shared systems work fine for our needs	19.3	12.7 <sup>[+]</sup>	16.0 <sup>[3]</sup>	24.1 <sup>[2]</sup>
Other	7.3	12.4 <sup>[+]</sup>	9.2 <sup>[3]</sup>	4.0 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	59.8	81.2 <sup>[2,3]</sup>	63.9 <sup>[1,3]</sup>	49.2 <sup>[1,2]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Some of the time	0.4	** [3]	** [3]	0.7 [1,2]
Never	2.3	** [2,3]	0.6 [1,3,+]	4.4 [1,2]
About half the time	1.7	0.4 [3,+]	0.4 [3,+]	3.1 [1,2]
Most of the time	22.5	26.9	13.9 [3]	27.3 [2]
Always	72.0	72.6	84.8 [3]	62.2 [2]
<i>Legitimately Skipped Question</i>	1.2	0.2 [+]	0.3 [+]	2.3 [+]
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	20.1	22.2	11.2 [3]	26.1 [2]
Firefighters do not trust that the SCBAs will work reliably	**	**	**	** [+]
Firefighters don't think they need them	11.4	17.0	6.5	13.0
Firefighters don't like sharing facepieces with others	0.5	** [3]	[+]	[1]
Firefighters are concerned that the SCBA may be or become contaminated	**	**	** [+]	
Wearing SCBAs makes it more difficult to work	4.4	4.3 [+]	3.0	5.5
Firefighters don't have SCBAs to use	2.7	2.7 [+]	[3]0.8	[2]
<i>Legitimately Skipped Question</i>	73.9	73.0	85.5 [3]	[2]
<b>36. How often is routine maintenance performed on your SCBAs?</b>			**	
After every time they are used	46.6	48.6	51.5 [3]	41.7 [2]
Once a month or more	16.7	7.8 [2,3]1.3	19.2 [1]3.8	[1]
Several times a year	14.3	19.3	14.0	12.4
Once a year	17.6	20.9	13.9	19.4
Less than once a year	2.6	2.4 [+]	[3]	[2]
Never. Maintenance has not been done on our SCBAs.	0.8	0.8 [+]	0.1 [3,+]	[2]
Does not apply. My department does not have SCBAs.	**	**	**	**
<i>Legitimately Skipped Question</i>	1.5	0.2 [+]	[+]	[+]

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b>				
Greater than zero	29.7	51.0 <sup>[2,3]</sup>	32.2 <sup>[1,3]</sup>	20.2 <sup>[1,2]</sup>
	70.3	49.0 <sup>[2,3]</sup>	67.8 <sup>[1,3]</sup>	79.8 <sup>[1,2]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b>				
Zero				
CBRN SCBA devices are not needed in our department	16.6	10.5 <sup>[3]</sup>	11.7 <sup>[3]</sup>	22.4 <sup>[1,2]</sup>
We didn't know they were available	11.2	3.5 <sup>[2,3]</sup>	10.0 <sup>[1]</sup>	14.7 <sup>[1]</sup>
We don't have adequate technical information to purchase them	15.4	5.2 <sup>[2,3]</sup>	14.6 <sup>[1]</sup>	19.7 <sup>[1]</sup>
We don't have adequate funding to purchase them	50.8	33.5 <sup>[2,3]</sup>	49.9 <sup>[1]</sup>	57.6 <sup>[1]</sup>
Other	7.1	17.1 <sup>[2,3]</sup>	5.4 <sup>[1]</sup>	4.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	31.1	54.1 <sup>[2,3]</sup>	34.1 <sup>[1,3]</sup>	20.8 <sup>[1,2]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b>				
No	85.3	97.7 <sup>[2,3]</sup>	89.5 <sup>[1,3]</sup>	77.7 <sup>[1,2]</sup>
	14.7	2.3 <sup>[2,3]</sup>	10.5 <sup>[1,3]</sup>	22.3 <sup>[1,2]</sup>
<b>38a. At your fire department, where do you have AEDs?</b>				
At the fire station(s)	2.1	0.6 <sup>[3,+]</sup>	0.5 <sup>[3,+]</sup>	3.8 <sup>[1,2]</sup>
On the emergency vehicles (or apparatus)	66.1	81.0 <sup>[2,3]</sup>	68.1 <sup>[1]</sup>	59.7 <sup>[1]</sup>
Both at the fire station(s) and on the vehicles (or apparatus)	14.8	15.5	19.1	11.4
<i>Legitimately Skipped Question</i>	17.0	2.9 <sup>[2,3]</sup>	12.2 <sup>[1,3]</sup>	25.1 <sup>[1,2]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	20.1	33.0 <sup>[2,3]</sup>	16.2 <sup>[1]</sup>	17.6 <sup>[1]</sup>
Once a month or more	24.7	29.9	25.0	22.2
Several times a year	19.4	17.8	19.5	20.1
Once a year	23.1	13.7 <sup>[2,3]</sup>	27.5 <sup>[1]</sup>	23.5 <sup>[1]</sup>
Less frequently than once a year	6.2	4.7 <sup>[+]</sup>	6.9	6.3
Never. Maintenance on our AEDs has not been done.	6.5	0.8 <sup>[2,3,+]</sup>	5.0 <sup>[1,3]</sup>	10.4 <sup>[1,2]</sup>
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	1.5	0.3 <sup>[3,+]</sup>	2.0 <sup>[+]</sup>	1.5 <sup>[1]</sup>
Never	3.1	0.1 <sup>[2,3,+]</sup>	2.3 <sup>[1,3]</sup>	4.7 <sup>[1,2]</sup>
About half the time	1.6	0.6 <sup>[3,+]</sup>	1.0	2.4 <sup>[1]</sup>
Most of the time	16.1	5.8 <sup>[2,3]</sup>	13.1 <sup>[1,3]</sup>	22.1 <sup>[1,2]</sup>
Always	77.8	93.2 <sup>[2,3]</sup>	81.6 <sup>[1,3]</sup>	69.3 <sup>[1,2]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Some of the time	14.5	9.1 <sup>[2,3]</sup>	16.1 <sup>[1]</sup>	15.2 <sup>[1]</sup>
Never	70.7	83.2 <sup>[2,3]</sup>	72.3 <sup>[1]</sup>	65.1 <sup>[1]</sup>
About half the time	7.8	5.3	7.8	8.7
Most of the time	5.7	1.9	3.4	8.7
Always	1.3	0.5 <sup>[3,+]</sup>	0.3 <sup>[3,+]</sup>	2.3 <sup>[1,2]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	38.6	27.2 <sup>[3]</sup>	34.8 <sup>[3]</sup>	45.7 <sup>[1,2]</sup>
Adequate	54.0	64.0 <sup>[3]</sup>	54.9	49.6 <sup>[1]</sup>
More than adequate	7.4	8.8	10.3 <sup>[3]</sup>	4.6 <sup>[2]</sup>
<b>42b. Training</b>				
Not adequate	36.0	43.2 <sup>[2]</sup>	31.1 <sup>[1]</sup>	37.2
Adequate	56.4	51.3	57.4	57.4
More than adequate	7.7	5.5	11.5 <sup>[3]</sup>	5.4 <sup>[2]</sup>
<b>42c. Personnel</b>				
Not adequate	48.8	48.0	47.6	50.0
Adequate	46.2	47.9	46.6	45.3
More than adequate	5.0	4.1	5.8	4.7
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	18.7	5.8 <sup>[2,3]</sup>	13.8 <sup>[1,3]</sup>	27.4 <sup>[1,2]</sup>
Several times per year	30.9	23.6	32.9	32.0
Never	40.4	44.4	44.9 <sup>[3]</sup>	35.3 <sup>[2]</sup>
Once a month or more	10.0	26.2 <sup>[2,3]</sup>	8.3 <sup>[1]</sup>	5.3 <sup>[1]</sup>
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	55.8	59.6	54.5	55.4
On the Internet	39.8	63.5 <sup>[2,3]</sup>	43.5 <sup>[1,3]</sup>	28.5 <sup>[1,2]</sup>
From colleagues in other departments	15.1	17.5	14.0	15.1
At conferences or other meetings	10.8	22.1 <sup>[2,3]</sup>	10.2 <sup>[1]</sup>	7.2 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.3	5.8 <sup>[2,3]</sup>	13.8 <sup>[1,3]</sup>	26.2 <sup>[1,2]</sup>



Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
No	64.8	86.2 <sup>[2,3]</sup>	68.4 <sup>[1,3]</sup>	54.5 <sup>[1,2]</sup>
Yes	16.9	8.1 <sup>[2,3]</sup>	17.7 <sup>[1]</sup>	19.4 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.3	5.7 <sup>[2,3]</sup>	13.9 <sup>[1,3]</sup>	26.1 <sup>[1,2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	67.6	72.7	73.0 <sup>[3]</sup>	61.2 <sup>[2]</sup>
No	13.5	21.5	13.0	11.0
<i>Legitimately Skipped Question</i>	18.9	5.8 <sup>[2,3]</sup>	14.0 <sup>[1,3]</sup>	27.8 <sup>[1,2]</sup>
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	25.4	23.2	25.5	26.1
Training sessions	51.5	52.4	54.3	49.1
Provide copies of NIOSH reports to firefighters	21.0	21.0	27.1 <sup>[3]</sup>	16.5 <sup>[2]</sup>
Provide copies of NIOSH report summaries to firefighters	10.2	5.8 <sup>[2]</sup>	13.9 <sup>[1]</sup>	9.0
Provide summaries prepared by department to firefighters	4.1	11.7 <sup>[2,3]</sup>	3.0 <sup>[1]</sup>	2.2 <sup>[1]</sup>
Postings on bulletin boards	43.1	28.5 <sup>[2,3]</sup>	48.7 <sup>[1]</sup>	44.0 <sup>[1]</sup>
Post report on the department website	3.8	6.5 <sup>[3]</sup>	6.5 <sup>[+]</sup>	0.8 <sup>[1]</sup>
Send message to firefighters by email	13.8	31.2 <sup>[2,3]</sup>	10.5 <sup>[1]</sup>	10.2 <sup>[1]</sup>
Other	2.6	9.8 <sup>[2,3]</sup>	1.7 <sup>[1]</sup>	0.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	31.8	27.7	27.0 <sup>[3]</sup>	37.0 <sup>[2]</sup>
<b>51. The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	50.4	82.1 <sup>[2,3]</sup>	54.3 <sup>[1,3]</sup>	36.4 <sup>[1,2]</sup>
Yes	30.8	11.8 <sup>[2,3]</sup>	31.6 <sup>[1]</sup>	36.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.8	6.1 <sup>[2,3]</sup>	14.1 <sup>[1,3]</sup>	26.8 <sup>[1,2]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	2.5	1.7 <sup>[+]</sup>	0.4 <sup>[+]</sup>	4.2 <sup>[+]</sup>
Disagree	5.1	12.3 <sup>[+]</sup>	4.9	2.7
Neither Agree nor Disagree	18.4	19.1	17.8	18.7
Agree	50.3	53.2	57.4 <sup>[3]</sup>	44.0 <sup>[2]</sup>
Strongly Agree	4.7	7.7	4.9	3.5
<i>Legitimately Skipped Question</i>	19.0	6.0 <sup>[2,3]</sup>	14.5 <sup>[1,3]</sup>	27.0 <sup>[1,2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	2.4	2.0 <sup>[+]</sup>	0.2 <sup>[+]</sup>	4.2 <sup>[+]</sup>
Disagree	1.5	1.4 <sup>[+]</sup>	2.5 <sup>[3]</sup>	0.8 <sup>[2]</sup>
Neither Agree nor Disagree	16.9	10.3 <sup>[3]</sup>	15.5	20.2 <sup>[1]</sup>
Agree	54.2	68.8 <sup>[3]</sup>	61.5 <sup>[3]</sup>	43.5 <sup>[1,2]</sup>
Strongly Agree	6.0	11.5 <sup>[3]</sup>	5.8	4.2 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	19.1	6.0 <sup>[2,3]</sup>	14.6 <sup>[1,3]</sup>	27.0 <sup>[1,2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	2.5	2.4 <sup>[+]</sup>	0.4 <sup>[+]</sup>	4.1 <sup>[+]</sup>
Disagree	6.0	19.5 <sup>[2,3]</sup>	4.2 <sup>[1]</sup>	2.7 <sup>[1]</sup>
Neither Agree nor Disagree	24.2	15.8 <sup>[2,3]</sup>	27.7 <sup>[1]</sup>	24.5 <sup>[1]</sup>
Agree	43.5	46.9	48.8 <sup>[3]</sup>	38.4 <sup>[2]</sup>
Strongly Agree	4.7	9.4 <sup>[3]</sup>	4.2	3.4 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	19.1	6.0 <sup>[2,3]</sup>	14.7 <sup>[1,3]</sup>	26.9 <sup>[1,2]</sup>

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	63.7	82.6 <sup>[2,3]</sup>	65.6 <sup>[1,3]</sup>	55.4 <sup>[1,2]</sup>
Respirator maintenance program guide	16.6	21.6 <sup>[3]</sup>	19.6 <sup>[3]</sup>	12.4 <sup>[1,2]</sup>
CDs of firefighter program materials	32.3	45.1 <sup>[2,3]</sup>	30.5 <sup>[1]</sup>	29.1 <sup>[1]</sup>
Alerts	44.2	64.5 <sup>[2,3]</sup>	45.7 <sup>[1]</sup>	35.7 <sup>[1]</sup>
Hazard IDs	18.0	20.1	20.3	15.4
Workplace Solutions	14.3	14.0	20.2 <sup>[3]</sup>	9.7 <sup>[2]</sup>
Other	1.0	2.8	1.0 <sup>[+]</sup>	0.4 <sup>[+]</sup>
None. I have not seen any NIOSH materials.	18.3	5.7 <sup>[2,3]</sup>	15.3 <sup>[1,3]</sup>	25.2 <sup>[1,2]</sup>
<b>53a. How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.5	2.6	0.9	1.5
Dissatisfied	0.1	**	** <sup>[+]</sup>	0.3 <sup>[+]</sup>
Neither satisfied nor dissatisfied	19.0	21.0	18.8	18.4
Very satisfied	53.0	59.1	59.1 <sup>[3]</sup>	46.0 <sup>[2]</sup>
Satisfied	8.3	11.6	6.1	8.8
<i>legitimately Skipped Question</i>	18.1	5.8 <sup>[2,3]</sup>	15.0 <sup>[1,3]</sup>	25.0 <sup>[1,2]</sup>
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	44.0	11.3 <sup>[2,3]</sup>	42.9 <sup>[1,3]</sup>	56.5 <sup>[1,2]</sup>
Yes, longer than one year ago	50.0	80.2 <sup>[2,3]</sup>	51.0 <sup>[1,3]</sup>	38.2 <sup>[1,2]</sup>
No	6.1	8.5	6.0	5.2

Question	Population Protected			
	Total	50,000 + People	5,000-49,999 People	0-4,999 People
<b>55. In which of these ways would you most prefer to receive information about NIOSH recommendations? MARK YOUR THREE (3) FAVORITES.</b>				
Cable television programming	5.2	3.3	4.2	6.7
Conference presentations or meeting	50.6	39.2 <sup>[2,3]</sup>	53.4 <sup>[1]</sup>	52.6 <sup>[1]</sup>
CD/DVD	8.9	7.6	9.2	9.1
Email	53.8	76.5 <sup>[2,3]</sup>	55.7 <sup>[1,3]</sup>	44.1 <sup>[1,2]</sup>
Fire Fighter Fatality Investigation Reports	53.6	62.0 <sup>[3]</sup>	56.9	48.0 <sup>[1]</sup>
NIOSH Website	27.2	40.9 <sup>[2,3]</sup>	28.1 <sup>[1,3]</sup>	21.5 <sup>[1,2]</sup>
One-page Fact Sheets	30.3	27.1	33.8	28.8
Pocket Guides	26.7	19.2 <sup>[3]</sup>	22.3 <sup>[3]</sup>	32.7 <sup>[1,2]</sup>
Posters	12.8	5.6 <sup>[2,3]</sup>	11.0 <sup>[1]</sup>	16.9 <sup>[1]</sup>
Summary Reports	25.5	26.8	24.4	26.0
Training session/class	19.1	11.6 <sup>[3]</sup>	16.7	23.6 <sup>[1]</sup>
Other	1.1	** <sup>[3]</sup>	1.0 <sup>[+]</sup>	1.5 <sup>[1]</sup>

**Note:**

The 0-4,999 column includes those records with a missing value for population protected.

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the “Mark all that Apply” questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.



**Table 19.1 Results from the Fire Department Survey, Percent Estimates by Fatality and FFFIPP Investigation Fire Fighter-Level Estimates**

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>1. Does your department have a Safety Officer?</b>				
No	79.0	92.4 <sup>[3]</sup>	90.1 <sup>[3]</sup>	78.0 <sup>[1,2]</sup>
Yes	21.0	7.6 <sup>[3]</sup>	9.9 <sup>[3]</sup>	22.0 <sup>[1,2]</sup>
<b>Does your department have a Training Officer?</b>				
No	93.3	99.3 <sup>[3]</sup>	97.2 <sup>[3]</sup>	92.9 <sup>[1,2]</sup>
Yes	6.7	0.7 <sup>[3]</sup>	2.8 <sup>[3]</sup>	7.1 <sup>[1,2]</sup>
<b>Some fire departments use Standard Operating Procedures (SOPs) or Standard Operating Guidelines (SOGs) to describe how certain situations should be approached. For which of the following does your department have SOPs/SOGs in place? MARK ALL THAT APPLY.</b>				
Incident Command Systems	89.6	98.7 <sup>[3]</sup>	97.5 <sup>[3]</sup>	89.0 <sup>[1,2]</sup>
Maintenance of SCBAs	76.8	94.8 <sup>[2,3]</sup>	64.4 <sup>[1]</sup>	76.3 <sup>[1]</sup>
Motor vehicle safety	83.9	96.1 <sup>[3]</sup>	91.4 <sup>[3]</sup>	83.2 <sup>[1,2]</sup>
Participation in a personal physical fitness program		39.0	38.4	23.3
Participation in regular health screenings for cardiovascular disease (CVD)	33.5	70.7 <sup>[3]</sup>	39.1	31.6 <sup>[1]</sup>
Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)	58.8	92.3 <sup>[2,3]</sup>	62.5 <sup>[1]</sup>	57.2 <sup>[1]</sup>
Use of Personal Alert Safety System (PASS) devices	81.5	93.2 <sup>[2,3]</sup>	67.9 <sup>[1]</sup>	81.3 <sup>[1]</sup>
Use of personal protective equipment and protective clothing	93.1	97.6 <sup>[3]</sup>	92.8	92.9 <sup>[1]</sup>
Use of radio communications	88.9	96.8 <sup>[3]</sup>	94.2 <sup>[3]</sup>	88.4 <sup>[1,2]</sup>
Other	10.7	11.3 <sup>[+]</sup>	20.3 <sup>[+]</sup>	10.5
Does not apply. Our fire department does not use SOPs/SOGs.	2.6	** <sup>[3]</sup>	0.2 <sup>[3,+]</sup>	2.7 <sup>[1,2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>4. Do your firefighters receive training on any of the topics listed below? If so, is training optional or required? MARK ALL THAT APPLY.</b>				
<b>4a. Fighting structure fires</b>				
No Training	1.2	2.7 <sup>[+]</sup>	4.6 <sup>[+]</sup>	1.0 <sup>[+]</sup>
Optional Training	11.1	2.5 <sup>[3,+]</sup>	22.9 <sup>[+]</sup>	11.2 <sup>[1]</sup>
Required Training	88.1	94.8	72.5	88.3
<b>4b. Driving safety</b>				
No Training	2.3	0.9 <sup>[+]</sup>	3.9 <sup>[+]</sup>	2.3
Optional Training	12.9	6.5 <sup>[+]</sup>	8.3	13.3
Required Training	85.0	92.7	87.8	84.6
<b>4c. Incident Command systems</b>				
No Training	1.5	0.2 <sup>[3,+]</sup>	3.9 <sup>[+]</sup>	1.5 <sup>[1]</sup>
Optional Training	19.2	2.8 <sup>[2,3,+]</sup>	11.2 <sup>[1,3]</sup>	20.2 <sup>[1,2]</sup>
Required Training	79.4	96.9 <sup>[2,3]</sup>	84.9 <sup>[1]</sup>	78.4 <sup>[1]</sup>
<b>4d. Maintenance of Self-Contained Breathing Apparatuses (SCBAs)</b>				
No Training	5.1	0.9 <sup>[3,+]</sup>	20.0 <sup>[+]</sup>	4.9 <sup>[1]</sup>
Optional Training	27.6	4.8 <sup>[2,3,+]</sup>	15.9 <sup>[1,3]</sup>	28.9 <sup>[1,2]</sup>
Required Training	67.7	94.3 <sup>[2,3]</sup>	64.0 <sup>[1]</sup>	66.5 <sup>[1]</sup>
<b>4e. Rapid Intervention Teams (RITs)</b>				
No Training	17.3	1.6 <sup>[3]</sup>	22.1 <sup>[+]</sup>	17.9 <sup>[1]</sup>
Optional Training	32.7	6.6 <sup>[2,3]</sup>	24.9 <sup>[1]</sup>	34.1 <sup>[1]</sup>
Required Training	50.3	91.8 <sup>[2,3]</sup>	53.0 <sup>[1]</sup>	48.3 <sup>[1]</sup>
<b>4f. Use of personal protective equipment and/or protective clothing</b>				
No Training	1.1	2.6 <sup>[+]</sup>	** <sup>[3]</sup>	1.1 <sup>[2]</sup>
Optional Training	6.9	1.2 <sup>[3,+]</sup>	5.4	7.2 <sup>[1]</sup>
Required Training	92.2	96.2	94.7	91.9
<b>4g. Use of radio communication devices</b>				
No Training	2.3	3.7 <sup>[+]</sup>	0.1 <sup>[3,+]</sup>	2.3 <sup>[2]</sup>
Optional Training	15.6	5.3 <sup>[3,+]</sup>	11.7	16.2 <sup>[1]</sup>
Required Training	82.4	91.0	88.2	81.9

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>5. Who provides training to your firefighters? MARK ALL THAT APPLY.</b> Our department's Training Officer Other officers within our department State fire training agency United States Fire Administration's (USFA) National Fire Academy in Emmitsburg, MD Conferences or regional meetings Other	90.4 88.2 78.1 34.4 60.7 25.6	98.5 <sup>[3]</sup> 98.6 <sup>[3]</sup> 52.8 36.6 56.0 13.0 <sup>[3]</sup>	95.2 <sup>[3]</sup> 93.6 87.4 44.2 81.1 <sup>[3]</sup> 17.7	89.9 <sup>[1,2]</sup> 87.5 <sup>[1]</sup> 79.0 34.1 60.4 <sup>[2]</sup> 26.4 <sup>[1]</sup>
<b>6. What other trainings have your firefighters attended in the last 12 months? MARK ALL THAT APPLY.</b> Roadside incidents/Motor Vehicle Accidents (MVA) Scuba diving Swift water rescue Wildland fire fighting	57.7 11.9 19.5 40.3 74.3 38.1	43.4 21.6 <sup>[+]</sup> 37.7 30.4 63.0 69.5 <sup>[2,3]</sup>	36.2 <sup>[3]</sup> 8.4 <sup>[+]</sup> 24.8 40.1 77.2 18.1 <sup>[1,3]</sup>	58.9 <sup>[2]</sup> 11.6 18.6 40.8 74.7 37.3 <sup>[1,2]</sup>
<b>8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)?</b> Other Not at all familiar Not very familiar Somewhat familiar Very familiar	4.8 17.1 58.1 20.0	0.3 <sup>[3,+]</sup> 6.4 <sup>[3,+]</sup> 21.8 <sup>[2,3]</sup> 71.4 <sup>[2,3]</sup>	0.5 <sup>[3,+]</sup> 6.8 <sup>[3]</sup> 56.6 <sup>[1]</sup> 36.1 <sup>[1]</sup>	5.1 <sup>[1,2]</sup> 17.8 <sup>[1,2]</sup> 59.6 <sup>[1]</sup> 17.4 <sup>[1]</sup>
<b>9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)?</b> Not at all familiar Not very familiar Somewhat familiar Very familiar	14.6 27.2 41.3 16.9	7.5 <sup>[+]</sup> 3.7 <sup>[3,+]</sup> 17.7 <sup>[2,3]</sup> 71.1 <sup>[2,3]</sup>	2.0 <sup>[3]</sup> 10.2 <sup>[3]</sup> 63.6 <sup>[1,3]</sup> 24.3 <sup>[1]</sup>	15.2 <sup>[2]</sup> 28.7 <sup>[1,2]</sup> 41.5 <sup>[1,2]</sup> 14.5 <sup>[1]</sup>



Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>10. How does your department receive information about NIOSH's firefighter safety and health recommendations? MARK ALL THAT APPLY.</b>				
NIOSH mailings	71.5	82.5	61.2	71.4
National conference presentations	9.3	14.4 <sup>[+]</sup>	6.4	9.2
State-level conference presentations	15.5	8.4 <sup>[+]</sup>	4.8 <sup>[3]</sup>	16.1 <sup>[2]</sup>
Other firefighters or departments	25.8	21.4	39.0	25.6
At seminars or other training opportunities (not conferences)	21.4	12.0	15.2	22.0
Trade publications (such as Firehouse and Fire Engineering)	55.5	68.8	47.0	55.2
NIOSH website	40.9	84.2 <sup>[2,3]</sup>	58.0 <sup>[1]</sup>	38.7 <sup>[1]</sup>
Links from other websites (such as NFPA and Firehouse)	36.8	64.9 <sup>[3]</sup>	49.4	35.3 <sup>[1]</sup>
Media reports - newspaper, television, radio	15.9	8.9 <sup>[+]</sup>	11.6	16.3
Does not apply. We have not received information about NIOSH recommendations.	2.7	0.6 <sup>[+]</sup>	12.4 <sup>[+]</sup>	2.5 <sup>[+]</sup>
Other	7.0	3.3 <sup>[+]</sup>	2.1 <sup>[3,+]</sup>	7.3 <sup>[2]</sup>
<b>11. In what ways has your department used NIOSH recommendations? MARK ALL THAT APPLY.</b>				
Made changes to training program	48.5	42.1	46.4	48.8
Developed new SOPs/SOGs	35.3	32.0	41.5	35.2
Made changes to SOPs/SOGs	45.6	44.8	60.2	45.2
Justified current budget/staffing	10.6	13.1	7.1	10.6
Made new budget/staffing requests	12.2	19.8	10.3	11.9
Justified grant applications	19.7	20.0	11.9	19.9
Does not apply. We have not used NIOSH recommendations.	25.0	41.1 <sup>[+]</sup>	24.6	24.4
<i>Legitimately Skipped Question</i>	7.3	3.5 <sup>[+]</sup>	2.2 <sup>[3,+]</sup>	7.6 <sup>[2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? If so, MARK ALL THAT APPLY.</b>				
Traffic hazards	35.3	27.2	50.5	35.2
Personal protective equipment and clothing	49.6	33.3	44.6	50.3
PASS systems	49.7	32.6	42.9	50.5
SCBA	40.4	28.3	35.5	41.0
Incident Command systems	40.8	28.2	56.5	40.9
Radio communications	27.1	23.0	37.0	27.0
Physical fitness and cardiovascular disease (CVD)	15.9	31.4	36.3	14.7
Building code compliance (e.g., warning against the use of wooden trusses)	9.9	7.7 <sup>[+]</sup>	3.6 <sup>[3,+]</sup>	10.2 <sup>[2]</sup>
Other	4.8	4.6 <sup>[+]</sup>	1.6 <sup>[+]</sup>	4.9
Does not apply. We have not used NIOSH recommendations for training purposes.	1.8	0.4 <sup>[3,+]</sup>	2.5 <sup>[+]</sup>	1.8 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	32.5	45.7	27.4	32.1
<b>12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities (for example a cardiovascular fitness program, physical training program, wellness program, or other fitness program)?</b>				
Yes, it's required	58.8	23.2 <sup>[3]</sup>	33.4 <sup>[3]</sup>	60.9 <sup>[1,2]</sup>
No	16.9	26.1	30.5	16.2
Yes, it's optional	24.3	50.6	36.2	22.9
<b>13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors?</b>				
One time, when they first join the department	14.5	6.0 <sup>[3,+]</sup>	11.7	14.9 <sup>[1]</sup>
Less frequently than once a year	9.2	3.3 <sup>[3,+]</sup>	19.9 <sup>[+]</sup>	9.1 <sup>[1]</sup>
One time a year	32.8	68.3 <sup>[3]</sup>	45.4	31.0 <sup>[1]</sup>
More than one time a year	0.4	** <sup>[3]</sup>	** <sup>[3]</sup>	0.4 <sup>[1,2]</sup>
Does not apply. Firefighters are not required to receive CVD screenings	43.2	22.4 <sup>[3]</sup>	22.9 <sup>[3]</sup>	44.6 <sup>[1,2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>14. Do all drivers of vehicles responding to emergency calls receive driver training before being allowed to operate the vehicles? MARK ALL THAT APPLY.</b>				
Yes, they receive training required by the department	4.1	0.3 <sup>[3,+]</sup>	13.6 <sup>[+]</sup>	4.0 <sup>[1]</sup>
No	88.9	96.8 <sup>[3]</sup>	80.0	88.9 <sup>[1]</sup>
Yes, they receive training required by the state	28.3	11.9 <sup>[3]</sup>	10.7 <sup>[3]</sup>	29.6 <sup>[1,2]</sup>
Yes, they receive optional training	13.6	5.1 <sup>[3,+]</sup>	10.1	14.1 <sup>[1]</sup>
<b>15. How often do drivers of your fire department vehicles receive refresher driver training to continue being allowed to drive the vehicles?</b>				
Two or more times a year	12.1	4.6 <sup>[3]</sup>	3.9 <sup>[3]</sup>	12.7 <sup>[1,2]</sup>
Once every year	43.6	63.6 <sup>[2]</sup>	17.7 <sup>[1,3]</sup>	43.4 <sup>[2]</sup>
Less frequently than once a year	28.4	20.3 <sup>[2]</sup>	54.5 <sup>[1,3]</sup>	28.0 <sup>[2]</sup>
Does not apply. Firefighters are not required to receive continuing driver training.	15.9	11.4	23.9	15.9
<b>16. Does your fire department have a requirement regarding seat belt use in emergency vehicles?</b>				
Yes	89.2	98.6 <sup>[3]</sup>	96.3 <sup>[3]</sup>	88.5 <sup>[1,2]</sup>
No	10.8	1.4 <sup>[3,+]</sup>	3.7 <sup>[3]</sup>	11.5 <sup>[1,2]</sup>
<b>17. To what extent do you agree or disagree that your firefighters are able to fit comfortably in their seatbelts while wearing turnout gear in your emergency vehicles?</b>				
Strongly disagree	6.8	5.3 <sup>[+]</sup>	3.2 <sup>[+]</sup>	7.0
Disagree	19.5	43.2	19.8 <sup>[+]</sup>	18.4
Neither agree nor disagree	25.2	8.2 <sup>[3]</sup>	23.7	26.0 <sup>[1]</sup>
Agree	34.8	26.7	11.5 <sup>[3]</sup>	35.9 <sup>[2]</sup>
Strongly agree	13.7	16.5 <sup>[+]</sup>	41.8 <sup>[3]</sup>	12.8 <sup>[2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles?</b>				
Some of the time	3.6	0.7 <sup>[3,+]</sup>	0.7 <sup>[3,+]</sup>	3.8 <sup>[1,2]</sup>
Never About half the time	22.3	40.8	32.3	21.1
Most of the time	16.5	11.1 <sup>[+]</sup>	24.3	16.6
Always	38.1	36.3	26.6	38.5
	19.6	11.2	16.1	20.0
<b>21. How often is Incident Command established when responding to structure fires?</b>				
Rarely	1.3	** <sup>[3]</sup>	1.5 <sup>[+]</sup>	1.3 <sup>[1]</sup>
Never About half the time	3.6	1.0 <sup>[3,+]</sup>	0.7 <sup>[3,+]</sup>	3.8 <sup>[1,2]</sup>
Most of the time	4.0	0.3 <sup>[3,+]</sup>	0.5 <sup>[3,+]</sup>	4.2 <sup>[1,2]</sup>
Always	20.3	5.3 <sup>[3,+]</sup>	10.7 <sup>[3]</sup>	21.3 <sup>[1,2]</sup>
	70.8	93.4 <sup>[3]</sup>	86.7 <sup>[3]</sup>	69.3 <sup>[1,2]</sup>
<b>22. What are the reasons why Incident Command is not always established by your fire department? MARK ALL THAT APPLY.</b>				
Fires are not usually big enough to require an Incident Commander	15.1	3.5 <sup>[3,+]</sup>	5.3 <sup>[3]</sup>	15.9 <sup>[1,2]</sup>
Not enough firefighters available at the scene of the fire	12.6	1.4 <sup>[3]</sup>	6.0 <sup>[3]</sup>	13.3 <sup>[1,2]</sup>
Other	4.7	1.6 <sup>[3,+]</sup>	4.5 <sup>[+]</sup>	4.9 <sup>[1]</sup>
Does not apply. My department always assigns an Incident Commander for structure fires.	3.4	0.4 <sup>[3,+]</sup>	0.9 <sup>[3,+]</sup>	3.6 <sup>[1,2]</sup>
<i>Legitimately Skipped Question</i>	70.8	93.5 <sup>[3]</sup>	88.9 <sup>[3]</sup>	69.3 <sup>[1,2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>23. When Incident Command is established for a structure fire, what are the Incident Commander's responsibilities? MARK ALL THAT APPLY.</b>				
Conduct an initial assessment before the other firefighters begin entering the building	91.2	89.3	75.5	91.8
Develop and coordinate the fire attack strategy	94.2	95.2	93.0	94.2
Develop and initiate a risk management plan	63.6	83.0 <sup>[3]</sup>	69.3	62.5 <sup>[1]</sup>
Document all assessments, plans and events related to the fire	42.2	45.0	43.9	42.0
Ensure that at least four (4) firefighters are on the scene before entering the building	70.4	59.5	57.1	71.3
Establish a collapse zone around the building	53.9	77.7 <sup>[3]</sup>	49.6	52.9 <sup>[1]</sup>
Establish Rapid Intervention Team (RIT) or Rapid Intervention Crew (RIC)	64.6	95.0 <sup>[2,3]</sup>	69.5 <sup>[1]</sup>	63.1 <sup>[1]</sup>
Identify and implement a communication strategy		79.8 <sup>[2]</sup>	50.8 <sup>[1]</sup>	67.4
Monitor location of all firefighters at the scene	77.2	93.9 <sup>[3]</sup>	83.5	76.2 <sup>[1]</sup>
Other	10.4	17.0 <sup>[+]</sup>	9.8	10.2
<b>24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires?</b>				
Some of the time	8.2	0.7 <sup>[3,+]</sup>	17.2 <sup>[+]</sup>	8.2 <sup>[1]</sup>
Never	25.1	45.4	26.2	24.1
About half the time	8.0	13.9 <sup>[+]</sup>	2.8 <sup>[3,+]</sup>	7.9 <sup>[2]</sup>
Most of the time	31.6	13.4 <sup>[3]</sup>	15.1 <sup>[3]</sup>	32.9 <sup>[1,2]</sup>
Always	27.2	26.6	38.7	26.9

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>25. What are the reasons why an Incident Commander does not always assign an Incident Safety Officer? MARK ALL THAT APPLY.</b> Fires are not big enough to require an Incident Safety Officer Not enough firefighters are available at the scene of the fire Other Does not apply. Our Incident Commanders always assign an Incident Safety Officer for structure fires. <i>Legitimately Skipped Question</i>	28.0 42.4 20.4 2.0 27.5	23.9 <sup>[+]</sup> 12.0 <sup>[3]</sup> 41.4 0.5 <sup>[3,+]</sup> 26.6	8.4 <sup>[3]</sup> 28.4 40.9 0.7 <sup>[+]</sup> 39.7	28.8 <sup>[2]</sup> 44.3 <sup>[1]</sup> 18.8 2.2 <sup>[1]</sup> 27.2
<b>26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires?</b> Some of the time Never About half the time Most of the time Always	17.6 16.3 5.5 26.6 34.0	2.2 <sup>[3]</sup> 2.0 <sup>[2,3]</sup> 14.7 <sup>[+]</sup> 13.5 <sup>[3]</sup> 67.6 <sup>[3]</sup>	20.2 <sup>[+]</sup> 11.0 <sup>[1]</sup> 1.7 <sup>[3,+]</sup> 18.5 <sup>[+]</sup> 48.6	18.3 <sup>[1]</sup> 17.1 <sup>[1]</sup> 5.2 <sup>[2]</sup> 27.4 <sup>[1]</sup> 32.0 <sup>[1]</sup>
<b>27. In what situations are RITs/RICs established? MARK ALL THAT APPLY.</b> When the building has more than one story/floor When there are enough firefighters on and at the scene of the fire Whenever firefighters enter a burning building Other <i>Legitimately Skipped Question</i>	8.6 28.7 26.1 6.2 51.7	1.2 <sup>[3,+]</sup> 9.9 <sup>[3,+]</sup> 14.5 13.6 <sup>[+]</sup> 69.9	4.6 <sup>[+]</sup> 19.8 18.4 <sup>[+]</sup> 13.3 <sup>[+]</sup> 69.0	9.1 <sup>[1]</sup> 29.8 <sup>[1]</sup> 26.8 5.7 50.4

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>28. What are the reasons why your fire department does not use RITs/RICs in every structure fire? MARK ALL THAT APPLY.</b>				
The structure fire may not be large enough to need an RIT/RIC	29.7	24.3 <sup>[+]</sup>	20.7	30.2
We don't have enough equipment, SCBAs, or turnout gear to establish an RIT/RIC	4.9	0.4 <sup>[3,+]</sup>	0.7 <sup>[3,+]</sup>	5.2 <sup>[1,2]</sup>
We don't have enough firefighters available at the scene of the fire	41.7	7.8 <sup>[3]</sup>	24.6	43.7 <sup>[1]</sup>
We don't have enough training or trained personnel at the scene to establish an RIT/RIC	13.6	3.2 <sup>[3,+]</sup>	6.1 <sup>[3]</sup>	14.3 <sup>[1,2]</sup>
We have never established an RIT/RIC	10.6	0.9 <sup>[3,+]</sup>	2.4 <sup>[3]</sup>	11.3 <sup>[1,2]</sup>
We use other fire departments in the area for RITs/RICs	22.6	5.1 <sup>[3]</sup>	7.7 <sup>[3]</sup>	23.8 <sup>[1,2]</sup>
We use other safety practices and so we don't need them	2.6	1.6 <sup>[+]</sup>	0.3 <sup>[3,+]</sup>	2.7 <sup>[2]</sup>
Other	5.5	1.8 <sup>[3,+]</sup>	20.7 <sup>[+]</sup>	5.3 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	34.4	67.7 <sup>[3]</sup>	48.6	32.5 <sup>[1]</sup>
<b>29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires?</b>				
	86.4	99.3 <sup>[3]</sup>	80.4	86.0 <sup>[1]</sup>
	13.6	0.7 <sup>[3]</sup>	<sup>[+]</sup>	14.0 <sup>[1]</sup>
<b>30. About how often do you think your firefighters wear their PASS devices when fighting structure fires?</b>				
No				
Some of the time	3.7	0.3 <sup>[3,+]</sup>	17.2 <sup>[+]</sup>	3.5 <sup>[1]</sup>
Never	2.5	** <sup>[3,+]</sup>	** <sup>[3]</sup>	2.7 <sup>[1,2]</sup>
About half the time	1.2	** <sup>[3,+]</sup>	0.5 <sup>[+]</sup>	1.3 <sup>[1]</sup>
Most of the time	8.5	4.8 <sup>[+]</sup>	5.7	8.7
Always	84.1	94.7 <sup>[3]</sup>	76.6	83.8 <sup>[1]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>31. Why do you think your firefighters do not use their PASS devices more often? MARK ALL THAT APPLY.</b>				
They don't have a PASS device to use	8.3	0.4 <sup>[3,+]</sup>	18.2 <sup>[+]</sup>	8.4 <sup>[1]</sup>
Situation doesn't require them	6.3	4.5 <sup>[+]</sup>	19.2 <sup>[+]</sup>	6.0
Firefighters think the devices do not always work reliably	0.2	0.1 <sup>[+]</sup>	0.3 <sup>[+]</sup>	0.2 <sup>[+]</sup>
Firefighters don't think they need them	3.2	0.1 <sup>[3,+]</sup>	0.7 <sup>[3,+]</sup>	3.5 <sup>[1,2]</sup>
Devices go off while firefighters are resting	2.6	4.5 <sup>[+]</sup>	0.7 <sup>[3,+]</sup>	2.5 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	84.5	94.9 <sup>[3]</sup>	77.4	84.2 <sup>[1]</sup>
<b>32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?</b>				
	98.8	99.8	84.6	99.2
	1.2	0.2 <sup>[+]</sup>	<sup>[+]</sup>	<sup>[+]</sup>
<b>33. Do your firefighters ever have to share facepieces for SCBAs?</b>				
No	40.2	38.6 <sup>[+]</sup>	31.1	40.5
Yes	58.6	61.3 <sup>[+]</sup>	52.3	58.6
<i>Legitimately Skipped Question</i>	1.2	0.2 <sup>[+]</sup>	16.6 <sup>[+]</sup>	0.9 <sup>[+]</sup>
<b>33a. What are the reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters? MARK ALL THAT APPLY.</b>			0.8	
Didn't know it was recommended	3.1	0.2 <sup>[3,+]</sup>	0.4 <sup>[3,+]</sup>	3.3 <sup>[1,2]</sup>
Firefighters don't like using the equipment	0.1	**	**	0.1 <sup>[+]</sup>
Have never needed them (e.g., we don't do interior attacks)	0.2	** <sup>[3]</sup>	0.5 <sup>[+]</sup>	0.2 <sup>[1]</sup>
They cost too much, there is not enough money in the budget	25.6	3.8 <sup>[3]</sup>	22.7	26.7 <sup>[1]</sup>
We don't have enough equipment for all of our firefighters	17.9	2.5 <sup>[3]</sup>	8.8 <sup>[3]</sup>	18.8 <sup>[1,2]</sup>
Shared systems work fine for our needs	19.3	34.3 <sup>[+]</sup>	9.5 <sup>[3]</sup>	18.8 <sup>[2]</sup>
Other	7.3	32.3 <sup>[+]</sup>	5.0	6.2
<i>Legitimately Skipped Question</i>	59.8	62.4	69.6	59.4



Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>34. About how often do you think your firefighters use SCBAs while fighting structure fires?</b>				
Some of the time	0.4	** [3]	** [3]	0.4 [1,2]
Never	2.3	0.2 [3,+]	1.2 [+]	2.4 [1]
About half the time	1.7	** [3]	** [3]	1.8 [1,2]
Most of the time	22.5	46.6	24.5	21.3
Always	72.0	53.0	57.9	73.3
<i>Legitimately Skipped Question</i>	1.2	0.2 [+]	16.4 [+]	0.9 [+]
<b>35. Why do you think your firefighters do not use SCBAs more often when fighting structure fires? MARK ALL THAT APPLY.</b>				
Situation doesn't require them	20.1	46.7	20.8 [+]	
Firefighters do not trust that the SCBAs will work reliably	**	**	**	** [+]
Firefighters don't think they need them	11.4	38.3 [+]		9.8
Firefighters don't like sharing facepieces with others	0.5	** [3]	[+] 18.9	[1]
Firefighters are concerned that the SCBA may be or become contaminated	**	** 21.9	**	** [+]
Wearing SCBAs makes it more difficult to work	4.4	4.5 [+]	[+]	
Firefighters don't have SCBAs to use	2.7	** [3]	** [3]	[1,2]
<i>Legitimately Skipped Question</i>	73.9	53.0	74.3 0.5	74.9
<b>36. How often is routine maintenance performed on your SCBAs?</b>				
After every time they are used	46.6	44.6 5.5	50.9	46.6
Once a month or more	16.7	6.4 [3,+]	[3] 4.4	[1,2]
Several times a year	14.3	36.3 [+]	2.0 [3]	[2]
Once a year	17.6	12.5 [+]	7.2 [3,+]	[2]
Less than once a year	2.6	** [3]	12.8 [+]	[1]
Never. Maintenance has not been done on our SCBAs.	0.8	0.1 [3,+] 6.3	2.6 [+]	[1]
Does not apply. My department does not have SCBAs.	**	**	** 13.4	**
<i>Legitimately Skipped Question</i>	1.5	0.2 [+]	[+] 18.2	[+]

2.4

0.7

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>37. How many Chemical/Biological/Radiological/Nuclear (CBRN) SCBAs are available (or on order) for use by firefighters within your department at this time?</b> Greater than zero	29.7 70.3	59.4 <sup>[3]</sup> 40.6 <sup>[3]</sup>	28.6	28.3 <sup>[1]</sup> 71.7 <sup>[1]</sup>
<b>37a. What are the reasons why your fire department does not have CBRN SCBAs? MARK ALL THAT APPLY.</b> Zero CBRN SCBA devices are not needed in our department We didn't know they were available We don't have adequate technical information to purchase them We don't have adequate funding to purchase them Other <i>Legitimately Skipped Question</i>	16.6 11.2 15.4 50.8 7.1 31.1	1.6 <sup>[2,3,+]</sup> 5.4 <sup>[+]</sup> 2.1 <sup>[2,3]</sup> 20.9 <sup>[2,3]</sup> 7.5 <sup>[+]</sup> 69.9 <sup>[2,3]</sup>	36.8 <sup>[1]</sup> 2.6 <sup>[3]</sup> 30.2 <sup>[1]</sup> 59.6 <sup>[1]</sup> 22.2 <sup>[+]</sup> 30.6 <sup>[1]</sup>	16.7 <sup>[1]</sup> 11.7 <sup>[2]</sup> 15.6 <sup>[1]</sup> 51.8 <sup>[1]</sup> 6.6 29.5 <sup>[1]</sup>
<b>38. Does your fire department have Automated External Defibrillators (AEDs)?</b> No	85.3 14.7	98.7 <sup>[3]</sup> 1.3 <sup>[3]</sup>	94.1 <sup>[3]</sup> 5.9 <sup>[3]</sup>	84.4 <sup>[1,2]</sup> 15.6 <sup>[1,2]</sup>
<b>38a. At your fire department, where do you have AEDs?</b> At the fire station(s) On the emergency vehicles (or apparatus) Both at the fire station(s) and on the vehicles (or apparatus) <i>Legitimately Skipped Question</i>	2.1 66.1 14.8 17.0	0.1 <sup>[3,+]</sup> 79.7 18.7 <sup>[+]</sup> 1.5 <sup>[3]</sup>	25.7 <sup>[+]</sup> 58.9 6.8 <sup>[3]</sup> 8.6 <sup>[3]</sup>	1.7 <sup>[1]</sup> 65.6 14.8 <sup>[2]</sup> 17.9 <sup>[1,2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs?</b>				
After every time they are used	20.1	35.1	31.7	18.9
Once a month or more	24.7	41.0 <sup>[+]</sup>	10.8 <sup>[3]</sup>	24.3 <sup>[2]</sup>
Several times a year	19.4	7.2 <sup>[3,+]</sup>	22.8	20.0 <sup>[1]</sup>
Once a year	23.1	14.6	30.0	23.3
Less frequently than once a year	6.2	0.5 <sup>[3,+]</sup>	1.2 <sup>[3,+]</sup>	6.7 <sup>[1,2]</sup>
Never. Maintenance on our AEDs has not been done.	6.5	1.7 <sup>[3,+]</sup>	3.5 <sup>[+]</sup>	6.9 <sup>[1]</sup>
<b>40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires?</b>				
Some of the time	1.5	0.3 <sup>[3,+]</sup>	** <sup>[3]</sup>	1.6 <sup>[1,2]</sup>
Never About half the time	3.1	** <sup>[2,3]</sup>	1.8 <sup>[1,+]</sup>	3.2 <sup>[1]</sup>
Most of the time	1.6	** <sup>[3,+]</sup>	** <sup>[3]</sup>	1.7 <sup>[1,2]</sup>
Always	16.1	2.6 <sup>[2,3]</sup>	15.4 <sup>[1]</sup>	16.7 <sup>[1]</sup>
	77.8	97.0 <sup>[2,3]</sup>	82.7 <sup>[1]</sup>	76.8 <sup>[1]</sup>
<b>41. Some radios and other two-way communication devices can have problems under field conditions, such as bleed-over, interference, or loss of communication. About how often do your communication devices have these or other problems?</b>				
Some of the time	14.5	5.8 <sup>[3,+]</sup>	7.7 <sup>[3]</sup>	15.1 <sup>[1,2]</sup>
Never About half the time	70.7	90.9 <sup>[3]</sup>	71.8	69.8 <sup>[1]</sup>
Most of the time	7.8	2.8 <sup>[3,+]</sup>	16.8 <sup>[+]</sup>	7.8 <sup>[1]</sup>
Always	5.7	0.5 <sup>[3,+]</sup>	3.5	6.0 <sup>[1]</sup>
	1.3	** <sup>[3]</sup>	0.3 <sup>[3,+]</sup>	1.4 <sup>[1,2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>42. How would you rate your department's budget in the following areas?</b>				
<b>42a. Equipment</b>				
Not adequate	38.6	17.8 <sup>[2,3]</sup>	49.3 <sup>[1]</sup>	39.3 <sup>[1]</sup>
Adequate	54.0	79.6 <sup>[2,3]</sup>	47.9 <sup>[1]</sup>	53.0 <sup>[1]</sup>
More than adequate	7.4	2.6 <sup>[3,+]</sup>	2.8 <sup>[3,+]</sup>	7.7 <sup>[1,2]</sup>
<b>42b. Training</b>				
Not adequate	36.0	17.9 <sup>[2,3]</sup>	54.0 <sup>[1]</sup>	36.3 <sup>[1]</sup>
Adequate	56.4	78.0 <sup>[2,3]</sup>	43.5 <sup>[1]</sup>	55.8 <sup>[1]</sup>
More than adequate	7.7	4.1 <sup>[+]</sup>	2.5 <sup>[3,+]</sup>	8.0 <sup>[2]</sup>
<b>42c. Personnel</b>				
Not adequate	48.8	19.9 <sup>[2,3]</sup>	62.3 <sup>[1]</sup>	49.8 <sup>[1]</sup>
Adequate	46.2	77.4 <sup>[2,3]</sup>	36.7 <sup>[1]</sup>	45.0 <sup>[1]</sup>
More than adequate	5.0	2.7 <sup>[+]</sup>	1.0 <sup>[3,+]</sup>	5.2 <sup>[2]</sup>
<b>43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Please refer to the insert sheet included with this survey for examples of NIOSH firefighter safety reports.</b>				
One or two times per year	18.7	3.8 <sup>[3,+]</sup>	4.5 <sup>[3]</sup>	19.8 <sup>[1,2]</sup>
Several times per year	30.9	11.8 <sup>[3]</sup>	33.6	31.7 <sup>[1]</sup>
Never	40.4	31.8	58.2	40.3
Once a month or more	10.0	52.6 <sup>[2,3]</sup>	3.7 <sup>[1,3]</sup>	8.3 <sup>[1,2]</sup>
<b>44. How does your department receive the NIOSH Fire Fighter Fatality Investigation reports? MARK ALL THAT APPLY.</b>				
By mail	55.8	74.2	54.8	55.0
On the Internet	39.8	51.6	51.4	38.9
From colleagues in other departments	15.1	11.8	31.3	14.8
At conferences or other meetings	10.8	11.5	33.1	10.1
<i>Legitimately Skipped Question</i>	18.3	3.8 <sup>[3,+]</sup>	4.4 <sup>[3]</sup>	19.4 <sup>[1,2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?</b>				
No	64.8	92.8 <sup>[3]</sup>	73.6	63.3 <sup>[1]</sup>
Yes	16.9	3.4 <sup>[3,+]</sup>	22.0	17.3 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.3	3.8 <sup>[3,+]</sup>	4.4 <sup>[3]</sup>	19.3 <sup>[1,2]</sup>
<b>50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?</b>				
Yes	67.6	54.7	79.9	67.8
<i>Legitimately Skipped Question</i>	13.5	41.4	15.6	12.2
	18.9	3.8 <sup>[3,+]</sup>	4.5 <sup>[3]</sup>	20.0 <sup>[1,2]</sup>
<b>50a. How is this information disseminated to firefighters? MARK ALL THAT APPLY.</b>				
Regular staff meetings	25.4	12.6 <sup>[3]</sup>	14.7 <sup>[3]</sup>	26.3 <sup>[1,2]</sup>
Training sessions	51.5	35.1	58.4	52.1
Provide copies of NIOSH reports to firefighters	21.0	14.8	10.7 <sup>[3]</sup>	21.6 <sup>[2]</sup>
Provide copies of NIOSH report summaries to firefighters	10.2	6.7 <sup>[+]</sup>	7.6	10.4
Provide summaries prepared by department to firefighters	4.1	11.6	0.8 <sup>[3,+]</sup>	3.8 <sup>[2]</sup>
Postings on bulletin boards	43.1	33.1	24.7 <sup>[3]</sup>	44.1 <sup>[2]</sup>
Post report on the department website	3.8	6.1 <sup>[+]</sup>	2.1 <sup>[+]</sup>	3.8
Send message to firefighters by email	13.8	16.7	21.7 <sup>[+]</sup>	13.4
<i>Legitimately Skipped Question</i>	2.6	3.5 <sup>[+]</sup>	14.2 <sup>[+]</sup>	2.2
	31.8	45.3	19.7	31.6
<b>Other The NIOSH reports sometimes reference other documents, such as guidelines or more detailed technical reports. Does your fire department usually have access to documents that are referenced in NIOSH reports?</b>				
No	50.4	86.7 <sup>[3]</sup>	68.1 <sup>[3]</sup>	48.3 <sup>[1,2]</sup>
Yes	30.8	9.4 <sup>[3]</sup>	26.9	31.9 <sup>[1]</sup>
<i>Legitimately Skipped Question</i>	18.8	3.9 <sup>[3,+]</sup>	5.0 <sup>[3]</sup>	19.8 <sup>[1,2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>52. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations:</b>				
<b>52a. Recommendations are practical</b>				
Strongly Disagree	2.5	0.9 <sup>[+]</sup>	**	2.6 <sup>[+]</sup>
Disagree	5.1	33.0 <sup>[+]</sup>	2.8 <sup>[+]</sup>	3.9
Neither Agree nor Disagree	18.4	21.2 <sup>[+]</sup>	45.0 <sup>[3]</sup>	17.6 <sup>[2]</sup>
Agree	50.3	37.7	45.9	51.0
Strongly Agree	4.7	3.4 <sup>[+]</sup>	1.4 <sup>[3,+]</sup>	4.8 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	19.0	3.8 <sup>[3,+]</sup>	4.9 <sup>[3]</sup>	20.1 <sup>[1,2]</sup>
<b>52b. Recommendations are easy to understand</b>				
Strongly Disagree	2.4	0.6 <sup>[+]</sup>	**	2.6 <sup>[+]</sup>
Disagree	1.5	0.3 <sup>[3,+]</sup>	2.2 <sup>[+]</sup>	1.5 <sup>[1]</sup>
Neither Agree nor Disagree	16.9	6.7 <sup>[3]</sup>	15.7	17.4 <sup>[1]</sup>
Agree	54.2	82.9 <sup>[3]</sup>	75.2 <sup>[3]</sup>	52.3 <sup>[1,2]</sup>
Strongly Agree	6.0	5.6 <sup>[+]</sup>	1.9 <sup>[3,+]</sup>	6.1 <sup>[2]</sup>
<i>Legitimately Skipped Question</i>	19.1	3.9 <sup>[3,+]</sup>	5.0 <sup>[3]</sup>	20.1 <sup>[1,2]</sup>
<b>52c. Recommendations are specific and concrete</b>				
Strongly Disagree	2.5	0.6 <sup>[+]</sup>	**	2.7 <sup>[+]</sup>
Disagree	6.0	53.8 <sup>[2,3]</sup>	3.9 <sup>[1,+]</sup>	3.9 <sup>[1]</sup>
Neither Agree nor Disagree	24.2	7.1 <sup>[2,3]</sup>	32.2 <sup>[1]</sup>	24.8 <sup>[1]</sup>
Agree	43.5	29.5	49.5	44.0
Strongly Agree	4.7	5.2 <sup>[+]</sup>	9.5 <sup>[+]</sup>	4.5
<i>Legitimately Skipped Question</i>	19.1	3.8 <sup>[3,+]</sup>	5.0 <sup>[3]</sup>	20.2 <sup>[1,2]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>53. What other NIOSH materials have you seen? MARK ALL THAT APPLY.</b>				
Pocket guide to chemical hazards	63.7	86.7 <sup>[2,3]</sup>	56.8 <sup>[1]</sup>	62.9 <sup>[1]</sup>
Respirator maintenance program guide	16.6	20.2 <sup>[+]</sup>	28.5	16.1
CDs of firefighter program materials	32.3	75.5 <sup>[2,3]</sup>	31.2 <sup>[1]</sup>	30.5 <sup>[1]</sup>
Alerts	44.2	82.0 <sup>[2,3]</sup>	52.2 <sup>[1]</sup>	42.3 <sup>[1]</sup>
Hazard IDs	18.0	25.7 <sup>[+]</sup>	14.4	17.8
Workplace Solutions	14.3	7.2 <sup>[+]</sup>	10.6	14.7
	1.0	** <sup>[3]</sup>	6.6 <sup>[+]</sup>	0.9 <sup>[1]</sup>
None. I have not seen any NIOSH materials.	18.3	3.6 <sup>[3,+]</sup>	14.1 <sup>[+]</sup>	19.1 <sup>[1]</sup>
<b>Other How satisfied or dissatisfied are you with these NIOSH materials?</b>				
Very dissatisfied	1.5	2.0 <sup>[+]</sup>	0.7 <sup>[+]</sup>	1.4
Dissatisfied	0.1	0.1 <sup>[+]</sup>	**	0.1 <sup>[+]</sup>
Neither satisfied nor dissatisfied	19.0	37.4 <sup>[+]</sup>	14.4	18.3
	53.0	54.7	66.3	52.5
Very satisfied	8.3	2.1 <sup>[3,+]</sup>	4.6 <sup>[+]</sup>	8.7 <sup>[1]</sup>
<i>Satisfied Legitimately Skipped Question</i>	18.1	3.7 <sup>[3,+]</sup>	13.9 <sup>[+]</sup>	18.9 <sup>[1]</sup>
<b>54. Have you ever visited the NIOSH website at <a href="http://www.cdc.gov/niosh/firehome.html">www.cdc.gov/niosh/firehome.html</a>?</b>				
Yes, in the last year	44.0	11.5 <sup>[3]</sup>	17.4 <sup>[3]</sup>	46.2 <sup>[1,2]</sup>
No Yes, longer than one year ago	50.0	86.6 <sup>[3]</sup>	67.9 <sup>[3]</sup>	47.8 <sup>[1,2]</sup>
	6.1	1.9 <sup>[3]</sup>	14.8 <sup>[+]</sup>	6.0 <sup>[1]</sup>

Question	Fatality and FFFIPP Investigation			
	Total	Fatality with Investigation	Fatality without Investigation	No Fatality
<b>55. In which of these ways would you most prefer to receive information about NIOSH recommendations? MARK YOUR THREE (3) FAVORITES.</b>				
Cable television programming	5.2	0.6 <sup>[3,+]</sup>	2.8 <sup>[+]</sup>	5.5 <sup>[1]</sup>
CD/DVD	50.6	33.8	51.5	51.3
Conference presentations or meeting	8.9	3.1 <sup>[3,+]</sup>	3.4 <sup>[3,+]</sup>	9.3 <sup>[1,2]</sup>
Email	53.8	73.3	61.5	52.7
Fire Fighter Fatality Investigation Reports	53.6	77.8 <sup>[2,3]</sup>	47.5 <sup>[1]</sup>	52.7 <sup>[1]</sup>
NIOSH Website	27.2	26.3	48.6	26.6
One-page Fact Sheets	30.3	29.1	42.0	30.0
Pocket Guides	26.7	11.7 <sup>[3]</sup>	13.1 <sup>[3]</sup>	27.7 <sup>[1,2]</sup>
Posters	12.8	4.0 <sup>[3,+]</sup>	5.3 <sup>[3]</sup>	13.5 <sup>[1,2]</sup>
Summary Reports	25.5	40.9	8.5 <sup>[3]</sup>	25.3 <sup>[2]</sup>
Training session/class	19.1	6.3 <sup>[3]</sup>	6.6 <sup>[3]</sup>	20.0 <sup>[1,2]</sup>
Other	1.1	** <sup>[3]</sup>	0.2 <sup>[3,+]</sup>	1.1 <sup>[1,2]</sup>

**Note:**

Estimates are generated from the 2006 Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation, Fire Department Survey.

Estimates within each column from the “Mark all that Apply” questions will not sum to 100. Estimates within each column from the other questions may not sum to 100 due to rounding.

The digits in square brackets beside an estimate [#] indicate the estimate is significantly different at the 95% confidence level from the corresponding estimate in column #. A plus sign within the square brackets [+] indicates the estimate has low precision.

\*\* Estimate is less than 0.1 and therefore rounds to zero.





## ***Logistic Regression Models***



**Model 1: Q3. SOPs/SOGs in place for: Incident Command Systems**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		83.71%	(81.46%,85.95%)	0.927*	(0.297,1.557)	83.71%	(81.46%,85.95%)		
Region (0.0756)	Northeast	87.29% <sup>3</sup>	(82.97%,91.60%)	0.256	(-0.385,0.897)	86.13% <sup>3</sup>	(81.44%,90.82%)	1.29	(0.68,2.45)
	South	85.73% <sup>3</sup>	(81.84%,89.61%)	0.263	(-0.332,0.857)	86.20% <sup>3</sup>	(82.46%,89.95%)	1.30	(0.72,2.36)
	Midwest	78.89% <sup>1,2</sup>	(74.68%,83.10%)	-0.228	(-0.796,0.340)	79.62% <sup>1,2</sup>	(75.52%,83.72%)	0.80	(0.45,1.40)
	West	83.44%	(76.78%,90.09%)	0.000	(0.000,0.000)	82.92%	(76.17%,89.67%)	1.00	n/a
Department Type (0.2696)	All Career	91.47% <sup>2,3</sup>	(86.74%,96.19%)	-0.639	(-1.438,0.160)	73.73%	(59.76%,87.70%)	0.53	(0.24,1.17)
	All Volunteer	84.79% <sup>1</sup>	(80.66%,88.92%)	0.000	(0.000,0.000)	83.62%	(79.10%,88.13%)	1.00	n/a
	Combination	82.48% <sup>1</sup>	(79.63%,85.34%)	0.032	(-0.388,0.451)	84.02%	(81.32%,86.73%)	1.03	(0.68,1.57)
Jurisdiction Type (0.3002)	Urban	92.97% <sup>2</sup>	(89.73%,96.20%)	0.364	(-0.325,1.052)	87.59%	(80.75%,94.43%)	1.44	(0.72,2.86)
	Rural/Missing	81.84% <sup>1</sup>	(79.22%,84.46%)	0.000	(0.000,0.000)	83.26%	(80.82%,85.70%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	97.71% <sup>2,3</sup>	(95.67%,99.76%)	2.550*	(1.351,3.749)	97.96% <sup>2,3</sup>	(95.69%,100.00%)	12.81*	(3.86,42.49)
	5,000-50,000	93.08% <sup>1,3</sup>	(90.70%,95.47%)	1.215*	(0.704,1.726)	92.73% <sup>1,3</sup>	(89.88%,95.57%)	3.37*	(2.02,5.62)
	0 – 5,000	78.99% <sup>1,2</sup>	(75.85%,82.14%)	0.000	(0.000,0.000)	79.36% <sup>1,2</sup>	(75.98%,82.73%)	1.00	n/a
FFFIPP/ Fatality (0.1173)	Fatality with Investigation	91.96% <sup>3</sup>	(87.25%,96.66%)	0.264	(-0.413,0.941)	86.80%	(79.52%,94.07%)	1.30	(0.66,2.56)
	Fatality - No Investigation	92.68% <sup>3</sup>	(88.03%,97.33%)	0.726*	(0.001,1.452)	91.14% <sup>3</sup>	(85.60%,96.68%)	2.07*	(1.00,4.27)
	No Fatality	83.55% <sup>1,2</sup>	(81.27%,85.84%)	0.000	(0.000,0.000)	83.63% <sup>2</sup>	(81.35%,85.90%)	1.00	n/a
Who Completed Survey (Q62) (0.1538)	Fire Chief	83.63% <sup>2</sup>	(80.92%,86.34%)	0.348	(-0.069,0.765)	84.27%	(81.64%,86.91%)	1.42	(0.93,2.15)
	Safety Officer	94.49% <sup>1,4</sup>	(86.84%,100.00%)	1.235	(-0.311,2.781)	92.68% <sup>4</sup>	(82.63%,100.00%)	3.44	(0.73,16.14)
	Training Officer	89.69%	(82.20%,97.18%)	0.684	(-0.211,1.579)	88.11%	(79.76%,96.45%)	1.98	(0.81,4.85)
	Other/Missing	80.65% <sup>2</sup>	(75.40%,85.90%)	0.000	(0.000,0.000)	79.37% <sup>2</sup>	(73.83%,84.92%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 2: Q3. SOPs/SOGs in place for: Maintenance of SCBAs**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		69.67%	(66.93%,72.41%)	0.536*	(0.049,1.023)	69.67%	(66.93%,72.41%)		
Region (0.0183)	Northeast	77.89% <sup>2,3,4</sup>	(72.59%,83.19%)	0.635*	(0.147,1.123)	77.72% <sup>2,3,4</sup>	(72.31%,83.13%)	1.89*	(1.16,3.08)
	South	66.32% <sup>1</sup>	(61.27%,71.37%)	0.037	(-0.393,0.468)	66.01% <sup>1</sup>	(60.97%,71.05%)	1.04	(0.68,1.60)
	Midwest	68.65% <sup>1</sup>	(64.00%,73.31%)	0.212	(-0.220,0.644)	69.72% <sup>1</sup>	(65.15%,74.29%)	1.24	(0.80,1.90)
	West	66.72% <sup>1</sup>	(58.81%,74.62%)	0.000	(0.000,0.000)	65.18% <sup>1</sup>	(57.07%,73.30%)	1.00	n/a
Department Type (0.2889)	All Career	81.43% <sup>2,3</sup>	(75.88%,86.97%)	-0.046	(-0.599,0.507)	72.00%	(61.47%,82.53%)	0.95	(0.55,1.66)
	All Volunteer	72.58% <sup>1</sup>	(67.74%,77.42%)	0.000	(0.000,0.000)	72.90%	(67.97%,77.83%)	1.00	n/a
	Combination	67.12% <sup>1</sup>	(63.57%,70.68%)	-0.253	(-0.570,0.063)	67.77%	(64.16%,71.37%)	0.78	(0.57,1.07)
Jurisdiction Type (0.7210)	Urban	79.10% <sup>2</sup>	(74.02%,84.17%)	0.078	(-0.349,0.505)	71.04%	(63.16%,78.91%)	1.08	(0.71,1.66)
	Rural/Missing	67.77% <sup>1</sup>	(64.65%,70.90%)	0.000	(0.000,0.000)	69.46%	(66.47%,72.45%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0018)	50,000+	87.47% <sup>2,3</sup>	(82.74%,92.20%)	1.073*	(0.411,1.734)	85.18% <sup>2,3</sup>	(77.47%,92.89%)	2.92*	(1.51,5.66)
	5,000-50,000	77.06% <sup>1,3</sup>	(73.08%,81.04%)	0.454*	(0.134,0.773)	75.71% <sup>1,3</sup>	(71.17%,80.25%)	1.57*	(1.14,2.17)
	0 – 5,000	65.69% <sup>1,2</sup>	(62.03%,69.34%)	0.000	(0.000,0.000)	66.59% <sup>1,2</sup>	(62.84%,70.34%)	1.00	n/a
FFFIPP/ Fatality (0.3184)	Fatality with Investigation	80.83% <sup>2,3</sup>	(73.98%,87.68%)	0.282	(-0.197,0.762)	75.15%	(66.65%,83.65%)	1.33	(0.82,2.14)
	Fatality - No Investigation	68.70% <sup>1</sup>	(59.12%,78.28%)	-0.214	(-0.686,0.258)	65.14%	(55.19%,75.09%)	0.81	(0.50,1.29)
	No Fatality	69.60% <sup>1</sup>	(66.82%,72.39%)	0.000	(0.000,0.000)	69.69%	(66.91%,72.46%)	1.00	n/a
Who Completed Survey (Q62) (0.4662)	Fire Chief	68.93%	(65.61%,72.26%)	0.075	(-0.257,0.407)	69.39%	(66.08%,72.70%)	1.08	(0.77,1.50)
	Safety Officer	80.63%	(67.73%,93.53%)	0.510	(-0.414,1.434)	77.59%	(62.51%,92.68%)	1.67	(0.66,4.20)
	Training Officer	77.23%	(67.93%,86.52%)	0.414	(-0.213,1.041)	75.92%	(65.88%,85.96%)	1.51	(0.81,2.83)
	Other/Missing	68.36%	(62.33%,74.39%)	0.000	(0.000,0.000)	67.82%	(61.73%,73.91%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 3: Q3. SOPs/SOGs in place for: Motor vehicle safety**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		78.82%	(76.38%,81.26%)	1.513*	(0.898,2.129)	78.82%	(76.38%,81.26%)		
Region (0.0002)	Northeast	84.82% <sup>3</sup>	(80.41%,89.24%)	0.063	(-0.529,0.655)	84.38% <sup>3</sup>	(79.82%,88.94%)	1.07	(0.59,1.93)
	South	80.20% <sup>3</sup>	(75.95%,84.45%)	-0.215	(-0.763,0.333)	80.39% <sup>3</sup>	(76.14%,84.64%)	0.81	(0.47,1.40)
	Midwest	70.87% <sup>1,2,4</sup>	(66.20%,75.55%)	-0.733*	(-1.269,-0.197)	71.06% <sup>1,2,4</sup>	(66.41%,75.70%)	0.48*	(0.28,0.82)
	West	83.43% <sup>3</sup>	(77.07%,89.80%)	0.000	(0.000,0.000)	83.54% <sup>3</sup>	(77.04%,90.04%)	1.00	n/a
Department Type (0.7928)	All Career	83.29%	(77.92%,88.66%)	-0.176	(-0.761,0.408)	75.48%	(65.24%,85.72%)	0.84	(0.47,1.50)
	All Volunteer	79.31%	(74.83%,83.78%)	0.000	(0.000,0.000)	78.50%	(73.82%,83.19%)	1.00	n/a
	Combination	78.20%	(75.11%,81.29%)	0.042	(-0.315,0.399)	79.18%	(76.08%,82.27%)	1.04	(0.73,1.49)
Jurisdiction Type (0.8256)	Urban	83.79% <sup>2</sup>	(79.18%,88.40%)	0.054	(-0.423,0.531)	79.56%	(72.60%,86.53%)	1.06	(0.65,1.70)
	Rural/Missing	77.82% <sup>1</sup>	(75.04%,80.60%)	0.000	(0.000,0.000)	78.70%	(76.04%,81.36%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0008)	50,000+	92.29% <sup>2,3</sup>	(88.90%,95.68%)	1.348*	(0.645,2.051)	92.52% <sup>2,3</sup>	(88.07%,96.97%)	3.85*	(1.91,7.78)
	5,000-50,000	82.84% <sup>1,3</sup>	(79.31%,86.37%)	0.379*	(0.024,0.734)	82.61% <sup>1,3</sup>	(78.72%,86.49%)	1.46*	(1.02,2.08)
	0 – 5,000	76.50% <sup>1,2</sup>	(73.24%,79.76%)	0.000	(0.000,0.000)	76.61% <sup>1,2</sup>	(73.23%,79.99%)	1.00	n/a
FFFIPP/ Fatality (0.1036)	Fatality with Investigation	90.31% <sup>3</sup>	(85.39%,95.23%)	0.639*	(0.047,1.231)	87.38% <sup>3</sup>	(81.09%,93.67%)	1.89*	(1.05,3.42)
	Fatality - No Investigation	82.73%	(75.13%,90.32%)	0.102	(-0.452,0.656)	80.37%	(72.15%,88.60%)	1.11	(0.64,1.93)
	No Fatality	78.70% <sup>1</sup>	(76.22%,81.18%)	0.000	(0.000,0.000)	78.76% <sup>1</sup>	(76.29%,81.23%)	1.00	n/a
Who Completed Survey (Q62) (0.5415)	Fire Chief	78.60%	(75.67%,81.52%)	-0.025	(-0.416,0.367)	79.18%	(76.30%,82.06%)	0.98	(0.66,1.44)
	Safety Officer	83.53%	(70.72%,96.34%)	-0.048	(-1.107,1.011)	78.80%	(62.37%,95.23%)	0.95	(0.33,2.75)
	Training Officer	74.41%	(64.58%,84.23%)	-0.422	(-1.038,0.194)	72.11%	(62.01%,82.21%)	0.66	(0.35,1.21)
	Other/Missing	80.33%	(75.06%,85.60%)	0.000	(0.000,0.000)	79.57%	(74.11%,85.03%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 4: Q3. SOPs/SOGs in place for: Participation in a personal physical fitness program**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		11.04%	(9.47%,12.61%)	-1.599*	(-2.182,-1.015)	11.04%	(9.47%,12.61%)		
Region (0.0001)	Northeast	9.75% <sup>4</sup>	(6.24%,13.26%)	-0.935*	(-1.500,-0.371)	9.70% <sup>4</sup>	(6.36%,13.05%)	0.39*	(0.22,0.69)
	South	10.91% <sup>4</sup>	(8.08%,13.73%)	-0.790*	(-1.285,-0.295)	10.87% <sup>4</sup>	(8.13%,13.62%)	0.45*	(0.28,0.74)
	Midwest	7.54% <sup>4</sup>	(5.26%,9.82%)	-1.134*	(-1.647,-0.622)	8.27% <sup>4</sup>	(5.84%,10.70%)	0.32*	(0.19,0.54)
	West	21.88% <sup>1,2,3</sup>	(16.12%,27.64%)	0.000	(0.000,0.000)	19.36% <sup>1,2,3</sup>	(14.47%,24.25%)	1.00	n/a
Department Type (0.0000)	All Career	47.79% <sup>2,3</sup>	(40.96%,54.63%)	0.770*	(0.260,1.280)	22.26% <sup>2,3</sup>	(15.06%,29.46%)	2.16*	(1.30,3.60)
	All Volunteer	14.15% <sup>1,3</sup>	(11.00%,17.29%)	0.000	(0.000,0.000)	12.57% <sup>1,3</sup>	(9.79%,15.34%)	1.00	n/a
	Combination	6.36% <sup>1,2</sup>	(4.56%,8.16%)	-0.535*	(-0.939,-0.132)	8.08% <sup>1,2</sup>	(5.99%,10.17%)	0.59*	(0.39,0.88)
Jurisdiction Type (0.0355)	Urban	27.57% <sup>2</sup>	(22.86%,32.28%)	0.494*	(0.034,0.955)	14.33%	(10.33%,18.32%)	1.64*	(1.03,2.60)
	Rural/Missing	7.71% <sup>1</sup>	(6.08%,9.34%)	0.000	(0.000,0.000)	9.77%	(7.86%,11.69%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	54.03% <sup>2,3</sup>	(47.40%,60.66%)	1.554*	(0.923,2.184)	23.54% <sup>3</sup>	(15.19%,31.90%)	4.73*	(2.52,8.89)
	5,000-50,000	19.66% <sup>1,3</sup>	(16.10%,23.21%)	1.080*	(0.622,1.538)	16.63% <sup>3</sup>	(13.11%,20.15%)	2.95*	(1.86,4.66)
	0 – 5,000	5.49% <sup>1,2</sup>	(3.80%,7.18%)	0.000	(0.000,0.000)	6.77% <sup>1,2</sup>	(4.68%,8.86%)	1.00	n/a
FFFIPP/ Fatality (0.3776)	Fatality with Investigation	24.33% <sup>3</sup>	(17.27%,31.39%)	-0.238	(-0.760,0.284)	9.19%	(5.49%,12.89%)	0.79	(0.47,1.33)
	Fatality - No Investigation	18.05%	(10.62%,25.49%)	0.319	(-0.315,0.954)	13.96%	(7.84%,20.08%)	1.38	(0.73,2.59)
	No Fatality	10.87% <sup>1</sup>	(9.28%,12.47%)	0.000	(0.000,0.000)	11.03%	(9.43%,12.63%)	1.00	n/a
Who Completed Survey (Q62) (0.3010)	Fire Chief	8.53% <sup>2,3,4</sup>	(6.75%,10.30%)	-0.286	(-0.705,0.133)	10.06%	(8.17%,11.95%)	0.75	(0.49,1.14)
	Safety Officer	31.35% <sup>1,4</sup>	(17.25%,45.46%)	0.454	(-0.485,1.392)	17.41%	(6.54%,28.28%)	1.57	(0.62,4.02)
	Training Officer	17.47% <sup>1</sup>	(9.42%,25.52%)	-0.125	(-0.822,0.572)	11.40%	(5.91%,16.88%)	0.88	(0.44,1.77)
	Other/Missing	14.83% <sup>1,2</sup>	(11.09%,18.56%)	0.000	(0.000,0.000)	12.53%	(9.31%,15.75%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 5: Q3. SOPs/SOGs in place for: Participation in regular health screenings for cardiovascular disease (CVD)**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		16.79%	(14.77%,18.82%)	-1.912*	(-2.449,-1.376)	16.79%	(14.77%,18.82%)		
Region (0.0000)	Northeast	27.51% <sup>2,3</sup>	(21.81%,33.20%)	0.516	(-0.003,1.035)	27.27% <sup>2,3,4</sup>	(21.24%,33.29%)	1.68	(1.00,2.82)
	South	9.34% <sup>1,3,4</sup>	(6.87%,11.81%)	-0.876*	(-1.363,-0.389)	9.34% <sup>1,3,4</sup>	(6.94%,11.74%)	0.42*	(0.26,0.68)
	Midwest	15.53% <sup>1,2</sup>	(12.14%,18.92%)	-0.187	(-0.659,0.285)	16.40% <sup>1,2</sup>	(12.97%,19.84%)	0.83	(0.52,1.33)
	West	20.97% <sup>2</sup>	(15.02%,26.92%)	0.000	(0.000,0.000)	18.91% <sup>1,2</sup>	(13.39%,24.44%)	1.00	n/a
Department Type (0.0046)	All Career	42.90% <sup>2,3</sup>	(36.14%,49.67%)	0.612*	(0.107,1.117)	27.86% <sup>2,3</sup>	(19.40%,36.32%)	1.84*	(1.11,3.05)
	All Volunteer	17.73% <sup>1</sup>	(14.13%,21.32%)	0.000	(0.000,0.000)	18.18% <sup>1</sup>	(14.42%,21.94%)	1.00	n/a
	Combination	14.17% <sup>1</sup>	(11.58%,16.76%)	-0.267	(-0.625,0.090)	14.82% <sup>1</sup>	(12.22%,17.41%)	0.77	(0.54,1.09)
Jurisdiction Type (0.5591)	Urban	29.59% <sup>2</sup>	(24.44%,34.73%)	-0.134	(-0.584,0.316)	15.58%	(11.22%,19.95%)	0.87	(0.56,1.37)
	Rural/Missing	14.22% <sup>1</sup>	(12.01%,16.42%)	0.000	(0.000,0.000)	17.22%	(14.74%,19.69%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	50.09% <sup>2,3</sup>	(43.48%,56.69%)	1.615*	(1.032,2.199)	37.97% <sup>2,3</sup>	(27.04%,48.91%)	5.03*	(2.81,9.02)
	5,000-50,000	26.78% <sup>1,3</sup>	(22.71%,30.86%)	0.976*	(0.607,1.344)	25.18% <sup>1,3</sup>	(20.82%,29.53%)	2.65*	(1.84,3.83)
	0 – 5,000	11.03% <sup>1,2</sup>	(8.64%,13.42%)	0.000	(0.000,0.000)	11.72% <sup>1,2</sup>	(9.15%,14.30%)	1.00	n/a
FFFIPP/ Fatality (0.6508)	Fatality with Investigation	32.01% <sup>3</sup>	(24.18%,39.84%)	0.150	(-0.322,0.622)	18.69%	(12.37%,25.01%)	1.16	(0.72,1.86)
	Fatality - No Investigation	24.53%	(15.96%,33.10%)	0.218	(-0.362,0.798)	19.63%	(11.78%,27.49%)	1.24	(0.70,2.22)
	No Fatality	16.61% <sup>1</sup>	(14.55%,18.66%)	0.000	(0.000,0.000)	16.74%	(14.69%,18.80%)	1.00	n/a
Who Completed Survey (Q62) (0.1563)	Fire Chief	16.04% <sup>2</sup>	(13.55%,18.53%)	0.176	(-0.219,0.570)	16.78%	(14.32%,19.24%)	1.19	(0.80,1.77)
	Safety Officer	39.35% <sup>1,3,4</sup>	(24.19%,54.52%)	0.966*	(0.131,1.802)	28.99%	(14.83%,43.14%)	2.63*	(1.14,6.06)
	Training Officer	20.94% <sup>2</sup>	(12.33%,29.55%)	0.244	(-0.426,0.913)	17.65%	(9.93%,25.38%)	1.28	(0.65,2.49)
	Other/Missing	15.05% <sup>2</sup>	(11.10%,19.00%)	0.000	(0.000,0.000)	14.67%	(10.75%,18.58%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 6: Q3. SOPs/SOGs in place for: Rapid Intervention Teams (RITs), also known as Rapid Intervention Crews (RICs) or Firefighter Assistance and Search Teams (FAST)**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		40.42%	(37.70%,43.14%)	-0.168	(-0.642,0.307)	40.42%	(37.70%,43.14%)		
Region (0.0003)	Northeast	48.26% <sup>2,3</sup>	(42.03%,54.48%)	-0.334	(-0.799,0.130)	45.67% <sup>2,3</sup>	(39.54%,51.80%)	0.72	(0.45,1.14)
	South	35.64% <sup>1,4</sup>	(30.73%,40.55%)	-0.800*	(-1.237,-0.362)	35.98% <sup>1,4</sup>	(31.21%,40.74%)	0.45*	(0.29,0.70)
	Midwest	33.85% <sup>1,4</sup>	(29.37%,38.33%)	-0.777*	(-1.205,-0.350)	36.42% <sup>1,4</sup>	(32.07%,40.76%)	0.46*	(0.30,0.70)
	West	54.97% <sup>2,3</sup>	(46.83%,63.11%)	0.000	(0.000,0.000)	52.98% <sup>2,3</sup>	(44.92%,61.04%)	1.00	n/a
Department Type (0.1561)	All Career	70.43% <sup>2,3</sup>	(63.86%,77.01%)	-0.369	(-0.857,0.120)	36.18%	(27.24%,45.12%)	0.69	(0.42,1.13)
	All Volunteer	45.61% <sup>1,3</sup>	(40.77%,50.45%)	0.000	(0.000,0.000)	43.66%	(38.85%,48.48%)	1.00	n/a
	Combination	35.14% <sup>1,2</sup>	(31.63%,38.64%)	-0.230	(-0.520,0.061)	38.94%	(35.42%,42.45%)	0.79	(0.59,1.06)
Jurisdiction Type (0.0014)	Urban	68.93% <sup>2</sup>	(63.32%,74.54%)	0.619*	(0.239,1.000)	51.75% <sup>2</sup>	(43.86%,59.64%)	1.86*	(1.27,2.72)
	Rural/Missing	34.67% <sup>1</sup>	(31.60%,37.74%)	0.000	(0.000,0.000)	38.27% <sup>1</sup>	(35.22%,41.32%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	89.37% <sup>2,3</sup>	(85.63%,93.11%)	2.385*	(1.823,2.946)	81.95% <sup>2,3</sup>	(74.36%,89.55%)	10.85*	(6.19,19.03)
	5,000-50,000	60.80% <sup>1,3</sup>	(56.35%,65.26%)	1.104*	(0.810,1.398)	56.94% <sup>1,3</sup>	(51.84%,62.04%)	3.02*	(2.25,4.05)
	0 – 5,000	29.42% <sup>1,2</sup>	(25.91%,32.94%)	0.000	(0.000,0.000)	31.79% <sup>1,2</sup>	(28.07%,35.51%)	1.00	n/a
FFFIPP/ Fatality (0.1323)	Fatality with Investigation	63.96% <sup>3</sup>	(55.66%,72.26%)	0.327	(-0.147,0.800)	47.13%	(37.28%,56.99%)	1.39	(0.86,2.23)
	Fatality - No Investigation	55.49% <sup>3</sup>	(45.43%,65.54%)	0.379	(-0.091,0.850)	48.26%	(38.55%,57.96%)	1.46	(0.91,2.34)
	No Fatality	40.10% <sup>1,2</sup>	(37.33%,42.86%)	0.000	(0.000,0.000)	40.30%	(37.55%,43.06%)	1.00	n/a
Who Completed Survey (Q62) (0.0243)	Fire Chief	37.08% <sup>2,3</sup>	(33.81%,40.35%)	-0.074	(-0.406,0.257)	38.92% <sup>2</sup>	(35.70%,42.13%)	0.93	(0.67,1.29)
	Safety Officer	79.26% <sup>1,3,4</sup>	(64.75%,93.78%)	1.458*	(0.383,2.533)	71.16% <sup>1,3,4</sup>	(51.63%,90.68%)	4.30*	(1.47,12.59)
	Training Officer	53.49% <sup>1,2</sup>	(42.25%,64.73%)	0.273	(-0.298,0.845)	46.24% <sup>2</sup>	(35.35%,57.13%)	1.31	(0.74,2.33)
	Other/Missing	42.45% <sup>2</sup>	(36.23%,48.67%)	0.000	(0.000,0.000)	40.45% <sup>2</sup>	(34.47%,46.43%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 7: Q3. SOPs/SOGs in place for: Use of Personal Alert Safety System (PASS) devices**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		75.35%	(72.76%,77.95%)	0.568*	(0.034,1.103)	75.35%	(72.76%,77.95%)		
Region (0.0403)	Northeast	83.47% <sup>2,3</sup>	(78.80%,88.14%)	0.472	(-0.068,1.012)	82.39% <sup>2,3</sup>	(77.38%,87.41%)	1.60	(0.93,2.75)
	South	70.88% <sup>1</sup>	(65.97%,75.80%)	-0.162	(-0.635,0.312)	71.65% <sup>1</sup>	(66.84%,76.46%)	0.85	(0.53,1.37)
	Midwest	74.59% <sup>1</sup>	(70.17%,79.01%)	0.012	(-0.465,0.489)	74.94% <sup>1</sup>	(70.56%,79.32%)	1.01	(0.63,1.63)
	West	74.95%	(67.47%,82.43%)	0.000	(0.000,0.000)	74.72%	(67.25%,82.18%)	1.00	n/a
Department Type (0.4528)	All Career	82.97% <sup>2,3</sup>	(77.29%,88.65%)	-0.337	(-0.928,0.254)	68.36%	(56.62%,80.09%)	0.71	(0.40,1.29)
	All Volunteer	74.64% <sup>1</sup>	(69.82%,79.46%)	0.000	(0.000,0.000)	74.86%	(69.92%,79.80%)	1.00	n/a
	Combination	75.13% <sup>1</sup>	(71.86%,78.40%)	0.062	(-0.280,0.404)	75.96%	(72.70%,79.23%)	1.06	(0.76,1.50)
Jurisdiction Type (0.3586)	Urban	85.39% <sup>2</sup>	(81.01%,89.77%)	0.228	(-0.259,0.714)	78.77%	(71.42%,86.12%)	1.26	(0.77,2.04)
	Rural/Missing	73.33% <sup>1</sup>	(70.34%,76.32%)	0.000	(0.000,0.000)	74.86%	(72.02%,77.69%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	90.37% <sup>2,3</sup>	(86.57%,94.16%)	1.532*	(0.843,2.222)	91.71% <sup>2,3</sup>	(86.95%,96.48%)	4.63*	(2.32,9.22)
	5,000-50,000	84.79% <sup>1,3</sup>	(81.40%,88.18%)	0.795*	(0.431,1.158)	84.19% <sup>1,3</sup>	(80.37%,88.01%)	2.21*	(1.54,3.18)
	0 – 5,000	70.58% <sup>1,2</sup>	(67.05%,74.11%)	0.000	(0.000,0.000)	70.88% <sup>1,2</sup>	(67.20%,74.55%)	1.00	n/a
FFFIPP/ Fatality (0.2825)	Fatality with Investigation	83.19% <sup>2,3</sup>	(76.74%,89.64%)	0.123	(-0.395,0.640)	77.53%	(69.05%,86.01%)	1.13	(0.67,1.90)
	Fatality - No Investigation	71.71% <sup>1</sup>	(62.66%,80.76%)	-0.361	(-0.839,0.118)	68.47%	(59.08%,77.86%)	0.70	(0.43,1.12)
	No Fatality	75.34% <sup>1</sup>	(72.70%,77.98%)	0.000	(0.000,0.000)	75.41%	(72.78%,78.04%)	1.00	n/a
Who Completed Survey (Q62) (0.4287)	Fire Chief	76.08%	(72.99%,79.16%)	0.282	(-0.074,0.639)	76.34%	(73.27%,79.41%)	1.33	(0.93,1.89)
	Safety Officer	81.43%	(67.83%,95.03%)	0.393	(-0.560,1.347)	78.22%	(63.18%,93.25%)	1.48	(0.57,3.84)
	Training Officer	78.43%	(69.04%,87.83%)	0.333	(-0.329,0.994)	77.20%	(67.12%,87.29%)	1.39	(0.72,2.70)
	Other/Missing	71.15%	(65.11%,77.19%)	0.000	(0.000,0.000)	71.10%	(65.06%,77.13%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 8: Q3. SOPs/SOGs in place for: Use of personal protective equipment and protective clothing**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		89.12%	(87.25%,91.00%)	1.447*	(0.761,2.133)	89.12%	(87.25%,91.00%)		
Region (0.0017)	Northeast	94.71% <sup>2,3,4</sup>	(92.05%,97.37%)	0.945*	(0.200,1.689)	94.68% <sup>2,3,4</sup>	(92.07%,97.29%)	2.57*	(1.22,5.41)
	South	89.49% <sup>1</sup>	(86.16%,92.81%)	0.222	(-0.416,0.861)	89.70% <sup>1</sup>	(86.41%,92.98%)	1.25	(0.66,2.36)
	Midwest	85.17% <sup>1</sup>	(81.48%,88.87%)	-0.210	(-0.834,0.413)	85.05% <sup>1</sup>	(81.27%,88.83%)	0.81	(0.43,1.51)
	West	87.75% <sup>1</sup>	(82.15%,93.36%)	0.000	(0.000,0.000)	87.49% <sup>1</sup>	(81.74%,93.24%)	1.00	n/a
Department Type (0.7402)	All Career	94.11% <sup>2,3</sup>	(90.63%,97.58%)	0.324	(-0.510,1.159)	91.79%	(85.71%,97.86%)	1.38	(0.60,3.19)
	All Volunteer	89.13% <sup>1</sup>	(85.72%,92.54%)	0.000	(0.000,0.000)	89.06%	(85.49%,92.63%)	1.00	n/a
	Combination	88.72% <sup>1</sup>	(86.33%,91.11%)	-0.005	(-0.484,0.473)	89.01%	(86.54%,91.47%)	0.99	(0.62,1.61)
Jurisdiction Type (0.2064)	Urban	91.36%	(87.70%,95.02%)	-0.433	(-1.105,0.239)	85.00%	(77.39%,92.61%)	0.65	(0.33,1.27)
	Rural/Missing	88.67%	(86.55%,90.80%)	0.000	(0.000,0.000)	89.59%	(87.63%,91.55%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0016)	50,000+	96.79% <sup>2,3</sup>	(94.60%,98.98%)	1.772*	(0.731,2.813)	97.42% <sup>2,3</sup>	(95.04%,99.79%)	5.88*	(2.08,16.65)
	5,000-50,000	93.07% <sup>1,3</sup>	(90.63%,95.50%)	0.773*	(0.224,1.323)	93.34% <sup>1,3</sup>	(90.68%,96.00%)	2.17*	(1.25,3.75)
	0 – 5,000	87.07% <sup>1,2</sup>	(84.51%,89.63%)	0.000	(0.000,0.000)	86.76% <sup>1,2</sup>	(83.90%,89.61%)	1.00	n/a
FFFIPP/ Fatality (0.2439)	Fatality with Investigation	96.34% <sup>3</sup>	(93.06%,99.62%)	0.812	(-0.143,1.767)	94.77% <sup>3</sup>	(90.17%,99.38%)	2.25	(0.87,5.86)
	Fatality - No Investigation	90.20%	(84.21%,96.20%)	-0.053	(-0.806,0.700)	88.59%	(81.44%,95.75%)	0.95	(0.45,2.01)
	No Fatality	89.06% <sup>1</sup>	(87.16%,90.97%)	0.000	(0.000,0.000)	89.10% <sup>1</sup>	(87.20%,91.00%)	1.00	n/a
Who Completed Survey (Q62) (0.3162)	Fire Chief	89.83%	(87.66%,92.00%)	0.437	(-0.024,0.898)	90.08%	(87.96%,92.21%)	1.55	(0.98,2.45)
	Safety Officer	90.62%	(80.74%,100.00%)	0.206	(-1.084,1.495)	87.88%	(75.01%,100.00%)	1.23	(0.34,4.46)
	Training Officer	90.63%	(83.52%,97.74%)	0.431	(-0.511,1.372)	90.03%	(82.51%,97.55%)	1.54	(0.60,3.94)
	Other/Missing	86.07%	(81.51%,90.63%)	0.000	(0.000,0.000)	85.59%	(80.91%,90.26%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 9: Q3. SOPs/SOGs in place for: Use of radio communications**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		84.79%	(82.67%,86.92%)	1.516*	(0.891,2.140)	84.79%	(82.67%,86.92%)		
Region (0.0001)	Northeast	91.77% <sup>2,3</sup>	(88.54%,94.99%)	0.545	(-0.122,1.212)	91.62% <sup>2,3</sup>	(88.30%,94.93%)	1.73	(0.89,3.36)
	South	85.52% <sup>1,3</sup>	(81.73%,89.30%)	-0.060	(-0.647,0.527)	85.71% <sup>1,3</sup>	(81.98%,89.45%)	0.94	(0.52,1.69)
	Midwest	78.06% <sup>1,2,4</sup>	(73.83%,82.30%)	-0.587*	(-1.156,-0.017)	78.12% <sup>1,2,4</sup>	(73.88%,82.37%)	0.56*	(0.31,0.98)
	West	86.60% <sup>3</sup>	(80.87%,92.32%)	0.000	(0.000,0.000)	86.43% <sup>3</sup>	(80.59%,92.27%)	1.00	n/a
Department Type (0.8470)	All Career	88.07%	(83.38%,92.76%)	-0.148	(-0.810,0.514)	82.50%	(73.79%,91.21%)	0.86	(0.44,1.67)
	All Volunteer	84.98%	(81.16%,88.79%)	0.000	(0.000,0.000)	84.47%	(80.48%,88.46%)	1.00	n/a
	Combination	84.43%	(81.70%,87.15%)	0.050	(-0.345,0.444)	85.09%	(82.40%,87.78%)	1.05	(0.71,1.56)
Jurisdiction Type (0.2160)	Urban	87.50%	(83.57%,91.43%)	-0.345	(-0.892,0.202)	80.68%	(73.21%,88.14%)	0.71	(0.41,1.22)
	Rural/Missing	84.25%	(81.82%,86.67%)	0.000	(0.000,0.000)	85.33%	(83.07%,87.59%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0001)	50,000+	94.96% <sup>2,3</sup>	(92.19%,97.73%)	1.795*	(0.937,2.653)	96.31% <sup>2,3</sup>	(93.56%,99.07%)	6.02*	(2.55,14.19)
	5,000-50,000	89.58% <sup>1,3</sup>	(86.82%,92.34%)	0.731*	(0.286,1.176)	90.12% <sup>1,3</sup>	(87.10%,93.13%)	2.08*	(1.33,3.24)
	0 – 5,000	82.27% <sup>1,2</sup>	(79.37%,85.16%)	0.000	(0.000,0.000)	81.68% <sup>1,2</sup>	(78.51%,84.85%)	1.00	n/a
FFFIPP/ Fatality (0.5698)	Fatality with Investigation	91.24% <sup>3</sup>	(86.30%,96.17%)	0.314	(-0.352,0.981)	88.30%	(81.72%,94.87%)	1.37	(0.70,2.67)
	Fatality - No Investigation	88.89%	(83.44%,94.34%)	0.183	(-0.442,0.808)	86.91%	(80.24%,93.58%)	1.20	(0.64,2.24)
	No Fatality	84.70% <sup>1</sup>	(82.55%,86.86%)	0.000	(0.000,0.000)	84.76%	(82.61%,86.90%)	1.00	n/a
Who Completed Survey (Q62) (0.8006)	Fire Chief	85.01%	(82.50%,87.52%)	0.190	(-0.229,0.609)	85.37%	(82.92%,87.83%)	1.21	(0.80,1.84)
	Safety Officer	90.08%	(79.66%,100.00%)	0.330	(-0.923,1.584)	86.99%	(73.70%,100.00%)	1.39	(0.40,4.87)
	Training Officer	84.54%	(76.18%,92.90%)	0.035	(-0.716,0.787)	83.40%	(74.57%,92.24%)	1.04	(0.49,2.20)
	Other/Missing	83.44%	(78.53%,88.35%)	0.000	(0.000,0.000)	82.93%	(77.92%,87.93%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 10: Q3. SOPs/SOGs in place for: Other (Please specify: \_\_\_\_\_)**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		8.73%	(7.10%,10.36%)	-2.509*	(-3.230,-1.787)	8.73%	(7.10%,10.36%)		
Region (0.1398)	Northeast	12.17% <sup>2,3</sup>	(7.86%,16.49%)	0.083	(-0.633,0.799)	11.61%	(7.27%,15.95%)	1.09	(0.53,2.22)
	South	6.72% <sup>1</sup>	(4.25%,9.19%)	-0.517	(-1.173,0.139)	6.81%	(4.29%,9.34%)	0.60	(0.31,1.15)
	Midwest	7.17% <sup>1</sup>	(4.74%,9.60%)	-0.389	(-1.052,0.275)	7.66%	(5.07%,10.24%)	0.68	(0.35,1.32)
	West	11.75%	(6.65%,16.84%)	0.000	(0.000,0.000)	10.81%	(5.76%,15.86%)	1.00	n/a
Department Type (0.3789)	All Career	12.48% <sup>3</sup>	(8.16%,16.81%)	-0.376	(-1.013,0.262)	7.31%	(3.28%,11.33%)	0.69	(0.36,1.30)
	All Volunteer	10.35%	(7.15%,13.54%)	0.000	(0.000,0.000)	10.19%	(6.83%,13.56%)	1.00	n/a
	Combination	7.53% <sup>1</sup>	(5.58%,9.49%)	-0.267	(-0.784,0.249)	8.06%	(5.88%,10.23%)	0.77	(0.46,1.28)
Jurisdiction Type (0.6295)	Urban	14.20% <sup>2</sup>	(9.92%,18.48%)	0.140	(-0.428,0.707)	9.58%	(5.56%,13.59%)	1.15	(0.65,2.03)
	Rural/Missing	7.62% <sup>1</sup>	(5.87%,9.38%)	0.000	(0.000,0.000)	8.47%	(6.54%,10.39%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0162)	50,000+	16.78% <sup>3</sup>	(11.45%,22.11%)	0.861*	(0.074,1.648)	14.15%	(6.26%,22.03%)	2.36*	(1.08,5.20)
	5,000-50,000	13.46% <sup>3</sup>	(10.20%,16.71%)	0.725*	(0.217,1.232)	12.60% <sup>3</sup>	(9.08%,16.12%)	2.06*	(1.24,3.43)
	0 – 5,000	6.31% <sup>1,2</sup>	(4.38%,8.25%)	0.000	(0.000,0.000)	6.59% <sup>2</sup>	(4.48%,8.70%)	1.00	n/a
FFFIPP/ Fatality (0.7348)	Fatality with Investigation	9.53%	(4.62%,14.43%)	-0.246	(-0.883,0.391)	7.02%	(3.02%,11.02%)	0.78	(0.41,1.48)
	Fatality - No Investigation	9.49%	(3.81%,15.16%)	-0.097	(-0.804,0.609)	8.03%	(3.17%,12.89%)	0.91	(0.45,1.84)
	No Fatality	8.71%	(7.06%,10.37%)	0.000	(0.000,0.000)	8.75%	(7.10%,10.41%)	1.00	n/a
Who Completed Survey (Q62) (0.0967)	Fire Chief	8.39% <sup>2</sup>	(6.41%,10.38%)	0.253	(-0.273,0.780)	8.67%	(6.61%,10.72%)	1.29	(0.76,2.18)
	Safety Officer	23.05% <sup>1,4</sup>	(8.97%,37.12%)	1.166*	(0.245,2.086)	18.69%	(6.35%,31.03%)	3.21*	(1.28,8.05)
	Training Officer	11.64%	(4.86%,18.42%)	0.430	(-0.380,1.240)	10.13%	(3.92%,16.34%)	1.54	(0.68,3.46)
	Other/Missing	7.05% <sup>2</sup>	(4.17%,9.92%)	0.000	(0.000,0.000)	6.89%	(4.07%,9.71%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 11: Q3. SOPs/SOGs in place for: Does not apply. Our fire department does not use SOPs/SOGs.**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		4.99%	(3.65%,6.33%)	-1.795*	(-2.772,-0.817)	4.99%	(3.65%,6.33%)		
Region (0.0041)	Northeast	1.05% <sup>2,3,4</sup>	(0.00%,2.24%)	-1.706*	(-3.091,-0.321)	1.17% <sup>2,3,4</sup>	(0.00%,2.49%)	0.18*	(0.05,0.73)
	South	4.60% <sup>1</sup>	(2.22%,6.97%)	-0.379	(-1.323,0.565)	4.23% <sup>1,3</sup>	(2.11%,6.34%)	0.68	(0.27,1.76)
	Midwest	7.86% <sup>1</sup>	(5.05%,10.67%)	0.323	(-0.550,1.195)	8.08% <sup>1,2</sup>	(5.21%,10.94%)	1.38	(0.58,3.30)
	West	6.14% <sup>1</sup>	(1.78%,10.50%)	0.000	(0.000,0.000)	6.02% <sup>1</sup>	(1.72%,10.32%)	1.00	n/a
Department Type (0.7060)	All Career	2.15%	(0.00%,4.67%)	-0.300	(-1.767,1.168)	4.42%	(0.00%,10.54%)	0.74	(0.17,3.21)
	All Volunteer	5.55%	(2.89%,8.21%)	0.000	(0.000,0.000)	5.82%	(2.99%,8.66%)	1.00	n/a
	Combination	4.91%	(3.29%,6.53%)	-0.257	(-0.932,0.418)	4.60%	(3.01%,6.18%)	0.77	(0.39,1.52)
Jurisdiction Type (0.8469)	Urban	2.22% <sup>2</sup>	(0.26%,4.18%)	-0.122	(-1.356,1.113)	4.50%	(0.00%,9.40%)	0.89	(0.26,3.04)
	Rural/Missing	5.55% <sup>1</sup>	(3.98%,7.12%)	0.000	(0.000,0.000)	5.04%	(3.60%,6.47%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0142)	5,000+	1.95% <sup>2</sup>	(0.70%,3.19%)	-1.205*	(-2.168,-0.242)	2.02% <sup>2</sup>	(0.45%,3.60%)	0.30*	(0.11,0.79)
	0 – 5,000	6.46% <sup>1</sup>	(4.56%,8.36%)	0.000	(0.000,0.000)	6.34% <sup>1</sup>	(4.25%,8.42%)	1.00	n/a
FFFIPP/ Fatality (0.0092)	Fatality	0.60% <sup>2</sup>	(0.00%,1.44%)	-1.909*	(-3.345,-0.474)	0.80% <sup>2</sup>	(0.00%,1.92%)	0.15*	(0.04,0.62)
	No Fatality	5.07% <sup>1</sup>	(3.70%,6.44%)	0.000	(0.000,0.000)	5.05% <sup>1</sup>	(3.69%,6.41%)	1.00	n/a
Who Completed Survey (Q62) (0.2186)	Fire Chief	4.32%	(2.84%,5.80%)	-0.686*	(-1.329,-0.043)	4.18%	(2.75%,5.62%)	0.50*	(0.26,0.96)
	Safety Officer	3.43%	(0.00%,10.01%)	-0.571	(-2.627,1.485)	4.66%	(0.00%,13.31%)	0.56	(0.07,4.42)
	Training Officer	5.11%	(0.00%,10.86%)	-0.389	(-1.735,0.956)	5.51%	(0.00%,11.67%)	0.68	(0.18,2.60)
	Other/Missing	7.42%	(3.83%,11.00%)	0.000	(0.000,0.000)	7.82%	(4.11%,11.54%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 12: Q4. Firefighters receive training in: Fighting structure fires, No Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		1.14%	(0.49%,1.78%)	-2.883*	(-4.057,-1.709)	1.14%	(0.49%,1.78%)		
Region (0.3890)	Northeast	0.46%	(0.00%,1.26%)	-1.255	(-3.316,0.806)	0.63%	(0.00%,1.68%)	0.29	(0.04,2.24)
	South	1.54%	(0.09%,3.00%)	-0.369	(-1.765,1.027)	1.44%	(0.18%,2.70%)	0.69	(0.17,2.79)
	Midwest	0.59%	(0.00%,1.31%)	-1.274	(-2.983,0.435)	0.62%	(0.00%,1.38%)	0.28	(0.05,1.54)
	West	2.56%	(0.15%,4.96%)	0.000	(0.000,0.000)	2.03%	(0.01%,4.05%)	1.00	n/a
Department Type (0.0000)	All Career	3.00%	(0.00%,6.36%)	4.259*	(2.518,6.000)	31.63% <sup>2,3</sup>	(5.87%,57.38%)	70.72*	(12.40,403.36)
	All Volunteer	1.19%	(0.00%,2.45%)	0.000	(0.000,0.000)	1.07% <sup>1</sup>	(0.00%,2.21%)	1.00	n/a
	Combination	0.96%	(0.20%,1.71%)	-0.122	(-1.537,1.293)	0.95% <sup>1</sup>	(0.18%,1.72%)	0.89	(0.22,3.64)
Jurisdiction Type (0.0362)	Urban	0.24% <sup>2</sup>	(0.00%,0.60%)	-1.992*	(-3.857,-0.128)	0.22% <sup>2</sup>	(0.00%,0.55%)	0.14*	(0.02,0.88)
	Rural/Missing	1.32% <sup>1</sup>	(0.54%,2.09%)	0.000	(0.000,0.000)	1.31% <sup>1</sup>	(0.59%,2.02%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	0.43%	(0.00%,1.28%)	-4.391*	(-6.821,-1.961)	0.05% <sup>3</sup>	(0.00%,0.15%)	0.01*	(0.00,0.14)
	5,000-50,000	0.09% <sup>3</sup>	(0.00%,0.28%)	-3.957*	(-6.034,-1.880)	0.07% <sup>3</sup>	(0.00%,0.21%)	0.02*	(0.00,0.15)
	0 – 5,000	1.63% <sup>2</sup>	(0.67%,2.59%)	0.000	(0.000,0.000)	2.52% <sup>1,2</sup>	(1.12%,3.93%)	1.00	n/a
FFFIPP/ Fatality (0.0841)	Fatality with Investigation	1.88%	(0.00%,4.51%)	1.267	(-0.408,2.941)	3.47%	(0.00%,8.31%)	3.55	(0.67,18.93)
	Fatality - No Investigation	3.50%	(0.00%,7.38%)	1.388	(-0.021,2.797)	3.87%	(0.00%,8.12%)	4.01	(0.98,16.40)
	No Fatality	1.11%	(0.45%,1.76%)	0.000	(0.000,0.000)	1.10%	(0.44%,1.76%)	1.00	n/a
Who Completed Survey (Q62) (0.1793)	Fire Chief	0.75%	(0.12%,1.37%)	-0.904	(-2.189,0.381)	0.83%	(0.15%,1.50%)	0.40	(0.11,1.46)
	Safety Officer	1.29%	(0.00%,3.83%)	-1.170	(-2.524,0.183)	0.65%	(0.00%,1.38%)	0.31	(0.08,1.20)
	Training Officer, Other or Missing	2.13%	(0.39%,3.87%)	0.000	(0.000,0.000)	1.91%	(0.27%,3.56%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 13: Q4. Firefighters receive training in: Fighting structure fires, Optional Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		16.74%	(14.50%,18.98%)	-1.359*	(-2.025,-0.693)	16.74%	(14.50%,18.98%)		
Region (0.0054)	Northeast	15.21% <sup>3</sup>	(10.73%,19.69%)	0.253	(-0.405,0.911)	16.46%	(11.58%,21.34%)	1.29	(0.67,2.49)
	South	13.16% <sup>3</sup>	(9.43%,16.89%)	-0.054	(-0.692,0.584)	12.76% <sup>3</sup>	(9.08%,16.44%)	0.95	(0.50,1.79)
	Midwest	23.32% <sup>1,2,4</sup>	(18.95%,27.69%)	0.668*	(0.064,1.272)	22.68% <sup>2,4</sup>	(18.42%,26.94%)	1.95*	(1.07,3.57)
	West	13.15% <sup>3</sup>	(7.04%,19.26%)	0.000	(0.000,0.000)	13.36% <sup>3</sup>	(7.24%,19.48%)	1.00	n/a
Department Type (0.8407)	All Career	4.96% <sup>2,3</sup>	(1.88%,8.03%)	-0.211	(-1.061,0.638)	14.82%	(4.62%,25.02%)	0.81	(0.35,1.89)
	All Volunteer	15.61% <sup>1</sup>	(11.53%,19.70%)	0.000	(0.000,0.000)	17.54%	(12.93%,22.15%)	1.00	n/a
	Combination	18.29% <sup>1</sup>	(15.41%,21.18%)	-0.083	(-0.492,0.327)	16.43%	(13.72%,19.15%)	0.92	(0.61,1.39)
Jurisdiction Type (0.1906)	Urban	6.73% <sup>2</sup>	(3.53%,9.94%)	-0.447	(-1.116,0.223)	11.97%	(5.47%,18.47%)	0.64	(0.33,1.25)
	Rural/Missing	18.75% <sup>1</sup>	(16.14%,21.37%)	0.000	(0.000,0.000)	17.29%	(14.86%,19.72%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	2.57% <sup>2,3</sup>	(0.25%,4.90%)	-1.807*	(-2.979,-0.636)	4.13% <sup>3</sup>	(0.00%,8.60%)	0.16*	(0.05,0.53)
	5,000-50,000	7.59% <sup>1,3</sup>	(5.10%,10.07%)	-1.059*	(-1.529,-0.590)	8.30% <sup>3</sup>	(5.32%,11.29%)	0.35*	(0.22,0.55)
	0 – 5,000	21.41% <sup>1,2</sup>	(18.26%,24.57%)	0.000	(0.000,0.000)	20.44% <sup>1,2</sup>	(17.21%,23.66%)	1.00	n/a
FFFIPP/ Fatality (0.1790)	Fatality with Investigation	7.68% <sup>2,3</sup>	(3.02%,12.34%)	-0.322	(-1.007,0.362)	12.83%	(5.64%,20.02%)	0.72	(0.37,1.44)
	Fatality - No Investigation	20.20% <sup>1</sup>	(11.62%,28.79%)	0.470	(-0.127,1.068)	23.79%	(14.09%,33.49%)	1.60	(0.88,2.91)
	No Fatality	16.77% <sup>1</sup>	(14.49%,19.05%)	0.000	(0.000,0.000)	16.69%	(14.42%,18.96%)	1.00	n/a
Who Completed Survey (Q62) (0.7191)	Fire Chief	17.32%	(14.57%,20.06%)	-0.165	(-0.591,0.260)	16.49%	(13.82%,19.15%)	0.85	(0.55,1.30)
	Safety Officer	7.96%	(0.00%,17.02%)	-0.629	(-1.955,0.697)	11.23%	(0.00%,23.61%)	0.53	(0.14,2.01)
	Training Officer	12.48%	(4.94%,20.02%)	-0.275	(-1.073,0.522)	15.09%	(6.33%,23.85%)	0.76	(0.34,1.69)
	Other/Missing	17.31%	(12.38%,22.24%)	0.000	(0.000,0.000)	18.76%	(13.45%,24.08%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 14: Q4. Firefighters receive training in: Fighting structure fires, Required Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		82.81%	(80.54%,85.08%)	1.057*	(0.422,1.691)	82.81%	(80.54%,85.08%)		
Region (0.0152)	Northeast	84.87% <sup>3</sup>	(80.39%,89.35%)	-0.128	(-0.759,0.504)	83.43%	(78.50%,88.36%)	0.88	(0.47,1.66)
	South	85.88% <sup>3</sup>	(82.02%,89.74%)	0.122	(-0.483,0.727)	86.49% <sup>3</sup>	(82.75%,90.24%)	1.13	(0.62,2.07)
	Midwest	76.86% <sup>1,2,4</sup>	(72.51%,81.21%)	-0.535	(-1.108,0.038)	77.36% <sup>2,4</sup>	(73.13%,81.60%)	0.59	(0.33,1.04)
	West	85.28% <sup>3</sup>	(78.99%,91.57%)	0.000	(0.000,0.000)	85.06% <sup>3</sup>	(78.83%,91.29%)	1.00	n/a
Department Type (0.7074)	All Career	93.26% <sup>2,3</sup>	(89.27%,97.26%)	-0.182	(-1.010,0.646)	78.93%	(66.19%,91.66%)	0.83	(0.36,1.91)
	All Volunteer	83.47% <sup>1</sup>	(79.30%,87.63%)	0.000	(0.000,0.000)	81.62%	(76.94%,86.30%)	1.00	n/a
	Combination	81.61% <sup>1</sup>	(78.72%,84.50%)	0.134	(-0.272,0.540)	83.45%	(80.72%,86.18%)	1.14	(0.76,1.72)
Jurisdiction Type (0.1391)	Urban	93.39% <sup>2</sup>	(90.20%,96.57%)	0.525	(-0.171,1.221)	88.40%	(81.83%,94.98%)	1.69	(0.84,3.39)
	Rural/Missing	80.68% <sup>1</sup>	(78.03%,83.33%)	0.000	(0.000,0.000)	82.15%	(79.68%,84.62%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	96.99% <sup>2,3</sup>	(94.53%,99.46%)	2.005*	(0.893,3.118)	96.38% <sup>2,3</sup>	(92.67%,100.00%)	7.43*	(2.44,22.59)
	5,000-50,000	92.75% <sup>1,3</sup>	(90.30%,95.19%)	1.177*	(0.697,1.658)	92.12% <sup>1,3</sup>	(89.21%,95.04%)	3.25*	(2.01,5.25)
	0 – 5,000	77.78% <sup>1,2</sup>	(74.59%,80.97%)	0.000	(0.000,0.000)	78.58% <sup>1,2</sup>	(75.26%,81.91%)	1.00	n/a
FFFIPP/ Fatality (0.0716)	Fatality with Investigation	90.44% <sup>2,3</sup>	(85.19%,95.68%)	0.091	(-0.550,0.732)	84.09%	(76.15%,92.02%)	1.10	(0.58,2.08)
	Fatality - No Investigation	76.29% <sup>1</sup>	(67.23%,85.36%)	-0.652*	(-1.220,-0.084)	72.50% <sup>3</sup>	(62.55%,82.44%)	0.52*	(0.30,0.92)
	No Fatality	82.82% <sup>1</sup>	(80.52%,85.13%)	0.000	(0.000,0.000)	82.90% <sup>2</sup>	(80.60%,85.19%)	1.00	n/a
Who Completed Survey (Q62) (0.3210)	Fire Chief	82.67%	(79.92%,85.42%)	0.314	(-0.101,0.729)	83.42%	(80.75%,86.09%)	1.37	(0.90,2.07)
	Safety Officer	90.75%	(81.41%,100.00%)	0.654	(-0.555,1.864)	87.45%	(75.14%,99.75%)	1.92	(0.57,6.45)
	Training Officer	88.81%	(81.59%,96.02%)	0.582	(-0.252,1.416)	86.66%	(78.24%,95.09%)	1.79	(0.78,4.12)
	Other/Missing	80.29%	(75.07%,85.51%)	0.000	(0.000,0.000)	78.89%	(73.31%,84.48%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 15: Q4. Firefighters receive training in: Driving safety, No Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		3.93%	(2.73%,5.14%)	-1.828*	(-2.845,-0.810)	3.93%	(2.73%,5.14%)		
Region (0.0027)	Northeast	1.02% <sup>3,4</sup>	(0.00%,2.18%)	-1.837*	(-3.225,-0.449)	1.16% <sup>3,4</sup>	(0.00%,2.48%)	0.16*	(0.04,0.64)
	South	2.42% <sup>3</sup>	(0.64%,4.20%)	-1.165*	(-2.197,-0.132)	2.24% <sup>3</sup>	(0.67%,3.80%)	0.31*	(0.11,0.88)
	Midwest	6.58% <sup>1,2</sup>	(3.98%,9.18%)	-0.015	(-0.898,0.868)	6.64% <sup>1,2</sup>	(3.98%,9.31%)	0.99	(0.41,2.38)
	West	6.89% <sup>1</sup>	(2.12%,11.66%)	0.000	(0.000,0.000)	6.73% <sup>1</sup>	(2.07%,11.40%)	1.00	n/a
Department Type (0.3346)	All Career	2.52%	(0.43%,4.60%)	0.622	(-0.616,1.859)	8.23%	(0.00%,16.76%)	1.86	(0.54,6.42)
	All Volunteer	4.06%	(1.71%,6.41%)	0.000	(0.000,0.000)	4.74%	(1.98%,7.49%)	1.00	n/a
	Combination	3.98%	(2.50%,5.45%)	-0.326	(-1.093,0.442)	3.50%	(2.18%,4.82%)	0.72	(0.34,1.56)
Jurisdiction Type (0.2041)	Urban	1.20% <sup>2</sup>	(0.16%,2.23%)	-0.635	(-1.616,0.346)	2.25%	(0.20%,4.29%)	0.53	(0.20,1.41)
	Rural/Missing	4.49% <sup>1</sup>	(3.05%,5.92%)	0.000	(0.000,0.000)	4.10%	(2.82%,5.38%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0016)	50,000+	1.40% <sup>3</sup>	(0.10%,2.69%)	-1.773*	(-3.176,-0.369)	0.95% <sup>3</sup>	(0.00%,2.16%)	0.17*	(0.04,0.69)
	5,000-50,000	1.18% <sup>3</sup>	(0.26%,2.10%)	-1.475*	(-2.378,-0.572)	1.27% <sup>3</sup>	(0.27%,2.27%)	0.23*	(0.09,0.56)
	0 – 5,000	5.28% <sup>1,2</sup>	(3.53%,7.03%)	0.000	(0.000,0.000)	5.21% <sup>1,2</sup>	(3.45%,6.97%)	1.00	n/a
FFFIPP/ Fatality (0.9421)	Fatality with Investigation	2.21%	(0.00%,4.73%)	-0.000	(-1.219,1.219)	3.92%	(0.00%,8.30%)	1.00	(0.30,3.38)
	Fatality - No Investigation	3.71%	(0.00%,7.57%)	0.204	(-0.956,1.363)	4.74%	(0.00%,9.56%)	1.23	(0.38,3.91)
	No Fatality	3.95%	(2.72%,5.17%)	0.000	(0.000,0.000)	3.93%	(2.71%,5.14%)	1.00	n/a
Who Completed Survey (Q62) (0.8561)	Fire Chief	3.78%	(2.37%,5.19%)	-0.329	(-1.115,0.457)	3.67%	(2.30%,5.05%)	0.72	(0.33,1.58)
	Safety Officer	3.76%	(0.00%,10.36%)	-0.085	(-2.030,1.859)	4.61%	(0.00%,12.48%)	0.92	(0.13,6.42)
	Training Officer	3.40%	(0.00%,7.27%)	-0.404	(-1.805,0.997)	3.43%	(0.00%,7.43%)	0.67	(0.16,2.71)
	Other/Missing	4.62%	(1.64%,7.61%)	0.000	(0.000,0.000)	4.98%	(1.87%,8.10%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 16: Q4. Firefighters receive training in: Driving safety, Optional Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		18.56%	(16.18%,20.95%)	-1.848*	(-2.560,-1.136)	18.56%	(16.18%,20.95%)		
Region (0.0209)	Northeast	19.69% <sup>4</sup>	(14.45%,24.93%)	0.725*	(0.038,1.413)	20.46% <sup>4</sup>	(14.97%,25.96%)	2.06*	(1.04,4.11)
	South	16.12% <sup>3</sup>	(12.09%,20.14%)	0.416	(-0.246,1.078)	15.98% <sup>3</sup>	(11.96%,20.00%)	1.52	(0.78,2.94)
	Midwest	23.73% <sup>2,4</sup>	(19.28%,28.19%)	0.879*	(0.231,1.527)	23.01% <sup>2,4</sup>	(18.65%,27.37%)	2.41*	(1.26,4.60)
	West	10.85% <sup>1,3</sup>	(5.16%,16.55%)	0.000	(0.000,0.000)	11.21% <sup>1,3</sup>	(5.40%,17.03%)	1.00	n/a
Department Type (0.7753)	All Career	7.12% <sup>2,3</sup>	(3.51%,10.72%)	-0.266	(-1.009,0.476)	15.43%	(6.11%,24.75%)	0.77	(0.36,1.61)
	All Volunteer	17.39% <sup>1</sup>	(12.97%,21.81%)	0.000	(0.000,0.000)	19.11%	(14.23%,23.99%)	1.00	n/a
	Combination	20.14% <sup>1</sup>	(17.11%,23.16%)	-0.046	(-0.442,0.350)	18.43%	(15.53%,21.34%)	0.96	(0.64,1.42)
Jurisdiction Type (0.4598)	Urban	10.79% <sup>2</sup>	(6.68%,14.90%)	-0.210	(-0.767,0.347)	15.99%	(9.16%,22.82%)	0.81	(0.46,1.41)
	Rural/Missing	20.14% <sup>1</sup>	(17.39%,22.88%)	0.000	(0.000,0.000)	18.92%	(16.34%,21.50%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0008)	50,000+	4.09% <sup>2,3</sup>	(1.21%,6.96%)	-1.305*	(-2.258,-0.352)	7.03% <sup>3</sup>	(1.10%,12.95%)	0.27*	(0.10,0.70)
	5,000-50,000	11.75% <sup>1,3</sup>	(8.68%,14.83%)	-0.684*	(-1.078,-0.290)	12.27% <sup>3</sup>	(8.87%,15.68%)	0.50*	(0.34,0.75)
	0 – 5,000	22.24% <sup>1,2</sup>	(18.97%,25.50%)	0.000	(0.000,0.000)	21.53% <sup>1,2</sup>	(18.20%,24.86%)	1.00	n/a
FFFIPP/ Fatality (0.0709)	Fatality with Investigation	5.82% <sup>2,3</sup>	(1.87%,9.78%)	-0.892*	(-1.652,-0.132)	8.74% <sup>3</sup>	(2.87%,14.61%)	0.41*	(0.19,0.88)
	Fatality - No Investigation	15.99% <sup>1</sup>	(8.47%,23.51%)	-0.035	(-0.653,0.583)	18.11%	(9.54%,26.67%)	0.97	(0.52,1.79)
	No Fatality	18.68% <sup>1</sup>	(16.26%,21.11%)	0.000	(0.000,0.000)	18.62% <sup>1</sup>	(16.20%,21.03%)	1.00	n/a
Who Completed Survey (Q62) (0.6309)	Fire Chief	20.04% <sup>2</sup>	(17.10%,22.99%)	0.086	(-0.336,0.508)	19.25%	(16.37%,22.14%)	1.09	(0.71,1.66)
	Safety Officer	7.58% <sup>1</sup>	(0.00%,16.71%)	-0.660	(-2.107,0.786)	10.32%	(0.00%,23.10%)	0.52	(0.12,2.20)
	Training Officer	12.59%	(4.92%,20.27%)	-0.231	(-1.034,0.571)	14.90%	(6.01%,23.80%)	0.79	(0.36,1.77)
	Other/Missing	16.96%	(11.88%,22.03%)	0.000	(0.000,0.000)	17.99%	(12.68%,23.30%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 17: Q4. Firefighters receive training in: Driving safety, Required Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		77.70%	(75.17%,80.23%)	1.112*	(0.514,1.709)	77.70%	(75.17%,80.23%)		
Region (0.0024)	Northeast	79.43% <sup>3</sup>	(74.12%,84.73%)	-0.229	(-0.817,0.359)	78.29% <sup>3</sup>	(72.71%,83.87%)	0.80	(0.44,1.43)
	South	81.69% <sup>3</sup>	(77.44%,85.94%)	0.017	(-0.539,0.573)	82.07% <sup>3</sup>	(77.91%,86.22%)	1.02	(0.58,1.77)
	Midwest	69.97% <sup>1,2,4</sup>	(65.22%,74.72%)	-0.647*	(-1.183,-0.111)	70.70% <sup>1,2,4</sup>	(66.09%,75.32%)	0.52*	(0.31,0.89)
	West	82.25% <sup>3</sup>	(75.30%,89.20%)	0.000	(0.000,0.000)	81.83% <sup>3</sup>	(74.92%,88.74%)	1.00	n/a
Department Type (0.7465)	All Career	90.97% <sup>2,3</sup>	(87.04%,94.90%)	0.181	(-0.493,0.856)	79.30%	(68.83%,89.78%)	1.20	(0.61,2.35)
	All Volunteer	78.55% <sup>1</sup>	(73.85%,83.25%)	0.000	(0.000,0.000)	76.33%	(71.22%,81.44%)	1.00	n/a
	Combination	76.15% <sup>1</sup>	(72.94%,79.36%)	0.117	(-0.249,0.483)	78.28%	(75.20%,81.35%)	1.12	(0.78,1.62)
Jurisdiction Type (0.3389)	Urban	88.19% <sup>2</sup>	(83.99%,92.40%)	0.258	(-0.271,0.788)	81.28%	(73.98%,88.58%)	1.29	(0.76,2.20)
	Rural/Missing	75.57% <sup>1</sup>	(72.65%,78.50%)	0.000	(0.000,0.000)	77.22%	(74.48%,79.95%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	94.52% <sup>2,3</sup>	(91.37%,97.66%)	1.433*	(0.613,2.254)	91.90% <sup>3</sup>	(86.14%,97.66%)	4.19*	(1.85,9.52)
	5,000-50,000	87.42% <sup>1,3</sup>	(84.27%,90.57%)	0.877*	(0.504,1.249)	86.74% <sup>3</sup>	(83.27%,90.22%)	2.40*	(1.66,3.49)
	0 – 5,000	72.61% <sup>1,2</sup>	(69.12%,76.10%)	0.000	(0.000,0.000)	73.44% <sup>1,2</sup>	(69.88%,77.00%)	1.00	n/a
FFFIPP/ Fatality (0.0990)	Fatality with Investigation	91.96% <sup>2,3</sup>	(87.35%,96.58%)	0.731*	(0.062,1.400)	87.53% <sup>3</sup>	(80.56%,94.50%)	2.08*	(1.06,4.06)
	Fatality - No Investigation	80.30% <sup>1</sup>	(72.17%,88.43%)	-0.025	(-0.592,0.542)	77.24%	(68.12%,86.37%)	0.98	(0.55,1.72)
	No Fatality	77.57% <sup>1</sup>	(74.99%,80.14%)	0.000	(0.000,0.000)	77.65% <sup>1</sup>	(75.09%,80.22%)	1.00	n/a
Who Completed Survey (Q62) (0.6223)	Fire Chief	76.33% <sup>2,3</sup>	(73.22%,79.43%)	0.009	(-0.382,0.399)	77.22%	(74.19%,80.25%)	1.01	(0.68,1.49)
	Safety Officer	88.66% <sup>1</sup>	(77.72%,99.59%)	0.522	(-0.732,1.777)	84.74%	(69.54%,99.94%)	1.69	(0.48,5.91)
	Training Officer	85.30% <sup>1</sup>	(77.21%,93.40%)	0.388	(-0.370,1.146)	82.99%	(73.69%,92.28%)	1.47	(0.69,3.15)
	Other/Missing	78.42%	(72.86%,83.99%)	0.000	(0.000,0.000)	77.08%	(71.32%,82.84%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 18: Q4. Firefighters receive training in: Incident Command systems, No Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		2.88%	(1.83%,3.92%)	-3.611*	(-5.252,-1.970)	2.88%	(1.83%,3.92%)		
Region (0.3046)	Northeast	1.24% <sup>3</sup>	(0.00%,2.62%)	-0.062	(-1.842,1.718)	1.44%	(0.00%,3.05%)	0.94	(0.16,5.58)
	South	3.33%	(1.24%,5.43%)	0.746	(-0.781,2.273)	3.16%	(1.27%,5.04%)	2.11	(0.46,9.71)
	Midwest	4.16% <sup>1</sup>	(2.06%,6.27%)	0.985	(-0.508,2.478)	3.96%	(1.96%,5.97%)	2.68	(0.60,11.92)
	West	1.50%	(0.00%,3.57%)	0.000	(0.000,0.000)	1.53%	(0.00%,3.62%)	1.00	n/a
Department Type (0.2431)	All Career	0.07% <sup>2,3</sup>	(0.00%,0.21%)	-1.595	(-3.472,0.281)	0.63% <sup>2,3</sup>	(0.00%,1.77%)	0.20	(0.03,1.32)
	All Volunteer	2.79% <sup>1</sup>	(0.84%,4.74%)	0.000	(0.000,0.000)	2.98% <sup>1</sup>	(0.90%,5.07%)	1.00	n/a
	Combination	3.16% <sup>1</sup>	(1.83%,4.49%)	-0.048	(-0.919,0.822)	2.85% <sup>1</sup>	(1.63%,4.07%)	0.95	(0.40,2.28)
Jurisdiction Type (0.0000)	Urban	0.02% <sup>2</sup>	(0.00%,0.06%)	-4.226*	(-6.149,-2.302)	0.05% <sup>2</sup>	(0.00%,0.14%)	0.01*	(0.00,0.10)
	Rural/Missing	3.45% <sup>1</sup>	(2.20%,4.71%)	0.000	(0.000,0.000)	3.12% <sup>1</sup>	(1.99%,4.24%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.1115)	50,000+	0.13% <sup>3</sup>	(0.00%,0.39%)	-1.461	(-3.363,0.440)	0.80% <sup>3</sup>	(0.00%,2.25%)	0.23	(0.03,1.55)
	5,000-50,000	0.98% <sup>3</sup>	(0.04%,1.92%)	-0.913	(-1.998,0.172)	1.37% <sup>3</sup>	(0.03%,2.70%)	0.40	(0.14,1.19)
	0 – 5,000	3.85% <sup>1,2</sup>	(2.35%,5.36%)	0.000	(0.000,0.000)	3.31% <sup>1,2</sup>	(2.01%,4.61%)	1.00	n/a
FFFIPP/ Fatality (0.7830)	Fatality with Investigation	1.43%	(0.00%,3.44%)	-0.131	(-1.621,1.359)	2.53%	(0.00%,6.04%)	0.88	(0.20,3.89)
	Fatality - No Investigation	3.25%	(0.00%,6.83%)	0.414	(-0.814,1.642)	4.25%	(0.00%,8.86%)	1.51	(0.44,5.16)
	No Fatality	2.88%	(1.82%,3.95%)	0.000	(0.000,0.000)	2.87%	(1.81%,3.93%)	1.00	n/a
Who Completed Survey (Q62) (0.0307)	Fire Chief	2.89% <sup>2</sup>	(1.66%,4.13%)	-0.226	(-1.048,0.596)	2.76% <sup>2</sup>	(1.59%,3.93%)	0.80	(0.35,1.81)
	Safety Officer	0.13% <sup>1,3</sup>	(0.00%,0.39%)	-2.901*	(-5.067,-0.734)	0.20% <sup>1,3</sup>	(0.00%,0.60%)	0.05*	(0.01,0.48)
	Training Officer, Other or Missing	3.12% <sup>2</sup>	(0.94%,5.29%)	0.000	(0.000,0.000)	3.42% <sup>2</sup>	(1.13%,5.72%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 19: Q4. Firefighters receive training in: Incident Command systems, Optional Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		27.39%	(24.70%,30.08%)	-0.742*	(-1.312,-0.172)	27.39%	(24.70%,30.08%)		
Region (0.0341)	Northeast	29.65%	(23.73%,35.56%)	0.636*	(0.083,1.190)	32.43% <sup>2,4</sup>	(26.13%,38.73%)	1.89*	(1.09,3.29)
	South	24.90%	(20.13%,29.67%)	0.182	(-0.344,0.708)	23.87% <sup>1,3</sup>	(19.30%,28.45%)	1.20	(0.71,2.03)
	Midwest	31.39% <sup>4</sup>	(26.58%,36.19%)	0.542*	(0.024,1.060)	30.54% <sup>2,4</sup>	(25.93%,35.15%)	1.72*	(1.02,2.89)
	West	20.46% <sup>3</sup>	(13.27%,27.64%)	0.000	(0.000,0.000)	20.88% <sup>1,3</sup>	(13.70%,28.06%)	1.00	n/a
Department Type (0.1632)	All Career	5.73% <sup>2,3</sup>	(2.47%,8.99%)	-0.649	(-1.396,0.097)	18.78%	(7.94%,29.62%)	0.52	(0.25,1.10)
	All Volunteer	27.65% <sup>1</sup>	(22.73%,32.56%)	0.000	(0.000,0.000)	29.86%	(24.61%,35.12%)	1.00	n/a
	Combination	29.02% <sup>1</sup>	(25.57%,32.47%)	-0.182	(-0.518,0.153)	26.43%	(23.15%,29.71%)	0.83	(0.60,1.17)
Jurisdiction Type (0.0026)	Urban	9.74% <sup>2</sup>	(5.85%,13.63%)	-0.837*	(-1.382,-0.293)	15.46% <sup>2</sup>	(8.87%,22.05%)	0.43*	(0.25,0.75)
	Rural/Missing	30.95% <sup>1</sup>	(27.82%,34.09%)	0.000	(0.000,0.000)	29.01% <sup>1</sup>	(26.04%,31.98%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	4.72% <sup>2,3</sup>	(1.52%,7.92%)	-1.336*	(-2.240,-0.432)	11.34% <sup>3</sup>	(2.67%,20.00%)	0.26*	(0.11,0.65)
	5,000-50,000	14.23% <sup>1,3</sup>	(10.87%,17.58%)	-0.916*	(-1.275,-0.557)	16.20% <sup>3</sup>	(12.20%,20.20%)	0.40*	(0.28,0.57)
	0 – 5,000	34.29% <sup>1,2</sup>	(30.57%,38.00%)	0.000	(0.000,0.000)	32.04% <sup>1,2</sup>	(28.36%,35.72%)	1.00	n/a
FFFIPP/ Fatality (0.3689)	Fatality with Investigation	12.29% <sup>2,3</sup>	(6.39%,18.19%)	-0.427	(-1.026,0.171)	20.20%	(11.26%,29.14%)	0.65	(0.36,1.19)
	Fatality - No Investigation	23.10% <sup>1</sup>	(14.38%,31.81%)	-0.078	(-0.648,0.493)	26.02%	(16.11%,35.93%)	0.93	(0.52,1.64)
	No Fatality	27.54% <sup>1</sup>	(24.80%,30.28%)	0.000	(0.000,0.000)	27.43%	(24.71%,30.16%)	1.00	n/a
Who Completed Survey (Q62) (0.4655)	Fire Chief	28.54% <sup>2</sup>	(25.24%,31.83%)	-0.127	(-0.494,0.241)	27.39%	(24.19%,30.58%)	0.88	(0.61,1.27)
	Safety Officer	11.65% <sup>1,4</sup>	(0.85%,22.44%)	-0.864	(-2.097,0.369)	15.80%	(0.55%,31.04%)	0.42	(0.12,1.45)
	Training Officer	19.50%	(10.29%,28.71%)	-0.343	(-1.036,0.350)	23.54%	(13.05%,34.03%)	0.71	(0.35,1.42)
	Other/Missing	28.20% <sup>2</sup>	(22.09%,34.30%)	0.000	(0.000,0.000)	29.79%	(23.56%,36.02%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 20: Q4. Firefighters receive training in: Incident Command systems, Required Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		69.89%	(67.15%,72.63%)	0.551	(-0.004,1.106)	69.89%	(67.15%,72.63%)		
Region (0.0358)	Northeast	69.12%	(63.15%,75.09%)	-0.599*	(-1.139,-0.058)	66.18% <sup>4</sup>	(59.84%,72.52%)	0.55*	(0.32,0.94)
	South	71.77%	(66.83%,76.70%)	-0.251	(-0.759,0.258)	72.95% <sup>3</sup>	(68.24%,77.66%)	0.78	(0.47,1.29)
	Midwest	64.96% <sup>4</sup>	(60.06%,69.86%)	-0.607*	(-1.107,-0.107)	66.01% <sup>2,4</sup>	(61.37%,70.65%)	0.54*	(0.33,0.90)
	West	78.04% <sup>3</sup>	(70.72%,85.37%)	0.000	(0.000,0.000)	77.32% <sup>1,3</sup>	(70.04%,84.60%)	1.00	n/a
Department Type (0.1379)	All Career	94.20% <sup>2,3</sup>	(90.93%,97.47%)	0.683	(-0.054,1.421)	79.60% <sup>2</sup>	(68.30%,90.89%)	1.98	(0.95,4.14)
	All Volunteer	69.77% <sup>1</sup>	(64.81%,74.73%)	0.000	(0.000,0.000)	67.43% <sup>1</sup>	(62.18%,72.68%)	1.00	n/a
	Combination	67.96% <sup>1</sup>	(64.43%,71.49%)	0.174	(-0.152,0.500)	70.82%	(67.46%,74.18%)	1.19	(0.86,1.65)
Jurisdiction Type (0.0008)	Urban	90.24% <sup>2</sup>	(86.35%,94.13%)	0.932*	(0.390,1.474)	83.79% <sup>2</sup>	(76.99%,90.60%)	2.54*	(1.48,4.37)
	Rural/Missing	65.78% <sup>1</sup>	(62.58%,68.98%)	0.000	(0.000,0.000)	68.04% <sup>1</sup>	(65.02%,71.07%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	95.15% <sup>2,3</sup>	(91.94%,98.36%)	1.381*	(0.496,2.265)	87.53% <sup>3</sup>	(78.35%,96.72%)	3.98*	(1.64,9.63)
	5,000-50,000	84.79% <sup>1,3</sup>	(81.37%,88.22%)	0.963*	(0.615,1.311)	82.34% <sup>3</sup>	(78.20%,86.48%)	2.62*	(1.85,3.71)
	0 – 5,000	62.09% <sup>1,2</sup>	(58.31%,65.87%)	0.000	(0.000,0.000)	64.80% <sup>1,2</sup>	(61.08%,68.53%)	1.00	n/a
FFFIPP/ Fatality (0.3621)	Fatality with Investigation	86.28% <sup>2,3</sup>	(80.13%,92.42%)	0.416	(-0.156,0.988)	77.29%	(68.12%,86.45%)	1.52	(0.86,2.68)
	Fatality - No Investigation	73.65% <sup>1</sup>	(64.60%,82.70%)	0.016	(-0.532,0.564)	70.16%	(60.01%,80.31%)	1.02	(0.59,1.76)
	No Fatality	69.73% <sup>1</sup>	(66.95%,72.52%)	0.000	(0.000,0.000)	69.85%	(67.08%,72.63%)	1.00	n/a
Who Completed Survey (Q62) (0.1168)	Fire Chief	68.57% <sup>2,3</sup>	(65.21%,71.93%)	0.196	(-0.162,0.555)	69.84%	(66.60%,73.08%)	1.22	(0.85,1.74)
	Safety Officer	88.22% <sup>1,4</sup>	(77.43%,99.02%)	1.051	(-0.179,2.282)	83.80% <sup>4</sup>	(68.32%,99.29%)	2.86	(0.84,9.80)
	Training Officer	82.82% <sup>1,4</sup>	(73.96%,91.67%)	0.717	(-0.012,1.447)	79.02% <sup>4</sup>	(68.68%,89.36%)	2.05	(0.99,4.25)
	Other/Missing	67.68% <sup>2,3</sup>	(61.37%,73.98%)	0.000	(0.000,0.000)	65.91% <sup>2,3</sup>	(59.50%,72.33%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 21: Q4. Firefighters receive training in: Maintenance of Self-Contained Breathing Apparatuses (SCBAs), No Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		6.55%	(5.02%,8.08%)	-1.526*	(-2.310,-0.741)	6.55%	(5.02%,8.08%)		
Region (0.0114)	Northeast	4.04% <sup>4</sup>	(1.43%,6.65%)	-1.228*	(-2.110,-0.346)	4.42% <sup>4</sup>	(1.52%,7.32%)	0.29*	(0.12,0.71)
	South	7.07%	(4.31%,9.83%)	-0.772*	(-1.451,-0.092)	6.79% <sup>4</sup>	(4.11%,9.46%)	0.46*	(0.23,0.91)
	Midwest	5.08% <sup>4</sup>	(2.78%,7.38%)	-1.111*	(-1.848,-0.374)	4.94% <sup>4</sup>	(2.65%,7.23%)	0.33*	(0.16,0.69)
	West	13.19% <sup>1,3</sup>	(7.13%,19.24%)	0.000	(0.000,0.000)	13.50% <sup>1,2,3</sup>	(7.32%,19.69%)	1.00	n/a
Department Type (0.2204)	All Career	5.71%	(2.40%,9.03%)	0.708	(-0.200,1.617)	13.06%	(3.21%,22.91%)	2.03	(0.82,5.04)
	All Volunteer	7.22%	(4.15%,10.29%)	0.000	(0.000,0.000)	7.03%	(3.81%,10.24%)	1.00	n/a
	Combination	6.26%	(4.44%,8.09%)	-0.160	(-0.794,0.474)	6.07%	(4.23%,7.91%)	0.85	(0.45,1.61)
Jurisdiction Type (0.0092)	Urban	2.56% <sup>2</sup>	(0.95%,4.17%)	-1.072*	(-1.879,-0.266)	2.66% <sup>2</sup>	(0.71%,4.60%)	0.34*	(0.15,0.77)
	Rural/Missing	7.36% <sup>1</sup>	(5.55%,9.17%)	0.000	(0.000,0.000)	7.30% <sup>1</sup>	(5.55%,9.05%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.4524)	50,000+	3.17% <sup>3</sup>	(0.70%,5.64%)	-0.796	(-2.045,0.452)	3.29%	(0.00%,6.99%)	0.45	(0.13,1.57)
	5,000-50,000	5.00%	(2.99%,7.01%)	-0.193	(-0.795,0.409)	5.81%	(3.25%,8.38%)	0.82	(0.45,1.51)
	0 – 5,000	7.38% <sup>1</sup>	(5.29%,9.47%)	0.000	(0.000,0.000)	6.94%	(4.93%,8.95%)	1.00	n/a
FFFIPP/ Fatality (0.9899)	Fatality with Investigation	5.26%	(0.74%,9.77%)	0.068	(-0.903,1.038)	6.97%	(0.94%,12.99%)	1.07	(0.41,2.82)
	Fatality - No Investigation	6.04%	(1.32%,10.77%)	0.022	(-0.823,0.867)	6.68%	(1.76%,11.60%)	1.02	(0.44,2.38)
	No Fatality	6.57%	(5.01%,8.13%)	0.000	(0.000,0.000)	6.55%	(5.00%,8.10%)	1.00	n/a
Who Completed Survey (Q62) (0.4884)	Fire Chief	6.77%	(4.86%,8.68%)	-0.025	(-0.633,0.584)	6.86%	(4.91%,8.81%)	0.98	(0.53,1.79)
	Safety Officer	4.23%	(0.00%,10.91%)	-0.647	(-2.364,1.070)	3.84%	(0.00%,9.91%)	0.52	(0.09,2.91)
	Training Officer	3.57%	(0.05%,7.09%)	-0.810	(-1.984,0.365)	3.29%	(0.00%,6.65%)	0.44	(0.14,1.44)
	Other/Missing	7.08%	(3.80%,10.36%)	0.000	(0.000,0.000)	7.01%	(3.73%,10.30%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 22: Q4. Firefighters receive training in: Maintenance of Self-Contained Breathing Apparatuses (SCBAs), Optional Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		33.59%	(30.77%,36.41%)	-0.745*	(-1.239,-0.252)	33.59%	(30.77%,36.41%)		
Region (0.0076)	Northeast	32.86% <sup>4</sup>	(26.90%,38.82%)	0.522*	(0.020,1.023)	34.27% <sup>4</sup>	(28.02%,40.51%)	1.68*	(1.02,2.78)
	South	31.94% <sup>3</sup>	(26.88%,37.00%)	0.381	(-0.089,0.851)	31.26% <sup>3</sup>	(26.22%,36.30%)	1.46	(0.91,2.34)
	Midwest	40.21% <sup>2,4</sup>	(35.22%,45.21%)	0.759*	(0.295,1.223)	39.63% <sup>2,4</sup>	(34.66%,44.59%)	2.14*	(1.34,3.40)
	West	23.35% <sup>1,3</sup>	(16.28%,30.41%)	0.000	(0.000,0.000)	23.86% <sup>1,3</sup>	(16.62%,31.10%)	1.00	n/a
Department Type (0.2882)	All Career	14.81% <sup>2,3</sup>	(9.59%,20.03%)	-0.388	(-0.950,0.175)	25.16%	(15.25%,35.06%)	0.68	(0.39,1.19)
	All Volunteer	31.60% <sup>1</sup>	(26.49%,36.71%)	0.000	(0.000,0.000)	32.86%	(27.54%,38.19%)	1.00	n/a
	Combination	36.18% <sup>1</sup>	(32.57%,39.80%)	0.073	(-0.234,0.380)	34.43%	(30.84%,38.02%)	1.08	(0.79,1.46)
Jurisdiction Type (0.0595)	Urban	20.89% <sup>2</sup>	(15.81%,25.96%)	-0.412	(-0.841,0.016)	26.35% <sup>2</sup>	(18.88%,33.82%)	0.66	(0.43,1.02)
	Rural/Missing	36.15% <sup>1</sup>	(32.92%,39.38%)	0.000	(0.000,0.000)	34.82% <sup>1</sup>	(31.67%,37.98%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0075)	50,000+	10.70% <sup>2,3</sup>	(6.18%,15.22%)	-0.970*	(-1.632,-0.308)	17.99% <sup>2,3</sup>	(8.94%,27.03%)	0.38*	(0.20,0.74)
	5,000-50,000	26.22% <sup>1,3</sup>	(22.04%,30.40%)	-0.367*	(-0.679,-0.054)	28.38% <sup>1,3</sup>	(23.53%,33.22%)	0.69*	(0.51,0.95)
	0 – 5,000	37.79% <sup>1,2</sup>	(34.04%,41.54%)	0.000	(0.000,0.000)	36.17% <sup>1,2</sup>	(32.35%,39.99%)	1.00	n/a
FFFIPP/ Fatality (0.6327)	Fatality with Investigation	21.37% <sup>3</sup>	(14.18%,28.56%)	-0.193	(-0.656,0.269)	29.58%	(20.53%,38.62%)	0.82	(0.52,1.31)
	Fatality - No Investigation	32.90%	(23.58%,42.23%)	0.099	(-0.358,0.557)	35.76%	(26.07%,45.44%)	1.10	(0.70,1.75)
	No Fatality	33.69% <sup>1</sup>	(30.82%,36.55%)	0.000	(0.000,0.000)	33.59%	(30.74%,36.45%)	1.00	n/a
Who Completed Survey (Q62) (0.1619)	Fire Chief	33.35%	(29.98%,36.72%)	-0.343*	(-0.667,-0.019)	32.16% <sup>4</sup>	(28.85%,35.46%)	0.71*	(0.51,0.98)
	Safety Officer	19.68% <sup>4</sup>	(6.25%,33.12%)	-0.653	(-1.582,0.277)	25.99%	(9.33%,42.66%)	0.52	(0.21,1.32)
	Training Officer	28.82%	(17.90%,39.73%)	-0.308	(-0.924,0.307)	32.88%	(21.10%,44.66%)	0.73	(0.40,1.36)
	Other/Missing	37.76% <sup>2</sup>	(31.44%,44.07%)	0.000	(0.000,0.000)	39.73% <sup>1</sup>	(33.28%,46.18%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 23: Q4. Firefighters receive training in: Maintenance of Self-Contained Breathing Apparatuses (SCBAs), Required Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		60.26%	(57.35%,63.16%)	0.095	(-0.380,0.570)	60.26%	(57.35%,63.16%)		
Region (0.2009)	Northeast	63.10% <sup>3</sup>	(57.01%,69.20%)	-0.134	(-0.595,0.328)	61.16%	(54.79%,67.53%)	0.87	(0.55,1.39)
	South	61.34%	(56.08%,66.61%)	-0.083	(-0.513,0.347)	62.32%	(57.08%,67.55%)	0.92	(0.60,1.41)
	Midwest	55.01% <sup>1,4</sup>	(49.97%,60.04%)	-0.365	(-0.788,0.059)	55.76%	(50.79%,60.73%)	0.69	(0.45,1.06)
	West	64.97% <sup>3</sup>	(56.96%,72.97%)	0.000	(0.000,0.000)	64.18%	(56.07%,72.28%)	1.00	n/a
Department Type (0.8685)	All Career	79.65% <sup>2,3</sup>	(73.80%,85.51%)	0.139	(-0.380,0.659)	63.19%	(52.02%,74.37%)	1.15	(0.68,1.93)
	All Volunteer	61.18% <sup>1</sup>	(55.87%,66.49%)	0.000	(0.000,0.000)	60.03%	(54.52%,65.53%)	1.00	n/a
	Combination	58.19% <sup>1</sup>	(54.49%,61.90%)	0.008	(-0.288,0.304)	60.21%	(56.53%,63.89%)	1.01	(0.75,1.36)
Jurisdiction Type (0.0053)	Urban	76.75% <sup>2</sup>	(71.54%,81.95%)	0.576*	(0.172,0.981)	71.11% <sup>2</sup>	(63.59%,78.62%)	1.78*	(1.19,2.67)
	Rural/Missing	56.94% <sup>1</sup>	(53.60%,60.27%)	0.000	(0.000,0.000)	58.35% <sup>1</sup>	(55.08%,61.62%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0008)	50,000+	87.29% <sup>2,3</sup>	(82.41%,92.18%)	1.165*	(0.532,1.798)	80.77% <sup>2,3</sup>	(71.64%,89.89%)	3.21*	(1.70,6.04)
	5,000-50,000	69.01% <sup>1,3</sup>	(64.67%,73.35%)	0.384*	(0.087,0.681)	66.08% <sup>1,3</sup>	(61.05%,71.11%)	1.47*	(1.09,1.98)
	0 – 5,000	55.28% <sup>1,2</sup>	(51.42%,59.14%)	0.000	(0.000,0.000)	57.21% <sup>1,2</sup>	(53.26%,61.17%)	1.00	n/a
FFFIPP/ Fatality (0.7173)	Fatality with Investigation	73.37% <sup>3</sup>	(65.51%,81.23%)	0.132	(-0.303,0.567)	63.25%	(53.78%,72.72%)	1.14	(0.74,1.76)
	Fatality - No Investigation	61.05%	(51.34%,70.77%)	-0.117	(-0.567,0.333)	57.56%	(47.43%,67.68%)	0.89	(0.57,1.40)
	No Fatality	60.16% <sup>1</sup>	(57.20%,63.11%)	0.000	(0.000,0.000)	60.27%	(57.32%,63.21%)	1.00	n/a
Who Completed Survey (Q62) (0.1224)	Fire Chief	60.12% <sup>2</sup>	(56.63%,63.61%)	0.307	(-0.010,0.624)	61.25%	(57.81%,64.70%)	1.36	(0.99,1.87)
	Safety Officer	76.08% <sup>1,4</sup>	(61.78%,90.39%)	0.700	(-0.168,1.568)	69.81%	(52.82%,86.79%)	2.01	(0.85,4.80)
	Training Officer	69.10% <sup>4</sup>	(58.13%,80.06%)	0.507	(-0.086,1.100)	65.73%	(54.17%,77.29%)	1.66	(0.92,3.00)
	Other/Missing	55.84% <sup>2,3</sup>	(49.40%,62.28%)	0.000	(0.000,0.000)	54.05%	(47.47%,60.63%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 24: Q4. Firefighters receive training in: Rapid Intervention Teams (RITs), No Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		28.51%	(25.74%,31.27%)	-0.769*	(-1.342,-0.195)	28.51%	(25.74%,31.27%)		
Region (0.0055)	Northeast	20.75% <sup>2,3</sup>	(15.55%,25.95%)	0.151	(-0.421,0.723)	22.93% <sup>3</sup>	(17.29%,28.57%)	1.16	(0.66,2.06)
	South	31.09% <sup>1,4</sup>	(25.86%,36.31%)	0.562*	(0.041,1.083)	30.25% <sup>4</sup>	(25.22%,35.28%)	1.75*	(1.04,2.95)
	Midwest	35.42% <sup>1,4</sup>	(30.30%,40.53%)	0.735*	(0.218,1.251)	33.63% <sup>1,4</sup>	(28.79%,38.48%)	2.08*	(1.24,3.49)
	West	19.82% <sup>2,3</sup>	(12.97%,26.68%)	0.000	(0.000,0.000)	20.54% <sup>2,3</sup>	(13.60%,27.48%)	1.00	n/a
Department Type (0.2058)	All Career	11.06% <sup>2,3</sup>	(6.26%,15.86%)	0.618	(-0.095,1.331)	40.73%	(26.79%,54.66%)	1.86	(0.91,3.79)
	All Volunteer	26.77% <sup>1</sup>	(21.79%,31.75%)	0.000	(0.000,0.000)	28.62%	(23.41%,33.83%)	1.00	n/a
	Combination	30.97% <sup>1</sup>	(27.40%,34.55%)	-0.029	(-0.375,0.317)	28.10%	(24.75%,31.45%)	0.97	(0.69,1.37)
Jurisdiction Type (0.0022)	Urban	7.91% <sup>2</sup>	(4.38%,11.45%)	-1.009*	(-1.654,-0.365)	14.41% <sup>2</sup>	(7.09%,21.73%)	0.36*	(0.19,0.69)
	Rural/Missing	32.86% <sup>1</sup>	(29.60%,36.12%)	0.000	(0.000,0.000)	30.28% <sup>1</sup>	(27.23%,33.33%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	1.68% <sup>2,3</sup>	(0.25%,3.11%)	-3.102*	(-4.105,-2.098)	2.49% <sup>2,3</sup>	(0.13%,4.85%)	0.04*	(0.02,0.12)
	5,000-50,000	12.44% <sup>1,3</sup>	(9.32%,15.56%)	-1.184*	(-1.568,-0.800)	14.53% <sup>1,3</sup>	(10.62%,18.43%)	0.31*	(0.21,0.45)
	0 – 5,000	37.14% <sup>1,2</sup>	(33.25%,41.03%)	0.000	(0.000,0.000)	34.73% <sup>1,2</sup>	(30.82%,38.65%)	1.00	n/a
FFFIPP/ Fatality (0.0480)	Fatality with Investigation	9.86% <sup>3</sup>	(4.42%,15.29%)	-0.740*	(-1.415,-0.065)	16.90% <sup>3</sup>	(8.21%,25.60%)	0.48*	(0.24,0.94)
	Fatality - No Investigation	17.70% <sup>3</sup>	(9.65%,25.76%)	-0.409	(-1.022,0.203)	21.66%	(12.40%,30.93%)	0.66	(0.36,1.23)
	No Fatality	28.76% <sup>1,2</sup>	(25.95%,31.57%)	0.000	(0.000,0.000)	28.62% <sup>1</sup>	(25.82%,31.42%)	1.00	n/a
Who Completed Survey (Q62) (0.1003)	Fire Chief	29.97% <sup>3</sup>	(26.57%,33.38%)	-0.154	(-0.531,0.223)	28.81% <sup>3</sup>	(25.54%,32.07%)	0.86	(0.59,1.25)
	Safety Officer	17.76%	(3.50%,32.01%)	-0.400	(-1.567,0.767)	24.45%	(5.47%,43.42%)	0.67	(0.21,2.15)
	Training Officer	13.25% <sup>1,4</sup>	(5.49%,21.00%)	-0.993*	(-1.782,-0.203)	15.71% <sup>1,4</sup>	(6.70%,24.71%)	0.37*	(0.17,0.82)
	Other/Missing	30.24% <sup>3</sup>	(23.94%,36.53%)	0.000	(0.000,0.000)	31.72% <sup>3</sup>	(25.32%,38.12%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 25: Q4. Firefighters receive training in: Rapid Intervention Teams (RITs), Optional Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		36.16%	(33.22%,39.10%)	-1.349*	(-1.886,-0.812)	36.16%	(33.22%,39.10%)		
Region (0.0000)	Northeast	52.93% <sup>2,3,4</sup>	(46.48%,59.37%)	1.380*	(0.873,1.887)	52.25% <sup>2,3,4</sup>	(45.65%,58.86%)	3.98*	(2.39,6.60)
	South	32.10% <sup>1,4</sup>	(26.90%,37.30%)	0.535*	(0.049,1.021)	32.64% <sup>1,4</sup>	(27.43%,37.85%)	1.71*	(1.05,2.77)
	Midwest	34.20% <sup>1,4</sup>	(29.19%,39.21%)	0.566*	(0.084,1.049)	33.31% <sup>1,4</sup>	(28.39%,38.23%)	1.76*	(1.09,2.86)
	West	21.26% <sup>1,2,3</sup>	(14.47%,28.05%)	0.000	(0.000,0.000)	22.33% <sup>1,2,3</sup>	(15.17%,29.50%)	1.00	n/a
Department Type (0.0007)	All Career	14.66% <sup>2,3</sup>	(9.35%,19.96%)	-0.656*	(-1.244,-0.069)	19.45% <sup>2,3</sup>	(10.89%,28.01%)	0.52*	(0.29,0.93)
	All Volunteer	29.96% <sup>1,3</sup>	(24.82%,35.11%)	0.000	(0.000,0.000)	31.13% <sup>1,3</sup>	(25.90%,36.36%)	1.00	n/a
	Combination	41.45% <sup>1,2</sup>	(37.59%,45.30%)	0.411*	(0.098,0.723)	40.01% <sup>1,2</sup>	(36.17%,43.85%)	1.51*	(1.10,2.06)
Jurisdiction Type (0.8736)	Urban	32.23%	(26.48%,37.98%)	-0.033	(-0.438,0.372)	35.57%	(27.81%,43.33%)	0.97	(0.65,1.45)
	Rural/Missing	36.99%	(33.65%,40.34%)	0.000	(0.000,0.000)	36.27%	(33.00%,39.54%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0637)	50,000+	10.88% <sup>2,3</sup>	(6.13%,15.62%)	-0.808*	(-1.487,-0.128)	21.70% <sup>2,3</sup>	(11.42%,31.98%)	0.45*	(0.23,0.88)
	5,000-50,000	34.66% <sup>1</sup>	(30.09%,39.23%)	-0.113	(-0.431,0.206)	34.76% <sup>1</sup>	(29.64%,39.88%)	0.89	(0.65,1.23)
	0 – 5,000	37.97% <sup>1</sup>	(34.08%,41.86%)	0.000	(0.000,0.000)	37.17% <sup>1</sup>	(33.24%,41.11%)	1.00	n/a
FFFIPP/ Fatality (0.0898)	Fatality with Investigation	29.62% <sup>2</sup>	(21.45%,37.80%)	0.143	(-0.296,0.582)	39.14%	(29.72%,48.56%)	1.15	(0.74,1.79)
	Fatality - No Investigation	46.15% <sup>1</sup>	(35.99%,56.31%)	0.501*	(0.044,0.959)	47.24% <sup>3</sup>	(37.14%,57.33%)	1.65*	(1.05,2.61)
	No Fatality	36.10%	(33.11%,39.09%)	0.000	(0.000,0.000)	36.03% <sup>2</sup>	(33.05%,39.01%)	1.00	n/a
Who Completed Survey (Q62) (0.0118)	Fire Chief	37.03% <sup>2</sup>	(33.47%,40.60%)	-0.130	(-0.471,0.212)	35.48% <sup>2</sup>	(32.03%,38.94%)	0.88	(0.62,1.24)
	Safety Officer	10.33% <sup>1,3,4</sup>	(0.88%,19.78%)	-1.570*	(-2.679,-0.461)	12.29% <sup>1,3,4</sup>	(1.10%,23.49%)	0.21*	(0.07,0.63)
	Training Officer	40.12% <sup>2</sup>	(28.74%,51.50%)	0.348	(-0.227,0.922)	46.17% <sup>2</sup>	(34.68%,57.65%)	1.42	(0.80,2.51)
	Other/Missing	35.65% <sup>2</sup>	(29.17%,42.13%)	0.000	(0.000,0.000)	38.30% <sup>2</sup>	(31.70%,44.90%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 26: Q4. Firefighters receive training in: Rapid Intervention Teams (RITs), Required Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		35.54%	(32.80%,38.28%)	-0.171	(-0.682,0.339)	35.54%	(32.80%,38.28%)		
Region (0.0000)	Northeast	26.90% <sup>2,4</sup>	(21.30%,32.51%)	-1.622*	(-2.145,-1.099)	25.01% <sup>2,3,4</sup>	(19.75%,30.27%)	0.20*	(0.12,0.33)
	South	36.81% <sup>1,4</sup>	(31.68%,41.95%)	-0.937*	(-1.402,-0.473)	37.30% <sup>1,4</sup>	(32.33%,42.27%)	0.39*	(0.25,0.62)
	Midwest	30.63% <sup>4</sup>	(26.15%,35.10%)	-1.166*	(-1.623,-0.710)	32.89% <sup>1,4</sup>	(28.52%,37.26%)	0.31*	(0.20,0.49)
	West	58.91% <sup>1,2,3</sup>	(50.75%,67.08%)	0.000	(0.000,0.000)	57.17% <sup>1,2,3</sup>	(48.74%,65.59%)	1.00	n/a
Department Type (0.0217)	All Career	74.90% <sup>2,3</sup>	(68.52%,81.27%)	0.180	(-0.323,0.683)	43.73% <sup>3</sup>	(33.54%,53.91%)	1.20	(0.72,1.98)
	All Volunteer	43.26% <sup>1,3</sup>	(38.26%,48.27%)	0.000	(0.000,0.000)	40.01% <sup>3</sup>	(35.04%,44.98%)	1.00	n/a
	Combination	27.87% <sup>1,2</sup>	(24.38%,31.35%)	-0.392*	(-0.707,-0.078)	32.38% <sup>1,2</sup>	(28.78%,35.98%)	0.68*	(0.49,0.93)
Jurisdiction Type (0.0023)	Urban	60.63% <sup>2</sup>	(54.90%,66.36%)	0.603*	(0.216,0.990)	45.59% <sup>2</sup>	(38.15%,53.02%)	1.83*	(1.24,2.69)
	Rural/Missing	30.23% <sup>1</sup>	(27.14%,33.33%)	0.000	(0.000,0.000)	33.38% <sup>1</sup>	(30.26%,36.50%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	87.44% <sup>2,3</sup>	(82.57%,92.31%)	2.125*	(1.499,2.750)	72.44% <sup>2,3</sup>	(61.40%,83.47%)	8.37*	(4.48,15.65)
	5,000-50,000	53.58% <sup>1,3</sup>	(48.93%,58.23%)	1.100*	(0.778,1.422)	50.40% <sup>1,3</sup>	(45.10%,55.70%)	3.00*	(2.18,4.14)
	0 – 5,000	24.89% <sup>1,2</sup>	(21.37%,28.41%)	0.000	(0.000,0.000)	27.21% <sup>1,2</sup>	(23.50%,30.93%)	1.00	n/a
FFFIPP/ Fatality (0.2765)	Fatality with Investigation	60.52% <sup>2,3</sup>	(51.82%,69.22%)	0.286	(-0.184,0.756)	41.11%	(31.94%,50.28%)	1.33	(0.83,2.13)
	Fatality - No Investigation	36.15% <sup>1</sup>	(26.67%,45.62%)	-0.254	(-0.766,0.258)	30.94%	(22.29%,39.60%)	0.78	(0.46,1.29)
	No Fatality	35.35% <sup>1</sup>	(32.57%,38.14%)	0.000	(0.000,0.000)	35.55%	(32.78%,38.33%)	1.00	n/a
Who Completed Survey (Q62) (0.0221)	Fire Chief	33.29% <sup>2,3</sup>	(29.95%,36.64%)	0.300	(-0.065,0.665)	36.01% <sup>2</sup>	(32.68%,39.33%)	1.35	(0.94,1.95)
	Safety Officer	71.91% <sup>1,3,4</sup>	(56.31%,87.52%)	1.527*	(0.514,2.539)	61.31% <sup>1,3,4</sup>	(41.44%,81.18%)	4.60*	(1.67,12.67)
	Training Officer	46.63% <sup>1,2</sup>	(35.33%,57.94%)	0.352	(-0.223,0.927)	37.00% <sup>2</sup>	(27.39%,46.60%)	1.42	(0.80,2.53)
	Other/Missing	34.12% <sup>2</sup>	(28.20%,40.03%)	0.000	(0.000,0.000)	30.49% <sup>2</sup>	(24.96%,36.03%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 27: Q4. Firefighters receive training in: Use of personal protective equipment and/or protective clothing, No Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		1.45%	(0.75%,2.16%)	-2.961*	(-4.303,-1.620)	1.45%	(0.75%,2.16%)		
Region (0.6497)	Northeast	0.59%	(0.00%,1.44%)	-1.055	(-3.004,0.893)	0.64%	(0.00%,1.58%)	0.35	(0.05,2.44)
	South	1.94%	(0.41%,3.46%)	-0.028	(-1.471,1.414)	1.76%	(0.43%,3.10%)	0.97	(0.23,4.11)
	Midwest	1.38%	(0.30%,2.46%)	-0.213	(-1.694,1.269)	1.47%	(0.30%,2.65%)	0.81	(0.18,3.56)
	West	1.87%	(0.00%,4.04%)	0.000	(0.000,0.000)	1.81%	(0.00%,3.98%)	1.00	n/a
Department Type (0.1493)	All Career	3.20%	(0.62%,5.77%)	1.188	(-0.222,2.598)	4.74%	(0.00%,10.43%)	3.28	(0.80,13.44)
	All Volunteer	1.65%	(0.27%,3.03%)	0.000	(0.000,0.000)	1.53%	(0.21%,2.85%)	1.00	n/a
	Combination	1.21%	(0.37%,2.04%)	-0.225	(-1.415,0.964)	1.23%	(0.35%,2.10%)	0.80	(0.24,2.62)
Jurisdiction Type (0.4556)	Urban	1.61%	(0.41%,2.80%)	0.451	(-0.734,1.635)	2.10%	(0.00%,4.23%)	1.57	(0.48,5.13)
	Rural/Missing	1.42%	(0.61%,2.23%)	0.000	(0.000,0.000)	1.36%	(0.61%,2.12%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.1140)	50,000+	1.16%	(0.00%,2.81%)	-2.174	(-4.442,0.094)	0.26% <sup>3</sup>	(0.00%,0.76%)	0.11	(0.01,1.10)
	5,000-50,000	0.94%	(0.18%,1.70%)	-1.035	(-2.241,0.171)	0.79%	(0.10%,1.48%)	0.36	(0.11,1.19)
	0 – 5,000	1.70%	(0.71%,2.68%)	0.000	(0.000,0.000)	2.14% <sup>1</sup>	(0.84%,3.44%)	1.00	n/a
FFFIPP/ Fatality (0.1336)	Fatality	0.31% <sup>2</sup>	(0.00%,0.92%)	-1.576	(-3.637,0.484)	0.31% <sup>2</sup>	(0.00%,0.94%)	0.21	(0.03,1.62)
	No Fatality	1.48% <sup>1</sup>	(0.76%,2.19%)	0.000	(0.000,0.000)	1.47% <sup>1</sup>	(0.76%,2.19%)	1.00	n/a
Who Completed Survey (Q62) (0.0248)	Fire Chief	1.00%	(0.30%,1.69%)	-1.086*	(-2.118,-0.054)	1.03%	(0.31%,1.75%)	0.34*	(0.12,0.95)
	Training Officer	0.30% <sup>3</sup>	(0.00%,0.89%)	-2.439*	(-4.575,-0.304)	0.27% <sup>3</sup>	(0.00%,0.81%)	0.09*	(0.01,0.74)
	Safety Officer, Other, Missing	3.15% <sup>2</sup>	(1.01%,5.29%)	0.000	(0.000,0.000)	2.97% <sup>2</sup>	(0.88%,5.06%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 28: Q4. Firefighters receive training in: Use of personal protective equipment and/or protective clothing, Optional Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		9.87%	(8.05%,11.68%)	-2.427*	(-3.312,-1.542)	9.87%	(8.05%,11.68%)		
Region (0.0068)	Northeast	6.89% <sup>3</sup>	(3.67%,10.10%)	0.504	(-0.485,1.493)	7.55% <sup>3</sup>	(3.98%,11.11%)	1.66	(0.62,4.45)
	South	9.63%	(6.38%,12.88%)	0.708	(-0.194,1.610)	9.08% <sup>3</sup>	(5.96%,12.19%)	2.03	(0.82,5.00)
	Midwest	14.42% <sup>1,4</sup>	(10.71%,18.14%)	1.254*	(0.351,2.158)	14.58% <sup>1,2,4</sup>	(10.78%,18.39%)	3.51*	(1.42,8.66)
	West	4.82% <sup>3</sup>	(1.09%,8.56%)	0.000	(0.000,0.000)	4.72% <sup>3</sup>	(1.01%,8.43%)	1.00	n/a
Department Type (0.4091)	All Career	4.31% <sup>2,3</sup>	(1.68%,6.94%)	-0.271	(-1.184,0.643)	9.36%	(1.83%,16.90%)	0.76	(0.31,1.90)
	All Volunteer	10.93% <sup>1</sup>	(7.41%,14.45%)	0.000	(0.000,0.000)	11.84%	(7.91%,15.77%)	1.00	n/a
	Combination	9.74% <sup>1</sup>	(7.50%,11.97%)	-0.321	(-0.818,0.176)	8.95%	(6.80%,11.11%)	0.73	(0.44,1.19)
Jurisdiction Type (0.4034)	Urban	4.81% <sup>2</sup>	(2.03%,7.58%)	-0.355	(-1.189,0.478)	7.42%	(2.11%,12.72%)	0.70	(0.30,1.61)
	Rural/Missing	10.88% <sup>1</sup>	(8.77%,12.99%)	0.000	(0.000,0.000)	10.18%	(8.21%,12.15%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0061)	50,000+	3.15% <sup>3</sup>	(1.04%,5.27%)	-1.177*	(-2.140,-0.214)	4.00% <sup>3</sup>	(0.57%,7.42%)	0.31*	(0.12,0.81)
	5,000-50,000	5.42% <sup>3</sup>	(3.35%,7.50%)	-0.789*	(-1.321,-0.257)	5.76% <sup>3</sup>	(3.40%,8.12%)	0.45*	(0.27,0.77)
	0 – 5,000	12.13% <sup>1,2</sup>	(9.59%,14.66%)	0.000	(0.000,0.000)	11.74% <sup>1,2</sup>	(9.16%,14.33%)	1.00	n/a
FFFIPP/ Fatality (0.5337)	Fatality with Investigation	6.49%	(2.27%,10.72%)	-0.059	(-0.793,0.675)	9.34%	(3.45%,15.23%)	0.94	(0.45,1.96)
	Fatality - No Investigation	11.86%	(5.34%,18.38%)	0.386	(-0.306,1.078)	13.68%	(6.17%,21.19%)	1.47	(0.74,2.94)
	No Fatality	9.87%	(8.02%,11.72%)	0.000	(0.000,0.000)	9.84%	(8.00%,11.67%)	1.00	n/a
Who Completed Survey (Q62) (0.8902)	Fire Chief	9.75%	(7.56%,11.93%)	-0.192	(-0.710,0.326)	9.41%	(7.27%,11.55%)	0.83	(0.49,1.39)
	Safety Officer	8.32%	(0.00%,18.10%)	0.059	(-1.378,1.496)	11.70%	(0.00%,25.51%)	1.06	(0.25,4.46)
	Training Officer	9.04%	(2.56%,15.51%)	-0.052	(-0.962,0.858)	10.64%	(3.20%,18.07%)	0.95	(0.38,2.36)
	Other/Missing	10.75%	(6.68%,14.81%)	0.000	(0.000,0.000)	11.13%	(6.89%,15.36%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 29: Q4. Firefighters receive training in: Use of personal protective equipment and/or protective clothing, Required Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		88.91%	(87.01%,90.81%)	1.902*	(1.135,2.669)	88.91%	(87.01%,90.81%)		
Region (0.0047)	Northeast	93.09% <sup>3</sup>	(89.88%,96.30%)	-0.153	(-1.032,0.727)	92.41% <sup>3</sup>	(88.84%,95.98%)	0.86	(0.36,2.07)
	South	88.75%	(85.27%,92.23%)	-0.515	(-1.289,0.258)	89.50% <sup>3</sup>	(86.21%,92.78%)	0.60	(0.28,1.29)
	Midwest	84.20% <sup>1,4</sup>	(80.38%,88.02%)	-1.017*	(-1.790,-0.243)	83.92% <sup>1,2,4</sup>	(80.02%,87.83%)	0.36*	(0.17,0.78)
	West	93.31% <sup>3</sup>	(89.06%,97.56%)	0.000	(0.000,0.000)	93.40% <sup>3</sup>	(89.13%,97.66%)	1.00	n/a
Department Type (0.2990)	All Career	93.10% <sup>2</sup>	(89.64%,96.55%)	-0.061	(-0.865,0.742)	85.90%	(76.66%,95.15%)	0.94	(0.42,2.10)
	All Volunteer	87.42% <sup>1</sup>	(83.71%,91.13%)	0.000	(0.000,0.000)	86.60%	(82.53%,90.68%)	1.00	n/a
	Combination	89.39%	(87.07%,91.71%)	0.360	(-0.109,0.829)	90.15%	(87.91%,92.40%)	1.43	(0.90,2.29)
Jurisdiction Type (0.6257)	Urban	93.77% <sup>2</sup>	(90.78%,96.76%)	0.182	(-0.551,0.916)	90.38%	(84.56%,96.21%)	1.20	(0.58,2.50)
	Rural/Missing	87.94% <sup>1</sup>	(85.74%,90.14%)	0.000	(0.000,0.000)	88.73%	(86.67%,90.78%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0006)	50,000+	95.69% <sup>3</sup>	(93.03%,98.35%)	1.376*	(0.424,2.327)	96.10% <sup>3</sup>	(92.81%,99.39%)	3.96*	(1.53,10.25)
	5,000-50,000	94.04% <sup>3</sup>	(91.92%,96.16%)	0.914*	(0.410,1.419)	93.97% <sup>3</sup>	(91.67%,96.27%)	2.50*	(1.51,4.13)
	0 – 5,000	86.35% <sup>1,2</sup>	(83.68%,89.01%)	0.000	(0.000,0.000)	86.37% <sup>1,2</sup>	(83.57%,89.17%)	1.00	n/a
FFFIPP/ Fatality (0.8321)	Fatality with Investigation	92.74%	(88.29%,97.18%)	0.113	(-0.580,0.807)	89.96%	(84.03%,95.89%)	1.12	(0.56,2.24)
	Fatality - No Investigation	88.75%	(82.32%,95.18%)	-0.177	(-0.886,0.532)	87.13%	(79.77%,94.49%)	0.84	(0.41,1.70)
	No Fatality	88.89%	(86.96%,90.82%)	0.000	(0.000,0.000)	88.92%	(87.00%,90.85%)	1.00	n/a
Who Completed Survey (Q62) (0.5013)	Fire Chief	89.44%	(87.19%,91.69%)	0.367	(-0.107,0.842)	89.71%	(87.49%,91.93%)	1.44	(0.90,2.32)
	Safety Officer	91.68%	(81.90%,100.00%)	0.269	(-1.142,1.681)	88.80%	(75.62%,100.00%)	1.31	(0.32,5.37)
	Training Officer	90.66%	(84.16%,97.16%)	0.342	(-0.532,1.216)	89.48%	(82.28%,96.68%)	1.41	(0.59,3.37)
	Other/Missing	86.21%	(81.70%,90.71%)	0.000	(0.000,0.000)	85.94%	(81.31%,90.58%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 30: Q4. Firefighters receive training in: Use of radio communication devices, No Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		2.68%	(1.70%,3.65%)	-2.986*	(-4.356,-1.615)	2.68%	(1.70%,3.65%)		
Region (0.4236)	Northeast	2.00%	(0.16%,3.85%)	0.432	(-1.193,2.057)	2.43%	(0.12%,4.75%)	1.54	(0.30,7.82)
	South	2.69%	(0.83%,4.56%)	0.396	(-0.996,1.788)	2.35%	(0.76%,3.95%)	1.49	(0.37,5.98)
	Midwest	3.48%	(1.72%,5.24%)	0.928	(-0.424,2.279)	3.89%	(1.94%,5.84%)	2.53	(0.65,9.77)
	West	1.90%	(0.00%,4.08%)	0.000	(0.000,0.000)	1.60%	(0.00%,3.51%)	1.00	n/a
Department Type (0.6188)	All Career	2.77%	(0.42%,5.11%)	0.363	(-1.031,1.757)	4.33%	(0.00%,9.65%)	1.44	(0.36,5.80)
	All Volunteer	3.15%	(1.24%,5.07%)	0.000	(0.000,0.000)	3.08%	(1.21%,4.95%)	1.00	n/a
	Combination	2.41%	(1.24%,3.58%)	-0.277	(-1.112,0.558)	2.37%	(1.21%,3.52%)	0.76	(0.33,1.75)
Jurisdiction Type (0.2608)	Urban	1.65%	(0.44%,2.85%)	-0.557	(-1.528,0.414)	1.68%	(0.23%,3.13%)	0.57	(0.22,1.51)
	Rural/Missing	2.88%	(1.74%,4.02%)	0.000	(0.000,0.000)	2.87%	(1.77%,3.97%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.2001)	50,000+	2.28%	(0.07%,4.48%)	-0.803	(-2.501,0.894)	1.48%	(0.00%,3.74%)	0.45	(0.08,2.45)
	5,000-50,000	1.61%	(0.59%,2.63%)	-0.693	(-1.464,0.078)	1.65%	(0.63%,2.66%)	0.50	(0.23,1.08)
	0 – 5,000	3.17%	(1.80%,4.53%)	0.000	(0.000,0.000)	3.20%	(1.83%,4.57%)	1.00	n/a
FFFIPP/ Fatality (0.1535)	Fatality with Investigation	1.96%	(0.00%,4.16%)	-0.159	(-1.428,1.109)	2.32%	(0.00%,5.11%)	0.85	(0.24,3.03)
	Fatality - No Investigation	0.38% <sup>3</sup>	(0.00%,1.13%)	-2.009	(-4.049,0.032)	0.38% <sup>3</sup>	(0.00%,1.13%)	0.13	(0.02,1.03)
	No Fatality	2.71% <sup>2</sup>	(1.72%,3.69%)	0.000	(0.000,0.000)	2.70% <sup>2</sup>	(1.72%,3.69%)	1.00	n/a
Who Completed Survey (Q62) (0.0010)	Fire Chief	1.51% <sup>3</sup>	(0.67%,2.36%)	-1.379*	(-2.204,-0.553)	1.47% <sup>3</sup>	(0.64%,2.29%)	0.25*	(0.11,0.57)
	Training Officer	6.16%	(1.18%,11.15%)	0.266	(-0.801,1.334)	7.07%	(1.07%,13.07%)	1.31	(0.45,3.80)
	Safety Office, Other, Missing	5.19% <sup>1</sup>	(2.25%,8.13%)	0.000	(0.000,0.000)	5.53% <sup>1</sup>	(2.46%,8.59%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 31: Q4. Firefighters receive training in: Use of radio communication devices, Optional Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		21.38%	(18.92%,23.84%)	-1.590*	(-2.221,-0.958)	21.38%	(18.92%,23.84%)		
Region (0.0062)	Northeast	21.01% <sup>4</sup>	(15.91%,26.12%)	0.859*	(0.203,1.515)	22.22% <sup>4</sup>	(16.78%,27.66%)	2.36*	(1.22,4.55)
	South	21.27% <sup>4</sup>	(16.80%,25.74%)	0.750*	(0.126,1.375)	20.44% <sup>4</sup>	(16.16%,24.73%)	2.12*	(1.13,3.95)
	Midwest	26.14% <sup>4</sup>	(21.60%,30.68%)	1.084*	(0.462,1.706)	26.22% <sup>4</sup>	(21.71%,30.74%)	2.96*	(1.59,5.51)
	West	10.99% <sup>1,2,3</sup>	(5.57%,16.40%)	0.000	(0.000,0.000)	10.96% <sup>1,2,3</sup>	(5.51%,16.41%)	1.00	n/a
Department Type (0.0614)	All Career	9.16% <sup>2,3</sup>	(5.22%,13.09%)	-0.553	(-1.192,0.085)	16.59%	(8.17%,25.00%)	0.58	(0.30,1.09)
	All Volunteer	23.75% <sup>1</sup>	(19.06%,28.43%)	0.000	(0.000,0.000)	25.34%	(20.36%,30.33%)	1.00	n/a
	Combination	21.07% <sup>1</sup>	(18.01%,24.12%)	-0.340	(-0.686,0.006)	19.65%	(16.71%,22.60%)	0.71	(0.50,1.01)
Jurisdiction Type (0.9816)	Urban	14.83% <sup>2</sup>	(10.30%,19.36%)	0.006	(-0.501,0.513)	21.46%	(13.86%,29.07%)	1.01	(0.61,1.67)
	Rural/Missing	22.68% <sup>1</sup>	(19.87%,25.49%)	0.000	(0.000,0.000)	21.37%	(18.70%,24.03%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0001)	50,000+	6.35% <sup>2,3</sup>	(2.92%,9.79%)	-1.286*	(-2.061,-0.511)	8.64% <sup>3</sup>	(2.95%,14.34%)	0.28*	(0.13,0.60)
	5,000-50,000	14.10% <sup>1,3</sup>	(10.83%,17.36%)	-0.750*	(-1.135,-0.364)	13.85% <sup>3</sup>	(10.26%,17.44%)	0.47*	(0.32,0.69)
	0 – 5,000	25.22% <sup>1,2</sup>	(21.87%,28.57%)	0.000	(0.000,0.000)	25.15% <sup>1,2</sup>	(21.62%,28.68%)	1.00	n/a
FFFIPP/ Fatality (0.7358)	Fatality with Investigation	13.38% <sup>3</sup>	(7.49%,19.27%)	-0.174	(-0.729,0.382)	18.69%	(10.72%,26.65%)	0.84	(0.48,1.46)
	Fatality - No Investigation	21.15%	(13.03%,29.27%)	0.121	(-0.414,0.655)	23.39%	(14.54%,32.23%)	1.13	(0.66,1.93)
	No Fatality	21.44% <sup>1</sup>	(18.94%,23.94%)	0.000	(0.000,0.000)	21.37%	(18.88%,23.86%)	1.00	n/a
Who Completed Survey (Q62) (0.6511)	Fire Chief	21.75% <sup>2</sup>	(18.78%,24.72%)	-0.086	(-0.467,0.295)	21.21%	(18.29%,24.12%)	0.92	(0.63,1.34)
	Safety Officer	9.07% <sup>1,4</sup>	(0.00%,18.24%)	-0.783	(-2.021,0.455)	12.03%	(0.00%,24.46%)	0.46	(0.13,1.58)
	Training Officer	19.90%	(10.75%,29.06%)	-0.002	(-0.677,0.672)	22.59%	(12.64%,32.53%)	1.00	(0.51,1.96)
	Other/Missing	22.23% <sup>2</sup>	(16.70%,27.76%)	0.000	(0.000,0.000)	22.63%	(17.02%,28.24%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 32: Q4. Firefighters receive training in: Use of radio communication devices, Required Training**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		76.19%	(73.65%,78.73%)	1.264*	(0.659,1.868)	76.19%	(73.65%,78.73%)		
Region (0.0015)	Northeast	77.12% <sup>4</sup>	(71.83%,82.40%)	-0.832*	(-1.456,-0.207)	75.42% <sup>4</sup>	(69.76%,81.09%)	0.44*	(0.23,0.81)
	South	76.67% <sup>4</sup>	(72.06%,81.28%)	-0.691*	(-1.280,-0.103)	77.85% <sup>3,4</sup>	(73.48%,82.22%)	0.50*	(0.28,0.90)
	Midwest	70.38% <sup>4</sup>	(65.70%,75.06%)	-1.111*	(-1.698,-0.524)	70.10% <sup>2,4</sup>	(65.43%,74.77%)	0.33*	(0.18,0.59)
	West	87.12% <sup>1,2,3</sup>	(81.38%,92.85%)	0.000	(0.000,0.000)	87.33% <sup>1,2,3</sup>	(81.58%,93.08%)	1.00	n/a
Department Type (0.0605)	All Career	88.68% <sup>2,3</sup>	(84.35%,93.01%)	0.458	(-0.139,1.055)	79.80%	(70.77%,88.84%)	1.58	(0.87,2.87)
	All Volunteer	73.43% <sup>1</sup>	(68.61%,78.25%)	0.000	(0.000,0.000)	71.83% <sup>3</sup>	(66.74%,76.93%)	1.00	n/a
	Combination	76.70% <sup>1</sup>	(73.54%,79.87%)	0.357*	(0.022,0.692)	78.19% <sup>2</sup>	(75.13%,81.25%)	1.43*	(1.02,2.00)
Jurisdiction Type (0.7564)	Urban	83.82% <sup>2</sup>	(79.19%,88.45%)	0.076	(-0.404,0.556)	77.32%	(69.87%,84.78%)	1.08	(0.67,1.74)
	Rural/Missing	74.68% <sup>1</sup>	(71.77%,77.58%)	0.000	(0.000,0.000)	76.03%	(73.26%,78.79%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	92.11% <sup>2,3</sup>	(88.31%,95.91%)	1.266*	(0.548,1.985)	89.90% <sup>3</sup>	(83.87%,95.93%)	3.55*	(1.73,7.28)
	5,000-50,000	84.39% <sup>1,3</sup>	(81.02%,87.77%)	0.774*	(0.411,1.136)	84.56% <sup>3</sup>	(80.89%,88.24%)	2.17*	(1.51,3.11)
	0 – 5,000	71.91% <sup>1,2</sup>	(68.44%,75.37%)	0.000	(0.000,0.000)	72.01% <sup>1,2</sup>	(68.39%,75.63%)	1.00	n/a
FFFIPP/ Fatality (0.8513)	Fatality with Investigation	84.66% <sup>3</sup>	(78.47%,90.85%)	0.150	(-0.369,0.669)	78.68%	(70.54%,86.82%)	1.16	(0.69,1.95)
	Fatality - No Investigation	78.47%	(70.33%,86.62%)	-0.001	(-0.535,0.533)	76.17%	(67.26%,85.08%)	1.00	(0.59,1.70)
	No Fatality	76.11% <sup>1</sup>	(73.53%,78.69%)	0.000	(0.000,0.000)	76.18%	(73.61%,78.75%)	1.00	n/a
Who Completed Survey (Q62) (0.1228)	Fire Chief	76.78% <sup>2</sup>	(73.75%,79.81%)	0.287	(-0.078,0.652)	77.40%	(74.43%,80.37%)	1.33	(0.93,1.92)
	Safety Officer	91.65% <sup>1,3,4</sup>	(82.59%,100.00%)	1.151	(-0.151,2.452)	88.78% <sup>3,4</sup>	(76.40%,100.00%)	3.16	(0.86,11.62)
	Training Officer	73.94% <sup>2</sup>	(64.07%,83.81%)	-0.089	(-0.704,0.527)	70.52% <sup>2</sup>	(59.95%,81.09%)	0.92	(0.49,1.69)
	Other/Missing	72.85% <sup>2</sup>	(66.92%,78.78%)	0.000	(0.000,0.000)	72.24% <sup>2</sup>	(66.21%,78.27%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 33: Q8. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH)? - Somewhat or Very Familiar**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		67.39%	(64.60%,70.17%)	-0.072	(-0.563,0.418)	67.39%	(64.60%,70.17%)		
Region (0.0012)	Northeast	78.00% <sup>2,3,4</sup>	(72.81%,83.18%)	0.760*	(0.279,1.240)	76.84% <sup>2,3,4</sup>	(71.48%,82.21%)	2.14*	(1.32,3.46)
	South	67.36% <sup>1</sup>	(62.31%,72.40%)	0.282	(-0.157,0.720)	67.84% <sup>1</sup>	(62.90%,72.77%)	1.33	(0.86,2.05)
	Midwest	61.07% <sup>1</sup>	(56.15%,65.98%)	0.031	(-0.399,0.461)	62.51% <sup>1</sup>	(57.71%,67.32%)	1.03	(0.67,1.59)
	West	63.95% <sup>1</sup>	(55.73%,72.16%)	0.000	(0.000,0.000)	61.83% <sup>1</sup>	(53.77%,69.90%)	1.00	n/a
Department Type (0.8456)	All Career	86.33% <sup>2,3</sup>	(81.08%,91.59%)	0.044	(-0.565,0.653)	69.30%	(57.67%,80.93%)	1.04	(0.57,1.92)
	All Volunteer	69.36% <sup>1</sup>	(64.29%,74.43%)	0.000	(0.000,0.000)	68.43%	(63.29%,73.57%)	1.00	n/a
	Combination	64.78% <sup>1</sup>	(61.22%,68.34%)	-0.082	(-0.393,0.229)	66.76%	(63.29%,70.23%)	0.92	(0.67,1.26)
Jurisdiction Type (0.1574)	Urban	83.74% <sup>2</sup>	(79.01%,88.47%)	0.343	(-0.133,0.819)	73.32%	(65.05%,81.59%)	1.41	(0.88,2.27)
	Rural/Missing	64.10% <sup>1</sup>	(60.89%,67.31%)	0.000	(0.000,0.000)	66.57%	(63.55%,69.60%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	93.68% <sup>2,3</sup>	(90.56%,96.80%)	1.849*	(1.154,2.543)	90.93% <sup>2,3</sup>	(85.58%,96.27%)	6.35*	(3.17,12.72)
	5,000-50,000	80.24% <sup>1,3</sup>	(76.47%,84.01%)	0.800*	(0.469,1.131)	78.17% <sup>1,3</sup>	(73.74%,82.61%)	2.23*	(1.60,3.10)
	0 – 5,000	60.59% <sup>1,2</sup>	(56.82%,64.37%)	0.000	(0.000,0.000)	62.32% <sup>1,2</sup>	(58.47%,66.17%)	1.00	n/a
FFFIPP/ Fatality (0.0008)	Fatality with Investigation	90.65% <sup>2,3</sup>	(85.75%,95.55%)	1.128*	(0.501,1.755)	85.62% <sup>3</sup>	(78.32%,92.93%)	3.09*	(1.65,5.79)
	Fatality - No Investigation	79.35% <sup>1,3</sup>	(71.25%,87.45%)	0.439	(-0.110,0.989)	75.55%	(66.28%,84.81%)	1.55	(0.90,2.69)
	No Fatality	67.10% <sup>1,2</sup>	(64.27%,69.93%)	0.000	(0.000,0.000)	67.22% <sup>1</sup>	(64.40%,70.04%)	1.00	n/a
Who Completed Survey (Q62) (0.0038)	Fire Chief	66.39% <sup>2,3</sup>	(63.03%,69.76%)	0.286	(-0.044,0.616)	67.35% <sup>2,3</sup>	(64.06%,70.64%)	1.33	(0.96,1.85)
	Safety Officer	88.48% <sup>1,4</sup>	(76.54%,100.00%)	1.364*	(0.131,2.597)	85.21% <sup>1,4</sup>	(70.54%,99.87%)	3.91*	(1.14,13.42)
	Training Officer	83.26% <sup>1,4</sup>	(75.38%,91.14%)	1.093*	(0.416,1.770)	81.60% <sup>1,4</sup>	(72.77%,90.43%)	2.98*	(1.52,5.87)
	Other/Missing	62.88% <sup>2,3</sup>	(56.53%,69.23%)	0.000	(0.000,0.000)	61.24% <sup>2,3</sup>	(54.89%,67.58%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 34: Q9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)? - Somewhat or Very Familiar**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		45.71%	(42.85%,48.57%)	-0.667*	(-1.121,-0.214)	45.71%	(42.85%,48.57%)		
Region (0.1203)	Northeast	53.29% <sup>2,3</sup>	(46.96%,59.61%)	0.101	(-0.334,0.535)	51.08% <sup>3</sup>	(44.61%,57.56%)	1.11	(0.72,1.71)
	South	43.66% <sup>1</sup>	(38.57%,48.75%)	-0.177	(-0.573,0.220)	44.59%	(39.50%,49.68%)	0.84	(0.56,1.25)
	Midwest	40.70% <sup>1</sup>	(35.85%,45.54%)	-0.294	(-0.692,0.104)	41.90% <sup>1</sup>	(37.06%,46.73%)	0.75	(0.50,1.11)
	West	50.15%	(42.02%,58.28%)	0.000	(0.000,0.000)	48.71%	(40.87%,56.56%)	1.00	n/a
Department Type (0.5328)	All Career	70.42% <sup>2,3</sup>	(64.14%,76.71%)	0.259	(-0.194,0.712)	51.01%	(40.84%,61.17%)	1.30	(0.82,2.04)
	All Volunteer	45.98% <sup>1</sup>	(40.87%,51.09%)	0.000	(0.000,0.000)	44.98%	(39.78%,50.17%)	1.00	n/a
	Combination	43.57% <sup>1</sup>	(39.88%,47.26%)	0.033	(-0.251,0.318)	45.75%	(42.02%,49.48%)	1.03	(0.78,1.37)
Jurisdiction Type (0.0141)	Urban	65.94% <sup>2</sup>	(60.13%,71.75%)	0.479*	(0.097,0.862)	55.27% <sup>2</sup>	(47.01%,63.53%)	1.62*	(1.10,2.37)
	Rural/Missing	41.66% <sup>1</sup>	(38.42%,44.89%)	0.000	(0.000,0.000)	43.91% <sup>1</sup>	(40.69%,47.13%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0001)	50,000+	74.55% <sup>2,3</sup>	(68.74%,80.36%)	0.870*	(0.373,1.367)	61.70% <sup>3</sup>	(51.39%,72.00%)	2.39*	(1.45,3.92)
	5,000-50,000	58.63% <sup>1,3</sup>	(54.01%,63.24%)	0.593*	(0.307,0.879)	55.19% <sup>3</sup>	(50.02%,60.36%)	1.81*	(1.36,2.41)
	0 – 5,000	38.79% <sup>1,2</sup>	(35.07%,42.51%)	0.000	(0.000,0.000)	41.02% <sup>1,2</sup>	(37.11%,44.92%)	1.00	n/a
FFFIPP/ Fatality (0.0000)	Fatality with Investigation	81.58% <sup>2,3</sup>	(74.77%,88.38%)	1.355*	(0.863,1.846)	74.92% <sup>3</sup>	(66.23%,83.62%)	3.88*	(2.37,6.34)
	Fatality - No Investigation	67.55% <sup>1,3</sup>	(58.47%,76.64%)	0.813*	(0.333,1.294)	64.06% <sup>3</sup>	(53.91%,74.20%)	2.26*	(1.39,3.65)
	No Fatality	45.23% <sup>1,2</sup>	(42.32%,48.14%)	0.000	(0.000,0.000)	45.35% <sup>1,2</sup>	(42.45%,48.25%)	1.00	n/a
Who Completed Survey (Q62) (0.0030)	Fire Chief	44.70% <sup>2,3</sup>	(41.25%,48.14%)	0.296	(-0.019,0.611)	45.79% <sup>3</sup>	(42.38%,49.20%)	1.34	(0.98,1.84)
	Safety Officer	67.30% <sup>1,4</sup>	(51.57%,83.02%)	0.901*	(0.119,1.683)	59.96% <sup>4</sup>	(42.95%,76.97%)	2.46*	(1.13,5.38)
	Training Officer	64.41% <sup>1,4</sup>	(53.61%,75.21%)	0.945*	(0.385,1.504)	60.95% <sup>1,4</sup>	(49.73%,72.18%)	2.57*	(1.47,4.50)
	Other/Missing	40.31% <sup>2,3</sup>	(34.12%,46.50%)	0.000	(0.000,0.000)	38.99% <sup>2,3</sup>	(32.81%,45.17%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 35: Q11. In what ways has your department used NIOSH recommendations: Made changes to training program**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		45.51%	(42.39%,48.63%)	-0.619*	(-1.120,-0.118)	45.51%	(42.39%,48.63%)		
Region (0.1907)	Northeast	49.08%	(42.41%,55.75%)	-0.223	(-0.694,0.248)	47.38%	(40.57%,54.19%)	0.80	(0.50,1.28)
	South	43.58% <sup>4</sup>	(37.96%,49.20%)	-0.327	(-0.763,0.109)	44.90%	(39.28%,50.52%)	0.72	(0.47,1.11)
	Midwest	41.19% <sup>4</sup>	(35.87%,46.52%)	-0.461*	(-0.900,-0.023)	41.74% <sup>4</sup>	(36.44%,47.04%)	0.63*	(0.41,0.98)
	West	54.22% <sup>2,3</sup>	(45.36%,63.09%)	0.000	(0.000,0.000)	52.74% <sup>3</sup>	(43.84%,61.64%)	1.00	n/a
Department Type (0.6336)	All Career	57.79% <sup>2,3</sup>	(51.30%,64.28%)	-0.000	(-0.434,0.434)	43.44%	(33.85%,53.03%)	1.00	(0.65,1.54)
	All Volunteer	44.43% <sup>1</sup>	(38.98%,49.89%)	0.000	(0.000,0.000)	43.44%	(37.88%,48.99%)	1.00	n/a
	Combination	45.00% <sup>1</sup>	(40.89%,49.11%)	0.143	(-0.161,0.447)	46.81%	(42.67%,50.96%)	1.15	(0.85,1.56)
Jurisdiction Type (0.1396)	Urban	57.20% <sup>2</sup>	(51.07%,63.32%)	0.290	(-0.095,0.675)	51.20%	(42.96%,59.44%)	1.34	(0.91,1.96)
	Rural/Missing	42.88% <sup>1</sup>	(39.31%,46.45%)	0.000	(0.000,0.000)	44.25%	(40.70%,47.80%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0060)	50,000+	65.70% <sup>2,3</sup>	(59.21%,72.20%)	0.801*	(0.288,1.314)	61.14% <sup>2,3</sup>	(50.69%,71.60%)	2.23*	(1.33,3.72)
	5,000-50,000	52.44% <sup>1,3</sup>	(47.59%,57.29%)	0.370*	(0.067,0.674)	50.88% <sup>1,3</sup>	(45.59%,56.18%)	1.45*	(1.07,1.96)
	0 – 5,000	40.90% <sup>1,2</sup>	(36.70%,45.10%)	0.000	(0.000,0.000)	41.98% <sup>1,2</sup>	(37.59%,46.38%)	1.00	n/a
FFFIPP/ Fatality (0.0001)	Fatality with Investigation	70.07% <sup>3</sup>	(61.94%,78.19%)	0.813*	(0.394,1.232)	64.30% <sup>3</sup>	(55.24%,73.35%)	2.25*	(1.48,3.43)
	Fatality - No Investigation	58.80% <sup>3</sup>	(48.85%,68.75%)	0.494*	(0.035,0.953)	57.00% <sup>3</sup>	(46.63%,67.38%)	1.64*	(1.04,2.59)
	No Fatality	45.16% <sup>1,2</sup>	(41.98%,48.34%)	0.000	(0.000,0.000)	45.24% <sup>1,2</sup>	(42.07%,48.41%)	1.00	n/a
Who Completed Survey (Q62) (0.0005)	Fire Chief	45.68% <sup>3,4</sup>	(41.89%,49.48%)	0.477*	(0.135,0.818)	46.45% <sup>3,4</sup>	(42.68%,50.22%)	1.61*	(1.14,2.27)
	Safety Officer	58.51% <sup>4</sup>	(41.44%,75.58%)	0.701	(-0.100,1.503)	51.91%	(33.38%,70.44%)	2.02	(0.90,4.49)
	Training Officer	66.90% <sup>1,4</sup>	(55.21%,78.59%)	1.222*	(0.618,1.827)	64.22% <sup>1,4</sup>	(52.19%,76.25%)	3.39*	(1.86,6.21)
	Other/Missing	35.97% <sup>1,2,3</sup>	(29.46%,42.49%)	0.000	(0.000,0.000)	35.29% <sup>1,3</sup>	(28.68%,41.90%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 36: Q11. In what ways has your department used NIOSH recommendations: Developed new SOPs/SOGs**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		29.85%	(26.98%,32.71%)	-0.979*	(-1.493,-0.464)	29.85%	(26.98%,32.71%)		
Region (0.1999)	Northeast	33.10%	(26.81%,39.39%)	-0.210	(-0.707,0.287)	31.99%	(25.54%,38.45%)	0.81	(0.49,1.33)
	South	27.24% <sup>4</sup>	(22.33%,32.16%)	-0.421	(-0.875,0.034)	27.72%	(22.74%,32.69%)	0.66	(0.42,1.03)
	Midwest	26.69% <sup>4</sup>	(22.01%,31.37%)	-0.429	(-0.884,0.026)	27.56%	(22.85%,32.26%)	0.65	(0.41,1.03)
	West	38.15% <sup>2,3</sup>	(29.57%,46.74%)	0.000	(0.000,0.000)	36.59%	(27.96%,45.22%)	1.00	n/a
Department Type (0.6043)	All Career	40.76% <sup>3</sup>	(33.98%,47.54%)	-0.150	(-0.613,0.313)	28.84%	(20.25%,37.42%)	0.86	(0.54,1.37)
	All Volunteer	32.65%	(27.41%,37.88%)	0.000	(0.000,0.000)	31.89%	(26.64%,37.15%)	1.00	n/a
	Combination	27.33% <sup>1</sup>	(23.67%,30.99%)	-0.151	(-0.475,0.172)	28.80%	(25.00%,32.60%)	0.86	(0.62,1.19)
Jurisdiction Type (0.1795)	Urban	40.85% <sup>2</sup>	(34.79%,46.90%)	0.266	(-0.122,0.653)	34.30%	(26.91%,41.68%)	1.30	(0.88,1.92)
	Rural/Missing	27.37% <sup>1</sup>	(24.14%,30.60%)	0.000	(0.000,0.000)	28.73%	(25.43%,32.03%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0150)	50,000+	47.99% <sup>2,3</sup>	(41.05%,54.92%)	0.692*	(0.155,1.229)	41.38% <sup>3</sup>	(30.28%,52.49%)	2.00*	(1.17,3.42)
	5,000-50,000	36.93% <sup>1,3</sup>	(32.24%,41.62%)	0.422*	(0.098,0.745)	35.14% <sup>3</sup>	(30.07%,40.21%)	1.52*	(1.10,2.11)
	0 – 5,000	25.26% <sup>1,2</sup>	(21.51%,29.01%)	0.000	(0.000,0.000)	26.35% <sup>1,2</sup>	(22.37%,30.34%)	1.00	n/a
FFFIPP/ Fatality (0.0013)	Fatality with Investigation	51.70% <sup>3</sup>	(42.82%,60.58%)	0.697*	(0.304,1.090)	45.21% <sup>3</sup>	(36.05%,54.37%)	2.01*	(1.35,2.97)
	Fatality - No Investigation	39.03%	(29.04%,49.02%)	0.332	(-0.118,0.782)	36.73%	(27.11%,46.35%)	1.39	(0.89,2.19)
	No Fatality	29.57% <sup>1</sup>	(26.65%,32.48%)	0.000	(0.000,0.000)	29.64% <sup>1</sup>	(26.73%,32.55%)	1.00	n/a
Who Completed Survey (Q62) (0.1230)	Fire Chief	29.78%	(26.32%,33.25%)	0.341	(-0.013,0.696)	30.66% <sup>4</sup>	(27.17%,34.15%)	1.41	(0.99,2.00)
	Safety Officer	43.54% <sup>4</sup>	(26.26%,60.81%)	0.606	(-0.251,1.462)	36.37%	(17.95%,54.79%)	1.83	(0.78,4.32)
	Training Officer	39.45% <sup>4</sup>	(27.48%,51.43%)	0.581	(-0.011,1.172)	35.81%	(24.30%,47.31%)	1.79	(0.99,3.23)
	Other/Missing	24.92% <sup>2,3</sup>	(19.30%,30.53%)	0.000	(0.000,0.000)	24.09% <sup>1</sup>	(18.61%,29.57%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 37: Q11. In what ways has your department used NIOSH recommendations: Made changes to SOPs/SOGs**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		39.55%	(36.52%,42.58%)	-1.116*	(-1.621,-0.611)	39.55%	(36.52%,42.58%)		
Region (0.3696)	Northeast	45.08% <sup>2</sup>	(38.49%,51.66%)	0.043	(-0.433,0.519)	43.44%	(36.83%,50.04%)	1.04	(0.65,1.68)
	South	35.48% <sup>1</sup>	(30.13%,40.82%)	-0.263	(-0.709,0.182)	36.51%	(31.11%,41.91%)	0.77	(0.49,1.20)
	Midwest	37.67%	(32.46%,42.89%)	-0.170	(-0.612,0.271)	38.56%	(33.45%,43.67%)	0.84	(0.54,1.31)
	West	44.31%	(35.65%,52.97%)	0.000	(0.000,0.000)	42.43%	(33.76%,51.11%)	1.00	n/a
Department Type (0.7800)	All Career	54.84% <sup>2,3</sup>	(47.91%,61.77%)	-0.044	(-0.510,0.422)	37.34%	(27.73%,46.95%)	0.96	(0.60,1.52)
	All Volunteer	38.98% <sup>1</sup>	(33.72%,44.24%)	0.000	(0.000,0.000)	38.32%	(33.06%,43.57%)	1.00	n/a
	Combination	38.48% <sup>1</sup>	(34.50%,42.47%)	0.094	(-0.208,0.397)	40.42%	(36.41%,44.43%)	1.10	(0.81,1.49)
Jurisdiction Type (0.7038)	Urban	51.84% <sup>2</sup>	(45.75%,57.94%)	0.071	(-0.296,0.438)	40.85%	(33.49%,48.22%)	1.07	(0.74,1.55)
	Rural/Missing	36.78% <sup>1</sup>	(33.34%,40.23%)	0.000	(0.000,0.000)	39.24%	(35.80%,42.69%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	68.09% <sup>2,3</sup>	(61.68%,74.51%)	1.423*	(0.897,1.950)	66.43% <sup>2,3</sup>	(56.31%,76.56%)	4.15*	(2.45,7.03)
	5,000-50,000	49.98% <sup>1,3</sup>	(45.10%,54.86%)	0.706*	(0.405,1.008)	49.59% <sup>1,3</sup>	(44.32%,54.86%)	2.03*	(1.50,2.74)
	0 – 5,000	32.70% <sup>1,2</sup>	(28.72%,36.68%)	0.000	(0.000,0.000)	33.07% <sup>1,2</sup>	(28.97%,37.18%)	1.00	n/a
FFFIPP/ Fatality (0.0001)	Fatality with Investigation	68.29% <sup>2,3</sup>	(59.98%,76.61%)	0.889*	(0.460,1.319)	59.95% <sup>3</sup>	(50.43%,69.47%)	2.43*	(1.58,3.74)
	Fatality - No Investigation	53.57% <sup>1,3</sup>	(43.28%,63.87%)	0.455*	(0.001,0.908)	49.82%	(39.54%,60.09%)	1.58*	(1.00,2.48)
	No Fatality	39.16% <sup>1,2</sup>	(36.08%,42.24%)	0.000	(0.000,0.000)	39.28% <sup>1</sup>	(36.21%,42.36%)	1.00	n/a
Who Completed Survey (Q62) (0.0006)	Fire Chief	39.94% <sup>2,4</sup>	(36.24%,43.64%)	0.498*	(0.151,0.844)	40.71% <sup>2,4</sup>	(37.04%,44.38%)	1.65*	(1.16,2.33)
	Safety Officer	68.52% <sup>1,4</sup>	(52.15%,84.88%)	1.422*	(0.613,2.232)	62.47% <sup>1,4</sup>	(45.13%,79.82%)	4.15*	(1.85,9.32)
	Training Officer	49.99% <sup>4</sup>	(37.94%,62.05%)	0.773*	(0.191,1.355)	47.17% <sup>4</sup>	(35.04%,59.30%)	2.17*	(1.21,3.88)
	Other/Missing	30.58% <sup>1,2,3</sup>	(24.57%,36.59%)	0.000	(0.000,0.000)	29.90% <sup>1,2,3</sup>	(23.85%,35.96%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 38: Q11. In what ways has your department used NIOSH recommendations: Justified current budget/staffing**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		5.70%	(4.37%,7.03%)	-3.041*	(-3.929,-2.153)	5.70%	(4.37%,7.03%)		
Region (0.3324)	Northeast	6.33%	(3.37%,9.29%)	-0.138	(-0.973,0.698)	6.01%	(3.15%,8.86%)	0.87	(0.38,2.01)
	South	3.81%	(1.81%,5.81%)	-0.605	(-1.454,0.243)	3.90%	(1.85%,5.94%)	0.55	(0.23,1.28)
	Midwest	6.48%	(3.93%,9.04%)	0.025	(-0.753,0.804)	6.96%	(4.20%,9.72%)	1.03	(0.47,2.23)
	West	7.62%	(3.68%,11.56%)	0.000	(0.000,0.000)	6.80%	(2.98%,10.63%)	1.00	n/a
Department Type (0.1324)	All Career	15.79% <sup>2,3</sup>	(10.73%,20.85%)	0.137	(-0.564,0.837)	8.08%	(3.61%,12.55%)	1.15	(0.57,2.31)
	All Volunteer	7.14% <sup>1,3</sup>	(4.60%,9.67%)	0.000	(0.000,0.000)	7.15%	(4.56%,9.74%)	1.00	n/a
	Combination	4.00% <sup>1,2</sup>	(2.39%,5.61%)	-0.525	(-1.108,0.059)	4.41%	(2.68%,6.14%)	0.59	(0.33,1.06)
Jurisdiction Type (0.0126)	Urban	12.93% <sup>2</sup>	(9.03%,16.84%)	0.840*	(0.181,1.499)	9.61% <sup>2</sup>	(5.10%,14.12%)	2.32*	(1.20,4.48)
	Rural/Missing	4.07% <sup>1</sup>	(2.70%,5.44%)	0.000	(0.000,0.000)	4.45% <sup>1</sup>	(2.98%,5.92%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.5948)	50,000+	16.47% <sup>2,3</sup>	(11.67%,21.28%)	0.448	(-0.489,1.385)	7.36%	(2.76%,11.97%)	1.56	(0.61,3.99)
	5,000-50,000	8.25% <sup>1,3</sup>	(5.74%,10.75%)	0.299	(-0.325,0.922)	6.44%	(4.30%,8.57%)	1.35	(0.72,2.51)
	0 – 5,000	3.83% <sup>1,2</sup>	(2.22%,5.44%)	0.000	(0.000,0.000)	4.89%	(2.77%,7.01%)	1.00	n/a
FFFIPP/ Fatality (0.0879)	Fatality with Investigation	15.78% <sup>3</sup>	(9.43%,22.13%)	0.606*	(0.016,1.197)	9.61%	(4.81%,14.41%)	1.83*	(1.02,3.31)
	Fatality - No Investigation	9.48%	(3.57%,15.38%)	0.450	(-0.324,1.223)	8.39%	(3.02%,13.76%)	1.57	(0.72,3.40)
	No Fatality	5.57% <sup>1</sup>	(4.22%,6.93%)	0.000	(0.000,0.000)	5.61%	(4.26%,6.97%)	1.00	n/a
Who Completed Survey (Q62) (0.6781)	Fire Chief	5.42%	(3.84%,7.00%)	0.340	(-0.350,1.030)	5.90%	(4.26%,7.53%)	1.41	(0.70,2.80)
	Safety Officer	11.04%	(0.00%,22.38%)	0.535	(-0.976,2.046)	7.03%	(0.00%,15.99%)	1.71	(0.38,7.74)
	Training Officer	9.17%	(3.33%,15.00%)	0.539	(-0.419,1.498)	7.05%	(2.29%,11.82%)	1.71	(0.66,4.47)
	Other/Missing	4.73%	(2.09%,7.38%)	0.000	(0.000,0.000)	4.31%	(1.84%,6.78%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 39: Q11. In what ways has your department used NIOSH recommendations: Made new budget/staffing requests**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		6.21%	(4.84%,7.59%)	-3.169*	(-3.959,-2.379)	6.21%	(4.84%,7.59%)		
Region (0.1932)	Northeast	6.54%	(3.46%,9.62%)	-0.600	(-1.424,0.224)	5.74%	(2.98%,8.50%)	0.55	(0.24,1.25)
	South	6.23%	(3.76%,8.70%)	-0.449	(-1.189,0.292)	6.58%	(4.01%,9.15%)	0.64	(0.30,1.34)
	Midwest	4.22% <sup>4</sup>	(2.34%,6.09%)	-0.843*	(-1.616,-0.069)	4.59%	(2.57%,6.61%)	0.43*	(0.20,0.93)
	West	10.35% <sup>3</sup>	(5.54%,15.15%)	0.000	(0.000,0.000)	9.76%	(4.70%,14.82%)	1.00	n/a
Department Type (0.5824)	All Career	15.81% <sup>2,3</sup>	(10.90%,20.72%)	0.339	(-0.327,1.004)	7.48%	(3.67%,11.30%)	1.40	(0.72,2.73)
	All Volunteer	6.26% <sup>1</sup>	(3.96%,8.56%)	0.000	(0.000,0.000)	5.53%	(3.47%,7.58%)	1.00	n/a
	Combination	5.32% <sup>1</sup>	(3.51%,7.14%)	0.171	(-0.398,0.740)	6.45%	(4.28%,8.62%)	1.19	(0.67,2.10)
Jurisdiction Type (0.1968)	Urban	12.62% <sup>2</sup>	(8.65%,16.59%)	0.435	(-0.226,1.095)	8.12%	(4.36%,11.88%)	1.54	(0.80,2.99)
	Rural/Missing	4.77% <sup>1</sup>	(3.34%,6.20%)	0.000	(0.000,0.000)	5.49%	(3.84%,7.14%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0219)	50,000+	16.77% <sup>2,3</sup>	(11.91%,21.63%)	0.762	(-0.168,1.692)	8.22%	(3.02%,13.42%)	2.14	(0.85,5.43)
	5,000-50,000	10.19% <sup>1,3</sup>	(7.32%,13.07%)	0.904*	(0.258,1.551)	9.32% <sup>3</sup>	(6.27%,12.38%)	2.47*	(1.29,4.71)
	0 – 5,000	3.62% <sup>1,2</sup>	(2.08%,5.15%)	0.000	(0.000,0.000)	4.07% <sup>2</sup>	(2.24%,5.90%)	1.00	n/a
FFFIPP/ Fatality (0.0005)	Fatality with Investigation	20.83% <sup>3</sup>	(13.93%,27.72%)	1.002*	(0.478,1.527)	14.30% <sup>3</sup>	(8.47%,20.13%)	2.72*	(1.61,4.60)
	Fatality - No Investigation	11.93%	(5.20%,18.67%)	0.565	(-0.192,1.322)	9.97%	(3.89%,16.04%)	1.76	(0.83,3.75)
	No Fatality	6.03% <sup>1</sup>	(4.63%,7.43%)	0.000	(0.000,0.000)	6.07% <sup>1</sup>	(4.67%,7.47%)	1.00	n/a
Who Completed Survey (Q62) (0.1663)	Fire Chief	5.44%	(3.87%,7.00%)	0.220	(-0.408,0.849)	5.87%	(4.20%,7.54%)	1.25	(0.66,2.34)
	Safety Officer	19.82%	(5.41%,34.22%)	1.189*	(0.004,2.374)	13.64%	(1.24%,26.04%)	3.28*	(1.00,10.74)
	Training Officer	11.38%	(4.32%,18.45%)	0.707	(-0.190,1.604)	9.07%	(3.06%,15.08%)	2.03	(0.83,4.97)
	Other/Missing	5.23%	(2.68%,7.78%)	0.000	(0.000,0.000)	4.79%	(2.40%,7.18%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 40: Q11. In what ways has your department used NIOSH recommendations: Justified grant applications**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		17.61%	(15.24%,19.98%)	-2.131*	(-2.811,-1.451)	17.61%	(15.24%,19.98%)		
Region (0.2731)	Northeast	22.33% <sup>3</sup>	(16.90%,27.76%)	0.213	(-0.366,0.791)	21.49%	(16.20%,26.78%)	1.24	(0.69,2.21)
	South	16.10%	(12.06%,20.14%)	-0.110	(-0.679,0.458)	16.61%	(12.50%,20.72%)	0.90	(0.51,1.58)
	Midwest	15.43% <sup>1</sup>	(11.65%,19.22%)	-0.210	(-0.778,0.359)	15.30%	(11.57%,19.02%)	0.81	(0.46,1.43)
	West	17.80%	(10.84%,24.77%)	0.000	(0.000,0.000)	18.17%	(11.03%,25.31%)	1.00	n/a
Department Type (0.3130)	All Career	24.29% <sup>2</sup>	(18.38%,30.20%)	0.251	(-0.287,0.789)	18.51%	(11.23%,25.79%)	1.29	(0.75,2.20)
	All Volunteer	15.17% <sup>1</sup>	(11.25%,19.08%)	0.000	(0.000,0.000)	15.08%	(11.22%,18.93%)	1.00	n/a
	Combination	18.34%	(15.16%,21.52%)	0.279	(-0.101,0.658)	18.93%	(15.68%,22.18%)	1.32	(0.90,1.93)
Jurisdiction Type (0.9823)	Urban	21.99%	(16.77%,27.21%)	-0.005	(-0.464,0.454)	17.55%	(11.90%,23.20%)	0.99	(0.63,1.57)
	Rural/Missing	16.62%	(13.97%,19.27%)	0.000	(0.000,0.000)	17.62%	(14.89%,20.36%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0090)	50,000+	28.04% <sup>3</sup>	(21.94%,34.14%)	0.953*	(0.333,1.573)	31.13% <sup>3</sup>	(20.09%,42.16%)	2.59*	(1.40,4.82)
	5,000-50,000	21.49% <sup>3</sup>	(17.45%,25.54%)	0.444*	(0.057,0.831)	21.48% <sup>3</sup>	(17.05%,25.92%)	1.56*	(1.06,2.30)
	0 – 5,000	15.07% <sup>1,2</sup>	(12.02%,18.12%)	0.000	(0.000,0.000)	14.99% <sup>1,2</sup>	(11.84%,18.14%)	1.00	n/a
FFFIPP/ Fatality (0.0479)	Fatality with Investigation	31.06% <sup>3</sup>	(22.83%,39.29%)	0.532*	(0.090,0.974)	26.28% <sup>3</sup>	(18.13%,34.43%)	1.70*	(1.09,2.65)
	Fatality - No Investigation	22.97%	(14.07%,31.88%)	0.273	(-0.292,0.837)	21.67%	(12.65%,30.70%)	1.31	(0.75,2.31)
	No Fatality	17.44% <sup>1</sup>	(15.03%,19.85%)	0.000	(0.000,0.000)	17.48% <sup>1</sup>	(15.08%,19.89%)	1.00	n/a
Who Completed Survey (Q62) (0.1915)	Fire Chief	18.31%	(15.40%,21.22%)	0.301	(-0.141,0.743)	18.59% <sup>2</sup>	(15.67%,21.51%)	1.35	(0.87,2.10)
	Safety Officer	12.25%	(4.18%,20.32%)	-0.443	(-1.308,0.423)	9.89% <sup>1</sup>	(2.78%,17.00%)	0.64	(0.27,1.53)
	Training Officer	21.61%	(11.73%,31.49%)	0.432	(-0.272,1.135)	20.61%	(10.96%,30.26%)	1.54	(0.76,3.11)
	Other/Missing	14.64%	(9.93%,19.35%)	0.000	(0.000,0.000)	14.52%	(9.74%,19.30%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 41: Q11. In what ways has your department used NIOSH recommendations: Does not apply. We have not used NIOSH recommendations.**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		34.05%	(31.02%,37.08%)	0.117	(-0.418,0.652)	34.05%	(31.02%,37.08%)		
Region (0.3510)	Northeast	28.09% <sup>2,3</sup>	(21.97%,34.22%)	-0.067	(-0.592,0.457)	29.79%	(23.47%,36.11%)	0.94	(0.55,1.58)
	South	37.96% <sup>1</sup>	(32.31%,43.62%)	0.245	(-0.237,0.726)	36.31%	(30.82%,41.79%)	1.28	(0.79,2.07)
	Midwest	36.24% <sup>1</sup>	(30.92%,41.57%)	0.227	(-0.256,0.709)	35.91%	(30.73%,41.10%)	1.25	(0.77,2.03)
	West	29.73%	(21.35%,38.11%)	0.000	(0.000,0.000)	31.14%	(22.68%,39.59%)	1.00	n/a
Department Type (0.2334)	All Career	19.29% <sup>2,3</sup>	(14.00%,24.58%)	-0.188	(-0.686,0.309)	33.87%	(23.64%,44.11%)	0.83	(0.50,1.36)
	All Volunteer	37.38% <sup>1</sup>	(31.84%,42.92%)	0.000	(0.000,0.000)	37.94%	(32.26%,43.63%)	1.00	n/a
	Combination	33.55% <sup>1</sup>	(29.66%,37.44%)	-0.277	(-0.605,0.051)	32.03%	(28.20%,35.86%)	0.76	(0.55,1.05)
Jurisdiction Type (0.1192)	Urban	21.15% <sup>2</sup>	(15.89%,26.40%)	-0.362	(-0.817,0.093)	27.79%	(19.78%,35.81%)	0.70	(0.44,1.10)
	Rural/Missing	36.95% <sup>1</sup>	(33.43%,40.46%)	0.000	(0.000,0.000)	35.19%	(31.81%,38.58%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0001)	50,000+	13.50% <sup>2,3</sup>	(9.22%,17.78%)	-1.176*	(-1.743,-0.608)	16.54% <sup>2,3</sup>	(9.70%,23.38%)	0.31*	(0.18,0.54)
	5,000-50,000	25.71% <sup>1,3</sup>	(21.40%,30.02%)	-0.526*	(-0.863,-0.190)	27.12% <sup>1,3</sup>	(22.26%,31.99%)	0.59*	(0.42,0.83)
	0 – 5,000	39.40% <sup>1,2</sup>	(35.22%,43.59%)	0.000	(0.000,0.000)	38.18% <sup>1,2</sup>	(33.89%,42.47%)	1.00	n/a
FFFIPP/ Fatality (0.0000)	Fatality with Investigation	10.28% <sup>3</sup>	(4.86%,15.70%)	-1.207*	(-1.823,-0.591)	14.15% <sup>3</sup>	(6.99%,21.31%)	0.30*	(0.16,0.55)
	Fatality - No Investigation	17.88% <sup>3</sup>	(10.44%,25.32%)	-0.835*	(-1.395,-0.275)	19.10% <sup>3</sup>	(11.05%,27.16%)	0.43*	(0.25,0.76)
	No Fatality	34.42% <sup>1,2</sup>	(31.33%,37.51%)	0.000	(0.000,0.000)	34.33% <sup>1,2</sup>	(31.26%,37.41%)	1.00	n/a
Who Completed Survey (Q62) (0.0002)	Fire Chief	33.44% <sup>3,4</sup>	(29.77%,37.10%)	-0.525*	(-0.873,-0.178)	32.94% <sup>3,4</sup>	(29.32%,36.56%)	0.59*	(0.42,0.84)
	Safety Officer	20.65% <sup>4</sup>	(5.74%,35.56%)	-0.918	(-1.882,0.046)	25.15% <sup>4</sup>	(8.19%,42.10%)	0.40	(0.15,1.05)
	Training Officer	14.41% <sup>1,4</sup>	(6.21%,22.62%)	-1.524*	(-2.266,-0.782)	15.69% <sup>1,4</sup>	(6.78%,24.59%)	0.22*	(0.10,0.46)
	Other/Missing	44.57% <sup>1,2,3</sup>	(37.57%,51.57%)	0.000	(0.000,0.000)	44.85% <sup>1,2,3</sup>	(37.85%,51.85%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 42: Q11b. Topics of NIOSH recommendations used for training purposes: Traffic hazards**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		50.40%	(46.56%,54.25%)	0.187	(-0.413,0.788)	50.40%	(46.56%,54.25%)		
Region (0.2437)	Northeast	47.03%	(39.21%,54.85%)	-0.333	(-0.881,0.215)	47.43%	(39.39%,55.48%)	0.72	(0.41,1.24)
	South	54.81%	(47.81%,61.82%)	-0.038	(-0.550,0.474)	54.72%	(47.62%,61.82%)	0.96	(0.58,1.61)
	Midwest	45.90%	(39.25%,52.55%)	-0.384	(-0.897,0.128)	46.16%	(39.48%,52.85%)	0.68	(0.41,1.14)
	West	56.76%	(46.55%,66.98%)	0.000	(0.000,0.000)	55.64%	(45.17%,66.10%)	1.00	n/a
Department Type (0.6157)	All Career	42.70%	(34.94%,50.45%)	-0.253	(-0.758,0.251)	45.39%	(33.68%,57.10%)	0.78	(0.47,1.29)
	All Volunteer	52.13%	(45.23%,59.02%)	0.000	(0.000,0.000)	51.60%	(44.22%,58.98%)	1.00	n/a
	Combination	50.32%	(45.26%,55.37%)	-0.053	(-0.440,0.334)	50.30%	(45.10%,55.50%)	0.95	(0.64,1.40)
Jurisdiction Type (0.2639)	Urban	44.24%	(37.34%,51.13%)	-0.243	(-0.670,0.184)	45.73%	(36.74%,54.71%)	0.78	(0.51,1.20)
	Rural/Missing	52.14%	(47.62%,56.65%)	0.000	(0.000,0.000)	51.70%	(47.20%,56.21%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.8620)	50,000+	49.40%	(41.85%,56.94%)	-0.019	(-0.618,0.580)	50.79%	(38.43%,63.15%)	0.98	(0.54,1.79)
	5,000-50,000	47.67%	(42.04%,53.30%)	-0.091	(-0.462,0.280)	49.03%	(42.88%,55.18%)	0.91	(0.63,1.32)
	0 – 5,000	52.26%	(46.77%,57.74%)	0.000	(0.000,0.000)	51.26%	(45.42%,57.11%)	1.00	n/a
FFFIPP/ Fatality (0.0936)	Fatality with Investigation	57.42%	(48.15%,66.68%)	0.380	(-0.040,0.799)	59.39%	(49.73%,69.05%)	1.46	(0.96,2.22)
	Fatality - No Investigation	58.44%	(47.19%,69.69%)	0.361	(-0.133,0.856)	58.95%	(47.77%,70.14%)	1.44	(0.88,2.35)
	No Fatality	50.21%	(46.27%,54.15%)	0.000	(0.000,0.000)	50.18%	(46.26%,54.10%)	1.00	n/a
Who Completed Survey (Q62) (0.3605)	Fire Chief	50.42%	(45.78%,55.06%)	0.168	(-0.249,0.586)	50.38%	(45.76%,54.99%)	1.18	(0.78,1.80)
	Safety Officer	66.37% <sup>4</sup>	(48.37%,84.37%)	0.850	(-0.106,1.805)	66.54%	(46.57%,86.51%)	2.34	(0.90,6.08)
	Training Officer	51.98%	(38.79%,65.17%)	0.235	(-0.403,0.872)	52.01%	(38.83%,65.19%)	1.26	(0.67,2.39)
	Other/Missing	46.10% <sup>2</sup>	(37.21%,54.98%)	0.000	(0.000,0.000)	46.23%	(37.19%,55.28%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 43: Q11b. Topics of NIOSH recommendations used for training purposes: Personal protective equipment and clothing**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		71.53%	(68.09%,74.97%)	0.891*	(0.234,1.547)	71.53%	(68.09%,74.97%)		
Region (0.4310)	Northeast	75.29%	(68.56%,82.03%)	0.454	(-0.141,1.049)	75.78%	(68.97%,82.59%)	1.57	(0.87,2.86)
	South	69.60%	(63.14%,76.07%)	0.125	(-0.423,0.673)	69.26%	(62.66%,75.86%)	1.13	(0.66,1.96)
	Midwest	72.13%	(66.23%,78.03%)	0.272	(-0.278,0.822)	72.28%	(66.39%,78.18%)	1.31	(0.76,2.27)
	West	67.25%	(57.49%,77.02%)	0.000	(0.000,0.000)	66.54%	(56.41%,76.68%)	1.00	n/a
Department Type (0.5698)	All Career	68.79%	(61.83%,75.75%)	-0.258	(-0.789,0.272)	68.47%	(57.81%,79.14%)	0.77	(0.45,1.31)
	All Volunteer	72.98%	(66.96%,78.99%)	0.000	(0.000,0.000)	73.74%	(67.40%,80.07%)	1.00	n/a
	Combination	71.06%	(66.47%,75.64%)	-0.155	(-0.580,0.271)	70.66%	(65.86%,75.45%)	0.86	(0.56,1.31)
Jurisdiction Type (0.8519)	Urban	71.60%	(65.36%,77.84%)	-0.046	(-0.533,0.441)	70.79%	(62.22%,79.36%)	0.95	(0.59,1.55)
	Rural/Missing	71.51%	(67.47%,75.56%)	0.000	(0.000,0.000)	71.73%	(67.69%,75.78%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.6469)	50,000+	72.47%	(65.69%,79.26%)	0.255	(-0.395,0.905)	76.20%	(66.39%,86.01%)	1.29	(0.67,2.47)
	5,000-50,000	71.66%	(66.66%,76.67%)	0.002	(-0.418,0.421)	71.33%	(65.65%,77.02%)	1.00	(0.66,1.52)
	0 – 5,000	71.38%	(66.45%,76.31%)	0.000	(0.000,0.000)	71.30%	(65.95%,76.64%)	1.00	n/a
FFFIPP/ Fatality (0.3798)	Fatality with Investigation	68.79%	(60.07%,77.50%)	-0.139	(-0.587,0.308)	68.77%	(59.53%,78.01%)	0.87	(0.56,1.36)
	Fatality - No Investigation	65.03%	(54.12%,75.94%)	-0.344	(-0.860,0.172)	64.24%	(53.12%,75.36%)	0.71	(0.42,1.19)
	No Fatality	71.65%	(68.13%,75.18%)	0.000	(0.000,0.000)	71.66%	(68.15%,75.17%)	1.00	n/a
Who Completed Survey (Q62) (0.8817)	Fire Chief	71.42%	(67.25%,75.60%)	-0.095	(-0.552,0.362)	71.33%	(67.16%,75.51%)	0.91	(0.58,1.44)
	Safety Officer	65.45%	(47.55%,83.35%)	-0.357	(-1.245,0.532)	65.73%	(47.25%,84.21%)	0.70	(0.29,1.70)
	Training Officer	71.70%	(59.86%,83.55%)	-0.048	(-0.742,0.646)	72.27%	(60.58%,83.96%)	0.95	(0.48,1.91)
	Other/Missing	73.19%	(65.56%,80.81%)	0.000	(0.000,0.000)	73.22%	(65.38%,81.06%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 44: Q11b. Topics of NIOSH recommendations used for training purposes: SCBA**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		68.88%	(65.29%,72.47%)	0.707*	(0.059,1.355)	68.88%	(65.29%,72.47%)		
Region (0.2706)	Northeast	72.00%	(64.98%,79.03%)	0.120	(-0.480,0.720)	71.65%	(64.40%,78.91%)	1.13	(0.62,2.05)
	South	63.50%	(56.61%,70.39%)	-0.257	(-0.813,0.298)	63.51%	(56.57%,70.46%)	0.77	(0.44,1.35)
	Midwest	71.34%	(65.31%,77.38%)	0.140	(-0.424,0.703)	72.04%	(66.05%,78.04%)	1.15	(0.65,2.02)
	West	70.19%	(60.82%,79.57%)	0.000	(0.000,0.000)	69.18%	(59.27%,79.09%)	1.00	n/a
Department Type (0.2981)	All Career	68.56%	(61.18%,75.95%)	-0.442	(-1.003,0.120)	60.31%	(47.91%,72.71%)	0.64	(0.37,1.13)
	All Volunteer	70.63%	(64.24%,77.01%)	0.000	(0.000,0.000)	70.09%	(63.20%,76.98%)	1.00	n/a
	Combination	67.98%	(63.24%,72.72%)	-0.050	(-0.475,0.375)	69.05%	(64.29%,73.82%)	0.95	(0.62,1.45)
Jurisdiction Type (0.5537)	Urban	74.07%	(68.18%,79.97%)	0.145	(-0.334,0.623)	71.26%	(62.89%,79.63%)	1.16	(0.72,1.86)
	Rural/Missing	67.42%	(63.13%,71.70%)	0.000	(0.000,0.000)	68.26%	(64.04%,72.48%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.1538)	50,000+	74.30% <sup>3</sup>	(68.07%,80.54%)	0.583	(-0.058,1.224)	77.31%	(67.91%,86.71%)	1.79	(0.94,3.40)
	5,000-50,000	73.27% <sup>3</sup>	(68.35%,78.20%)	0.342	(-0.071,0.756)	72.86%	(67.28%,78.44%)	1.41	(0.93,2.13)
	0 – 5,000	65.62% <sup>1,2</sup>	(60.36%,70.88%)	0.000	(0.000,0.000)	65.68%	(60.05%,71.31%)	1.00	n/a
FFFIPP/ Fatality (0.3627)	Fatality with Investigation	65.18%	(56.22%,74.14%)	-0.235	(-0.676,0.205)	63.87%	(54.21%,73.53%)	0.79	(0.51,1.23)
	Fatality - No Investigation	63.80%	(52.81%,74.80%)	-0.279	(-0.791,0.232)	62.86%	(51.77%,73.95%)	0.76	(0.45,1.26)
	No Fatality	68.99%	(65.32%,72.66%)	0.000	(0.000,0.000)	69.02%	(65.36%,72.67%)	1.00	n/a
Who Completed Survey (Q62) (0.7995)	Fire Chief	68.04%	(63.66%,72.42%)	-0.039	(-0.496,0.417)	68.23%	(63.89%,72.56%)	0.96	(0.61,1.52)
	Safety Officer	68.82%	(52.04%,85.60%)	-0.076	(-0.989,0.838)	67.45%	(49.10%,85.80%)	0.93	(0.37,2.31)
	Training Officer	74.77%	(63.72%,85.83%)	0.272	(-0.424,0.967)	74.47%	(63.49%,85.45%)	1.31	(0.65,2.63)
	Other/Missing	69.35%	(61.19%,77.52%)	0.000	(0.000,0.000)	69.06%	(60.55%,77.57%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 45: Q11b. Topics of NIOSH recommendations used for training purposes: PASS systems**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		56.11%	(52.31%,59.91%)	0.210	(-0.402,0.821)	56.11%	(52.31%,59.91%)		
Region (0.4441)	Northeast	60.95%	(53.33%,68.58%)	0.302	(-0.254,0.857)	60.47%	(52.62%,68.31%)	1.35	(0.78,2.36)
	South	52.32%	(45.27%,59.37%)	-0.038	(-0.554,0.479)	52.25%	(45.16%,59.33%)	0.96	(0.57,1.61)
	Midwest	56.61%	(50.04%,63.19%)	0.185	(-0.336,0.707)	57.69%	(51.17%,64.21%)	1.20	(0.71,2.03)
	West	54.52%	(44.27%,64.77%)	0.000	(0.000,0.000)	53.17%	(42.46%,63.89%)	1.00	n/a
Department Type (0.0438)	All Career	49.95% <sup>2</sup>	(42.25%,57.65%)	-0.618 <sup>*</sup>	(-1.116,-0.120)	45.66% <sup>2</sup>	(34.22%,57.10%)	0.54 <sup>*</sup>	(0.33,0.89)
	All Volunteer	60.71% <sup>1</sup>	(54.01%,67.42%)	0.000	(0.000,0.000)	60.72% <sup>1</sup>	(53.56%,67.89%)	1.00	n/a
	Combination	54.33%	(49.30%,59.36%)	-0.247	(-0.637,0.143)	54.78%	(49.61%,59.95%)	0.78	(0.53,1.15)
Jurisdiction Type (0.2429)	Urban	61.64%	(55.11%,68.17%)	0.259	(-0.176,0.694)	60.99%	(52.20%,69.79%)	1.30	(0.84,2.00)
	Rural/Missing	54.55%	(50.05%,59.06%)	0.000	(0.000,0.000)	54.77%	(50.28%,59.25%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.4849)	50,000+	52.20%	(44.82%,59.59%)	-0.082	(-0.660,0.497)	52.81%	(40.94%,64.69%)	0.92	(0.52,1.64)
	5,000-50,000	60.15%	(54.72%,65.59%)	0.153	(-0.224,0.529)	58.51%	(52.37%,64.64%)	1.16	(0.80,1.70)
	0 – 5,000	53.75%	(48.26%,59.23%)	0.000	(0.000,0.000)	54.81%	(49.01%,60.62%)	1.00	n/a
FFFIPP/ Fatality (0.4761)	Fatality with Investigation	53.03%	(43.70%,62.36%)	-0.068	(-0.482,0.347)	54.58%	(44.78%,64.39%)	0.93	(0.62,1.41)
	Fatality - No Investigation	50.26%	(38.77%,61.75%)	-0.298	(-0.784,0.188)	48.94%	(37.62%,60.26%)	0.74	(0.46,1.21)
	No Fatality	56.23%	(52.34%,60.12%)	0.000	(0.000,0.000)	56.23%	(52.36%,60.11%)	1.00	n/a
Who Completed Survey (Q62) (0.7152)	Fire Chief	55.69%	(51.09%,60.30%)	-0.012	(-0.444,0.421)	55.74%	(51.17%,60.31%)	0.99	(0.64,1.52)
	Safety Officer	65.94%	(49.31%,82.58%)	0.447	(-0.384,1.279)	66.43%	(49.49%,83.37%)	1.56	(0.68,3.59)
	Training Officer	54.98%	(42.05%,67.90%)	-0.046	(-0.686,0.595)	54.91%	(42.00%,67.82%)	0.96	(0.50,1.81)
	Other/Missing	56.27%	(47.45%,65.10%)	0.000	(0.000,0.000)	56.02%	(46.72%,65.32%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 46: Q11b. Topics of NIOSH recommendations used for training purposes: Incident Command systems**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		55.19%	(51.36%,59.03%)	-0.121	(-0.725,0.483)	55.19%	(51.36%,59.03%)		
Region (0.8340)	Northeast	55.24%	(47.47%,63.01%)	0.046	(-0.504,0.597)	54.19%	(46.18%,62.19%)	1.05	(0.60,1.82)
	South	57.25%	(50.25%,64.26%)	0.197	(-0.322,0.715)	57.86%	(50.81%,64.91%)	1.22	(0.72,2.05)
	Midwest	53.60%	(46.92%,60.27%)	0.043	(-0.475,0.561)	54.12%	(47.46%,60.78%)	1.04	(0.62,1.75)
	West	53.66%	(43.28%,64.04%)	0.000	(0.000,0.000)	53.05%	(42.31%,63.79%)	1.00	n/a
Department Type (0.2286)	All Career	52.45%	(44.59%,60.31%)	-0.444	(-0.950,0.063)	46.16%	(34.47%,57.85%)	0.64	(0.39,1.06)
	All Volunteer	57.53%	(50.70%,64.36%)	0.000	(0.000,0.000)	57.09%	(49.76%,64.41%)	1.00	n/a
	Combination	54.24%	(49.18%,59.30%)	-0.079	(-0.468,0.309)	55.15%	(49.95%,60.34%)	0.92	(0.63,1.36)
Jurisdiction Type (0.1132)	Urban	60.62%	(53.83%,67.41%)	0.355	(-0.084,0.795)	61.90%	(53.03%,70.76%)	1.43	(0.92,2.21)
	Rural/Missing	53.66%	(49.14%,58.19%)	0.000	(0.000,0.000)	53.30%	(48.79%,57.81%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.9174)	50,000+	56.39%	(48.81%,63.98%)	0.116	(-0.476,0.708)	57.30%	(45.21%,69.40%)	1.12	(0.62,2.03)
	5,000-50,000	57.61%	(52.05%,63.16%)	0.066	(-0.307,0.439)	56.09%	(49.93%,62.25%)	1.07	(0.74,1.55)
	0 – 5,000	53.53%	(48.03%,59.03%)	0.000	(0.000,0.000)	54.47%	(48.62%,60.32%)	1.00	n/a
FFFIPP/ Fatality (0.3139)	Fatality with Investigation	53.09%	(43.74%,62.44%)	-0.116	(-0.529,0.298)	52.26%	(42.36%,62.16%)	0.89	(0.59,1.35)
	Fatality - No Investigation	63.69%	(52.64%,74.73%)	0.355	(-0.156,0.866)	63.56%	(52.38%,74.75%)	1.43	(0.86,2.38)
	No Fatality	55.09%	(51.17%,59.02%)	0.000	(0.000,0.000)	55.10%	(51.19%,59.01%)	1.00	n/a
Who Completed Survey (Q62) (0.6459)	Fire Chief	55.62%	(50.99%,60.24%)	0.244	(-0.174,0.662)	56.03%	(51.42%,60.63%)	1.28	(0.84,1.94)
	Safety Officer	60.00%	(41.66%,78.34%)	0.347	(-0.523,1.217)	58.52%	(38.86%,78.19%)	1.42	(0.59,3.38)
	Training Officer	57.61%	(44.57%,70.66%)	0.295	(-0.344,0.933)	57.25%	(44.16%,70.35%)	1.34	(0.71,2.54)
	Other/Missing	51.20%	(42.32%,60.08%)	0.000	(0.000,0.000)	50.00%	(40.88%,59.11%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 47: Q11b. Topics of NIOSH recommendations used for training purposes: Radio communications**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		39.63%	(35.87%,43.40%)	-0.067	(-0.690,0.556)	39.63%	(35.87%,43.40%)		
Region (0.4457)	Northeast	36.63%	(29.13%,44.13%)	-0.457	(-1.012,0.098)	35.86%	(28.30%,43.42%)	0.63	(0.36,1.10)
	South	40.38%	(33.45%,47.32%)	-0.260	(-0.779,0.260)	40.48%	(33.50%,47.47%)	0.77	(0.46,1.30)
	Midwest	38.34%	(31.83%,44.85%)	-0.322	(-0.847,0.202)	38.99%	(32.40%,45.57%)	0.72	(0.43,1.22)
	West	46.94%	(36.50%,57.37%)	0.000	(0.000,0.000)	46.81%	(36.03%,57.58%)	1.00	n/a
Department Type (0.0751)	All Career	35.50%	(28.56%,42.44%)	-0.559*	(-1.047,-0.071)	28.68% <sup>2,3</sup>	(19.40%,37.96%)	0.57*	(0.35,0.93)
	All Volunteer	42.78%	(35.94%,49.62%)	0.000	(0.000,0.000)	41.12% <sup>1</sup>	(33.94%,48.31%)	1.00	n/a
	Combination	38.41%	(33.48%,43.33%)	-0.042	(-0.433,0.348)	40.12% <sup>1</sup>	(34.96%,45.28%)	0.96	(0.65,1.42)
Jurisdiction Type (0.2325)	Urban	43.72%	(36.85%,50.60%)	0.262	(-0.168,0.691)	44.55%	(35.51%,53.59%)	1.30	(0.85,2.00)
	Rural/Missing	38.48%	(34.07%,42.90%)	0.000	(0.000,0.000)	38.27%	(33.91%,42.63%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.7489)	50,000+	44.15%	(36.58%,51.72%)	0.219	(-0.360,0.798)	43.70%	(31.87%,55.53%)	1.24	(0.70,2.22)
	5,000-50,000	41.82%	(36.28%,47.36%)	0.107	(-0.269,0.483)	40.99%	(34.95%,47.03%)	1.11	(0.76,1.62)
	0 – 5,000	37.89%	(32.53%,43.25%)	0.000	(0.000,0.000)	38.46%	(32.75%,44.17%)	1.00	n/a
FFFIPP/ Fatality (0.1233)	Fatality with Investigation	46.41%	(37.07%,55.75%)	0.276	(-0.138,0.691)	46.09%	(36.21%,55.97%)	1.32	(0.87,2.00)
	Fatality - No Investigation	49.64%	(38.16%,61.11%)	0.429	(-0.065,0.923)	49.86%	(38.27%,61.44%)	1.54	(0.94,2.52)
	No Fatality	39.42%	(35.56%,43.27%)	0.000	(0.000,0.000)	39.42%	(35.58%,43.26%)	1.00	n/a
Who Completed Survey (Q62) (0.9099)	Fire Chief	38.73%	(34.21%,43.26%)	-0.132	(-0.561,0.297)	39.21%	(34.69%,43.73%)	0.88	(0.57,1.35)
	Safety Officer	43.27%	(25.13%,61.42%)	-0.070	(-0.919,0.778)	40.68%	(21.79%,59.58%)	0.93	(0.40,2.18)
	Training Officer	38.30%	(25.41%,51.18%)	-0.219	(-0.878,0.441)	37.19%	(24.34%,50.03%)	0.80	(0.42,1.55)
	Other/Missing	43.21%	(34.36%,52.07%)	0.000	(0.000,0.000)	42.37%	(33.21%,51.53%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 48: Q11b. Topics of NIOSH recommendations used for training purposes: Physical fitness and cardiovascular disease (CVD)**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		14.65%	(12.11%,17.20%)	-2.314*	(-3.081,-1.546)	14.65%	(12.11%,17.20%)		
Region (0.3386)	Northeast	12.02%	(7.12%,16.92%)	-0.687	(-1.421,0.047)	11.34%	(6.56%,16.13%)	0.50	(0.24,1.05)
	South	14.96%	(10.41%,19.51%)	-0.331	(-0.959,0.297)	15.26%	(10.66%,19.85%)	0.72	(0.38,1.35)
	Midwest	14.53%	(9.95%,19.12%)	-0.360	(-1.016,0.297)	14.90%	(10.29%,19.52%)	0.70	(0.36,1.35)
	West	19.55%	(11.91%,27.20%)	0.000	(0.000,0.000)	19.79%	(11.83%,27.74%)	1.00	n/a
Department Type (0.1926)	All Career	30.77% <sup>2,3</sup>	(23.51%,38.02%)	0.551	(-0.051,1.152)	19.72%	(11.53%,27.91%)	1.73	(0.95,3.16)
	All Volunteer	14.32% <sup>1</sup>	(9.97%,18.68%)	0.000	(0.000,0.000)	12.67%	(8.65%,16.68%)	1.00	n/a
	Combination	13.08% <sup>1</sup>	(9.71%,16.45%)	0.212	(-0.289,0.713)	15.10%	(11.35%,18.85%)	1.24	(0.75,2.04)
Jurisdiction Type (0.4965)	Urban	22.09% <sup>2</sup>	(16.68%,27.49%)	0.181	(-0.341,0.704)	16.26%	(10.74%,21.78%)	1.20	(0.71,2.02)
	Rural/Missing	12.56% <sup>1</sup>	(9.68%,15.44%)	0.000	(0.000,0.000)	14.03%	(10.93%,17.13%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0037)	50,000+	32.22% <sup>2,3</sup>	(25.28%,39.17%)	1.056*	(0.313,1.800)	24.02% <sup>3</sup>	(13.34%,34.71%)	2.88*	(1.37,6.05)
	5,000-50,000	20.20% <sup>1,3</sup>	(15.72%,24.69%)	0.837*	(0.324,1.350)	20.32% <sup>3</sup>	(15.40%,25.24%)	2.31*	(1.38,3.86)
	0 – 5,000	9.78% <sup>1,2</sup>	(6.59%,12.96%)	0.000	(0.000,0.000)	10.07% <sup>1,2</sup>	(6.72%,13.41%)	1.00	n/a
FFFIPP/ Fatality (0.0104)	Fatality with Investigation	33.13% <sup>3</sup>	(24.78%,41.48%)	0.653*	(0.215,1.090)	23.88% <sup>3</sup>	(16.69%,31.06%)	1.92*	(1.24,2.98)
	Fatality - No Investigation	20.83%	(11.25%,30.42%)	0.406	(-0.297,1.109)	19.91%	(9.78%,30.04%)	1.50	(0.74,3.03)
	No Fatality	14.36% <sup>1</sup>	(11.76%,16.97%)	0.000	(0.000,0.000)	14.45% <sup>1</sup>	(11.85%,17.05%)	1.00	n/a
Who Completed Survey (Q62) (0.1062)	Fire Chief	14.71%	(11.51%,17.91%)	0.353	(-0.189,0.894)	15.83% <sup>3</sup>	(12.55%,19.11%)	1.42	(0.83,2.45)
	Safety Officer	28.14% <sup>3</sup>	(13.36%,42.92%)	0.740	(-0.118,1.599)	21.36%	(9.15%,33.58%)	2.10	(0.89,4.95)
	Training Officer	10.31% <sup>2</sup>	(4.07%,16.55%)	-0.321	(-1.135,0.492)	8.96% <sup>1</sup>	(3.48%,14.44%)	0.73	(0.32,1.64)
	Other/Missing	13.69%	(8.44%,18.93%)	0.000	(0.000,0.000)	11.83%	(7.09%,16.57%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 49: Q11b. Topics of NIOSH recommendations used for training purposes: Building code compliance**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		11.89%	(9.44%,14.33%)	-1.573*	(-2.422,-0.725)	11.89%	(9.44%,14.33%)		
Region (0.2901)	Northeast	14.14%	(8.68%,19.60%)	0.151	(-0.649,0.951)	15.37%	(9.25%,21.49%)	1.16	(0.52,2.59)
	South	9.18%	(5.30%,13.06%)	-0.498	(-1.272,0.276)	8.74%	(5.01%,12.46%)	0.61	(0.28,1.32)
	Midwest	11.77%	(7.69%,15.84%)	-0.156	(-0.901,0.588)	11.83%	(7.70%,15.96%)	0.86	(0.41,1.80)
	West	14.33%	(6.68%,21.97%)	0.000	(0.000,0.000)	13.53%	(6.31%,20.76%)	1.00	n/a
Department Type (0.0045)	All Career	20.23% <sup>2,3</sup>	(14.16%,26.31%)	1.068*	(0.306,1.830)	28.25% <sup>2,3</sup>	(15.20%,41.31%)	2.91*	(1.36,6.23)
	All Volunteer	11.84% <sup>1</sup>	(7.35%,16.34%)	0.000	(0.000,0.000)	12.14% <sup>1</sup>	(7.27%,17.00%)	1.00	n/a
	Combination	11.01% <sup>1</sup>	(7.86%,14.15%)	-0.166	(-0.749,0.417)	10.49% <sup>1</sup>	(7.48%,13.51%)	0.85	(0.47,1.52)
Jurisdiction Type (0.0407)	Urban	10.37%	(6.83%,13.92%)	-0.704*	(-1.379,-0.030)	7.38% <sup>2</sup>	(3.71%,11.05%)	0.49*	(0.25,0.97)
	Rural/Missing	12.31%	(9.34%,15.28%)	0.000	(0.000,0.000)	13.67% <sup>1</sup>	(10.44%,16.90%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.8623)	50,000+	15.39%	(9.90%,20.88%)	-0.162	(-1.084,0.759)	10.26%	(3.34%,17.18%)	0.85	(0.34,2.14)
	5,000-50,000	11.78%	(8.39%,15.16%)	0.040	(-0.521,0.600)	12.24%	(8.34%,16.14%)	1.04	(0.59,1.82)
	0 – 5,000	11.71%	(8.14%,15.28%)	0.000	(0.000,0.000)	11.82%	(8.05%,15.60%)	1.00	n/a
FFFIPP/ Fatality (0.3145)	Fatality with Investigation	17.50%	(10.62%,24.37%)	0.355	(-0.202,0.911)	16.04%	(8.86%,23.22%)	1.43	(0.82,2.49)
	Fatality - No Investigation	9.45%	(2.29%,16.62%)	-0.356	(-1.276,0.564)	8.68%	(1.74%,15.61%)	0.70	(0.28,1.76)
	No Fatality	11.86%	(9.36%,14.36%)	0.000	(0.000,0.000)	11.89%	(9.39%,14.38%)	1.00	n/a
Who Completed Survey (Q62) (0.7928)	Fire Chief	11.32%	(8.47%,14.18%)	-0.191	(-0.813,0.430)	11.35%	(8.54%,14.17%)	0.83	(0.44,1.54)
	Safety Officer	18.51%	(2.68%,34.33%)	0.352	(-0.894,1.599)	17.93%	(0.97%,34.89%)	1.42	(0.41,4.95)
	Training Officer	11.16%	(2.16%,20.17%)	-0.257	(-1.264,0.751)	10.72%	(2.39%,19.05%)	0.77	(0.28,2.12)
	Other/Missing	13.13%	(7.42%,18.84%)	0.000	(0.000,0.000)	13.39%	(7.20%,19.58%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 50: Q11b. Topics of NIOSH recommendations used for training purposes: Other (Please specify: \_\_\_\_\_)**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		3.99%	(2.49%,5.49%)	-4.148*	(-5.575,-2.721)	3.99%	(2.49%,5.49%)		
Region (0.2693)	Northeast	3.22%	(0.61%,5.83%)	-0.363	(-1.597,0.871)	2.71%	(0.43%,4.99%)	0.70	(0.20,2.39)
	South	5.86%	(2.30%,9.42%)	0.569	(-0.480,1.618)	6.49%	(2.50%,10.47%)	1.77	(0.62,5.04)
	Midwest	2.65%	(0.63%,4.67%)	-0.305	(-1.475,0.866)	2.87%	(0.62%,5.11%)	0.74	(0.23,2.38)
	West	4.02%	(1.06%,6.98%)	0.000	(0.000,0.000)	3.83%	(0.83%,6.83%)	1.00	n/a
Department Type (0.6645)	All Career	5.38%	(1.79%,8.98%)	-0.499	(-1.593,0.595)	2.66%	(0.04%,5.29%)	0.61	(0.20,1.81)
	All Volunteer	4.75%	(1.85%,7.65%)	0.000	(0.000,0.000)	4.26%	(1.44%,7.09%)	1.00	n/a
	Combination	3.43%	(1.55%,5.32%)	-0.035	(-1.054,0.985)	4.13%	(1.76%,6.50%)	0.97	(0.35,2.68)
Jurisdiction Type (0.0367)	Urban	7.71% <sup>2</sup>	(3.82%,11.59%)	1.221*	(0.076,2.367)	8.87%	(1.52%,16.21%)	3.39*	(1.08,10.66)
	Rural/Missing	2.95% <sup>1</sup>	(1.36%,4.53%)	0.000	(0.000,0.000)	2.83%	(1.31%,4.36%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.9828)	50,000+	6.45%	(2.62%,10.29%)	-0.109	(-1.769,1.551)	3.62%	(0.00%,7.75%)	0.90	(0.17,4.72)
	5,000-50,000	5.03%	(2.62%,7.45%)	0.002	(-1.082,1.086)	4.02%	(1.82%,6.22%)	1.00	(0.34,2.96)
	0 – 5,000	3.13%	(1.09%,5.17%)	0.000	(0.000,0.000)	4.01%	(1.06%,6.97%)	1.00	n/a
FFFIPP/ Fatality (0.5250)	Fatality with Investigation	7.46%	(2.65%,12.27%)	0.399	(-0.479,1.277)	5.77%	(1.41%,10.12%)	1.49	(0.62,3.58)
	Fatality - No Investigation	2.79%	(0.00%,6.25%)	-0.412	(-1.759,0.934)	2.70%	(0.00%,6.03%)	0.66	(0.17,2.55)
	No Fatality	3.97%	(2.43%,5.51%)	0.000	(0.000,0.000)	3.99%	(2.45%,5.52%)	1.00	n/a
Who Completed Survey (Q62) (0.4341)	Fire Chief	3.77%	(1.93%,5.61%)	0.612	(-0.365,1.590)	4.10%	(2.12%,6.07%)	1.84	(0.69,4.90)
	Safety Officer	9.63%	(0.00%,22.71%)	1.302	(-0.698,3.303)	7.71%	(0.00%,20.27%)	3.68	(0.50,27.19)
	Training Officer	5.71%	(0.67%,10.76%)	0.872	(-0.418,2.163)	5.22%	(0.40%,10.04%)	2.39	(0.66,8.70)
	Other/Missing	2.82%	(0.67%,4.96%)	0.000	(0.000,0.000)	2.28%	(0.48%,4.09%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 51: Q11b. Topics of NIOSH recommendations used for training purposes: Does not apply. We have not used NIOSH recommendations for training purposes.**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		3.30%	(1.94%,4.66%)	-5.583*	(-8.134,-3.032)	3.30%	(1.94%,4.66%)		
Region (0.5496)	Northeast	4.47%	(1.32%,7.63%)	1.303	(-0.597,3.203)	4.16%	(1.14%,7.19%)	3.68	(0.55,24.60)
	South	3.54%	(1.01%,6.06%)	1.221	(-0.734,3.175)	3.85%	(1.14%,6.57%)	3.39	(0.48,23.94)
	Midwest	2.99%	(0.64%,5.34%)	0.889	(-1.041,2.818)	2.80%	(0.62%,4.98%)	2.43	(0.35,16.75)
	West	1.06%	(0.00%,2.87%)	0.000	(0.000,0.000)	1.18%	(0.00%,3.22%)	1.00	n/a
Department Type (0.5114)	All Career	3.08%	(0.54%,5.62%)	0.849	(-0.637,2.334)	5.27%	(0.00%,10.93%)	2.34	(0.53,10.32)
	All Volunteer	2.06%	(0.31%,3.80%)	0.000	(0.000,0.000)	2.35%	(0.40%,4.31%)	1.00	n/a
	Combination	3.99%	(1.99%,6.00%)	0.440	(-0.547,1.426)	3.59%	(1.82%,5.35%)	1.55	(0.58,4.16)
Jurisdiction Type (0.7690)	Urban	2.98%	(0.67%,5.29%)	0.213	(-1.208,1.633)	3.90%	(0.00%,8.39%)	1.24	(0.30,5.12)
	Rural/Missing	3.39%	(1.78%,5.01%)	0.000	(0.000,0.000)	3.18%	(1.61%,4.75%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.4633)	50,000+	1.45%	(0.00%,2.94%)	-1.194	(-3.091,0.704)	1.26%	(0.00%,3.28%)	0.30	(0.05,2.02)
	5,000-50,000	2.57%	(0.85%,4.29%)	-0.482	(-1.622,0.657)	2.52%	(0.55%,4.49%)	0.62	(0.20,1.93)
	0 – 5,000	3.92%	(1.86%,5.97%)	0.000	(0.000,0.000)	3.99%	(1.67%,6.31%)	1.00	n/a
FFFIPP/ Fatality (0.1774)	Fatality with Investigation	2.80%	(0.00%,6.08%)	-0.094	(-1.395,1.207)	2.96%	(0.00%,6.54%)	0.91	(0.25,3.34)
	Fatality - No Investigation	7.86%	(1.97%,13.74%)	0.913	(-0.069,1.894)	7.58%	(1.64%,13.51%)	2.49	(0.93,6.65)
	No Fatality	3.24%	(1.85%,4.63%)	0.000	(0.000,0.000)	3.24%	(1.86%,4.63%)	1.00	n/a
Who Completed Survey (Q62) (0.0111)	Fire Chief	4.03% <sup>3</sup>	(2.27%,5.80%)	1.110	(-0.770,2.991)	3.91% <sup>3</sup>	(2.22%,5.60%)	3.03	(0.46,19.90)
	Safety Officer	5.75%	(0.00%,15.84%)	1.695	(-0.969,4.359)	6.77%	(0.00%,19.56%)	5.45	(0.38,78.18)
	Training Officer	0.37% <sup>1</sup>	(0.00%,0.89%)	-1.188	(-3.465,1.089)	0.41% <sup>1</sup>	(0.00%,0.98%)	0.30	(0.03,2.97)
	Other/Missing	1.27%	(0.00%,3.52%)	0.000	(0.000,0.000)	1.33%	(0.00%,3.71%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 52: Q12. Does your department have a fitness training that involves physical exercise and/or other health promotion activities? - Yes, required or Yes, optional**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		21.54%	(19.53%,23.56%)	-0.591*	(-1.118,-0.064)	21.54%	(19.53%,23.56%)		
Region (0.0000)	Northeast	18.43% <sup>4</sup>	(13.68%,23.18%)	-1.431*	(-2.014,-0.848)	17.26% <sup>4</sup>	(12.74%,21.78%)	0.24*	(0.13,0.43)
	South	21.18% <sup>4</sup>	(17.42%,24.94%)	-1.081*	(-1.556,-0.606)	21.42% <sup>4</sup>	(17.94%,24.91%)	0.34*	(0.21,0.55)
	Midwest	16.42% <sup>4</sup>	(13.24%,19.60%)	-1.364*	(-1.852,-0.877)	18.00% <sup>4</sup>	(14.75%,21.26%)	0.26*	(0.16,0.42)
	West	40.70% <sup>1,2,3</sup>	(33.15%,48.26%)	0.000	(0.000,0.000)	38.18% <sup>1,2,3</sup>	(31.17%,45.18%)	1.00	n/a
Department Type (0.0000)	All Career	72.40% <sup>2,3</sup>	(66.32%,78.48%)	0.569*	(0.113,1.025)	36.65% <sup>2,3</sup>	(28.31%,44.98%)	1.77*	(1.12,2.79)
	All Volunteer	30.12% <sup>1,3</sup>	(26.17%,34.06%)	0.000	(0.000,0.000)	26.88% <sup>1,3</sup>	(22.99%,30.78%)	1.00	n/a
	Combination	12.71% <sup>1,2</sup>	(10.32%,15.11%)	-0.781*	(-1.134,-0.429)	16.30% <sup>1,2</sup>	(13.52%,19.07%)	0.46*	(0.32,0.65)
Jurisdiction Type (0.0000)	Urban	53.28% <sup>2</sup>	(47.87%,58.69%)	0.904*	(0.527,1.280)	32.00% <sup>2</sup>	(26.33%,37.68%)	2.47*	(1.69,3.60)
	Rural/Missing	15.22% <sup>1</sup>	(13.06%,17.39%)	0.000	(0.000,0.000)	18.57% <sup>1</sup>	(16.19%,20.95%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	75.45% <sup>2,3</sup>	(69.83%,81.08%)	1.721*	(1.193,2.248)	40.38% <sup>3</sup>	(30.64%,50.12%)	5.59*	(3.30,9.47)
	5,000-50,000	41.79% <sup>1,3</sup>	(37.46%,46.12%)	1.478*	(1.123,1.832)	35.42% <sup>3</sup>	(30.89%,39.95%)	4.38*	(3.08,6.24)
	0 – 5,000	10.35% <sup>1,2</sup>	(8.06%,12.64%)	0.000	(0.000,0.000)	13.09% <sup>1,2</sup>	(10.39%,15.80%)	1.00	n/a
FFFIPP/ Fatality (0.6398)	Fatality with Investigation	40.36% <sup>3</sup>	(32.16%,48.57%)	-0.187	(-0.673,0.299)	19.28%	(13.74%,24.83%)	0.83	(0.51,1.35)
	Fatality - No Investigation	28.52%	(19.98%,37.07%)	0.148	(-0.419,0.714)	23.44%	(16.23%,30.65%)	1.16	(0.66,2.04)
	No Fatality	21.34% <sup>1</sup>	(19.29%,23.38%)	0.000	(0.000,0.000)	21.54%	(19.50%,23.58%)	1.00	n/a
Who Completed Survey (Q62) (0.3856)	Fire Chief	18.46% <sup>2,4</sup>	(16.02%,20.90%)	-0.159	(-0.534,0.215)	21.15%	(18.68%,23.61%)	0.85	(0.59,1.24)
	Safety Officer	44.85% <sup>1,4</sup>	(28.97%,60.72%)	0.322	(-0.556,1.201)	27.70%	(15.50%,39.91%)	1.38	(0.57,3.32)
	Training Officer	27.79%	(18.45%,37.13%)	-0.420	(-1.050,0.210)	18.07%	(11.84%,24.31%)	0.66	(0.35,1.23)
	Other/Missing	27.03% <sup>1,2</sup>	(22.00%,32.07%)	0.000	(0.000,0.000)	23.19%	(19.01%,27.37%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 53: Q13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors? - One or more times a year**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		17.44%	(15.37%,19.50%)	-1.735*	(-2.268,-1.202)	17.44%	(15.37%,19.50%)		
Region (0.0000)	Northeast	30.87% <sup>2,3,4</sup>	(24.96%,36.78%)	0.782*	(0.280,1.283)	30.43% <sup>2,3,4</sup>	(24.24%,36.63%)	2.19*	(1.32,3.61)
	South	11.49% <sup>1,4</sup>	(8.69%,14.29%)	-0.534*	(-1.011,-0.057)	11.49% <sup>1,4</sup>	(8.78%,14.20%)	0.59*	(0.36,0.94)
	Midwest	13.48% <sup>1</sup>	(10.32%,16.64%)	-0.273	(-0.750,0.204)	14.19% <sup>1</sup>	(10.92%,17.47%)	0.76	(0.47,1.23)
	West	19.34% <sup>1,2</sup>	(13.87%,24.81%)	0.000	(0.000,0.000)	17.55% <sup>1,2</sup>	(12.46%,22.64%)	1.00	n/a
Department Type (0.0000)	All Career	51.21% <sup>2,3</sup>	(44.59%,57.83%)	1.043*	(0.540,1.546)	36.78% <sup>2,3</sup>	(27.07%,46.50%)	2.84*	(1.72,4.69)
	All Volunteer	17.80% <sup>1</sup>	(14.15%,21.45%)	0.000	(0.000,0.000)	18.40% <sup>1</sup>	(14.61%,22.19%)	1.00	n/a
	Combination	14.55% <sup>1</sup>	(11.91%,17.19%)	-0.266	(-0.617,0.085)	14.99% <sup>1</sup>	(12.39%,17.59%)	0.77	(0.54,1.09)
Jurisdiction Type (0.3291)	Urban	33.90% <sup>2</sup>	(28.59%,39.20%)	0.212	(-0.214,0.638)	19.60%	(14.53%,24.66%)	1.24	(0.81,1.89)
	Rural/Missing	14.13% <sup>1</sup>	(11.89%,16.37%)	0.000	(0.000,0.000)	16.76%	(14.29%,19.24%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0002)	50,000+	53.05% <sup>2,3</sup>	(46.21%,59.88%)	1.124*	(0.547,1.702)	31.59% <sup>3</sup>	(21.47%,41.71%)	3.08*	(1.73,5.48)
	5,000-50,000	25.81% <sup>1,3</sup>	(21.83%,29.78%)	0.613*	(0.253,0.973)	22.40% <sup>3</sup>	(18.37%,26.43%)	1.85*	(1.29,2.65)
	0 – 5,000	12.30% <sup>1,2</sup>	(9.81%,14.79%)	0.000	(0.000,0.000)	14.03% <sup>1,2</sup>	(11.26%,16.80%)	1.00	n/a
FFFIPP/ Fatality (0.9164)	Fatality with Investigation	32.64% <sup>3</sup>	(24.69%,40.60%)	0.048	(-0.470,0.565)	18.03%	(11.33%,24.73%)	1.05	(0.63,1.76)
	Fatality - No Investigation	24.39%	(15.58%,33.19%)	0.126	(-0.509,0.760)	19.07%	(10.66%,27.49%)	1.13	(0.60,2.14)
	No Fatality	17.26% <sup>1</sup>	(15.16%,19.35%)	0.000	(0.000,0.000)	17.41%	(15.31%,19.51%)	1.00	n/a
Who Completed Survey (Q62) (0.1637)	Fire Chief	16.34% <sup>2</sup>	(13.82%,18.87%)	-0.052	(-0.445,0.341)	17.31%	(14.79%,19.83%)	0.95	(0.64,1.41)
	Safety Officer	40.28% <sup>1,3,4</sup>	(24.37%,56.18%)	0.621	(-0.260,1.502)	27.56%	(12.93%,42.19%)	1.86	(0.77,4.49)
	Training Officer	15.54% <sup>2</sup>	(9.07%,22.01%)	-0.469	(-1.099,0.161)	12.57%	(7.15%,17.99%)	0.63	(0.33,1.17)
	Other/Missing	18.87% <sup>2</sup>	(14.37%,23.38%)	0.000	(0.000,0.000)	17.99%	(13.53%,22.45%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 54: Q15. How often do drivers of your fire department vehicles receive 'refresher' driver training to continue being allowed to drive the vehicles? - One or more times a year**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		54.51%	(51.57%,57.45%)	0.148	(-0.295,0.592)	54.51%	(51.57%,57.45%)		
Region (0.5096)	Northeast	52.66%	(46.32%,59.00%)	-0.074	(-0.497,0.349)	52.00%	(45.47%,58.54%)	0.93	(0.61,1.42)
	South	57.83%	(52.58%,63.08%)	0.161	(-0.229,0.551)	57.77%	(52.51%,63.04%)	1.17	(0.80,1.73)
	Midwest	52.34%	(47.35%,57.34%)	-0.033	(-0.422,0.356)	53.03%	(48.03%,58.03%)	0.97	(0.66,1.43)
	West	54.17%	(46.10%,62.25%)	0.000	(0.000,0.000)	53.84%	(45.74%,61.93%)	1.00	n/a
Department Type (0.3795)	All Career	53.85%	(47.04%,60.66%)	-0.303	(-0.729,0.124)	48.20%	(38.20%,58.19%)	0.74	(0.48,1.13)
	All Volunteer	56.78%	(51.46%,62.10%)	0.000	(0.000,0.000)	55.67%	(50.20%,61.13%)	1.00	n/a
	Combination	53.32%	(49.56%,57.08%)	-0.052	(-0.333,0.229)	54.38%	(50.55%,58.22%)	0.95	(0.72,1.26)
Jurisdiction Type (0.3075)	Urban	59.08%	(53.09%,65.06%)	0.191	(-0.176,0.558)	58.41%	(50.46%,66.35%)	1.21	(0.84,1.75)
	Rural/Missing	53.60%	(50.27%,56.92%)	0.000	(0.000,0.000)	53.74%	(50.43%,57.04%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.2953)	50,000+	53.52%	(46.80%,60.25%)	-0.058	(-0.544,0.428)	51.83%	(41.11%,62.56%)	0.94	(0.58,1.53)
	5,000-50,000	58.45%	(53.79%,63.12%)	0.176	(-0.109,0.460)	57.58%	(52.39%,62.77%)	1.19	(0.90,1.58)
	0 – 5,000	52.80%	(48.97%,56.64%)	0.000	(0.000,0.000)	53.27%	(49.27%,57.27%)	1.00	n/a
FFFIPP/ Fatality (0.4198)	Fatality with Investigation	58.07%	(49.63%,66.51%)	0.131	(-0.237,0.499)	57.75%	(49.05%,66.44%)	1.14	(0.79,1.65)
	Fatality - No Investigation	49.59%	(39.70%,59.49%)	-0.224	(-0.642,0.193)	49.00%	(39.05%,58.95%)	0.80	(0.53,1.21)
	No Fatality	54.54%	(51.55%,57.53%)	0.000	(0.000,0.000)	54.55%	(51.57%,57.53%)	1.00	n/a
Who Completed Survey (Q62) (0.4883)	Fire Chief	53.15%	(49.62%,56.68%)	-0.073	(-0.378,0.232)	53.42%	(49.88%,56.96%)	0.93	(0.69,1.26)
	Safety Officer	58.35%	(42.52%,74.18%)	0.131	(-0.593,0.856)	58.42%	(41.86%,74.97%)	1.14	(0.55,2.35)
	Training Officer	63.33%	(52.63%,74.02%)	0.302	(-0.234,0.837)	62.46%	(51.48%,73.44%)	1.35	(0.79,2.31)
	Other/Missing	55.82%	(49.43%,62.21%)	0.000	(0.000,0.000)	55.21%	(48.67%,61.76%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 55: Q16. Does your fire department have a requirement regarding seat belt use in emergency vehicles? Yes**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		84.24%	(82.07%,86.42%)	2.088*	(1.359,2.817)	84.24%	(82.07%,86.42%)		
Region (0.0002)	Northeast	85.57% <sup>3,4</sup>	(81.02%,90.11%)	-0.637	(-1.344,0.070)	85.28% <sup>3</sup>	(80.58%,89.98%)	0.53	(0.26,1.07)
	South	87.26% <sup>3</sup>	(83.66%,90.87%)	-0.468	(-1.140,0.204)	87.24% <sup>3</sup>	(83.62%,90.87%)	0.63	(0.32,1.23)
	Midwest	76.65% <sup>1,2,4</sup>	(72.31%,80.99%)	-1.173*	(-1.824,-0.523)	77.44% <sup>1,2,4</sup>	(73.20%,81.69%)	0.31*	(0.16,0.59)
	West	92.00% <sup>1,3</sup>	(87.69%,96.31%)	0.000	(0.000,0.000)	91.56% <sup>3</sup>	(87.03%,96.09%)	1.00	n/a
Department Type (0.4518)	All Career	94.29% <sup>2,3</sup>	(90.89%,97.69%)	0.335	(-0.502,1.172)	89.15%	(81.46%,96.84%)	1.40	(0.61,3.23)
	All Volunteer	86.90% <sup>1,3</sup>	(83.21%,90.58%)	0.000	(0.000,0.000)	85.59%	(81.50%,89.68%)	1.00	n/a
	Combination	81.97% <sup>1,2</sup>	(79.08%,84.86%)	-0.175	(-0.589,0.240)	83.39%	(80.60%,86.19%)	0.84	(0.55,1.27)
Jurisdiction Type (0.7752)	Urban	89.76% <sup>2</sup>	(85.73%,93.79%)	-0.085	(-0.669,0.499)	83.26%	(76.01%,90.51%)	0.92	(0.51,1.65)
	Rural/Missing	83.14% <sup>1</sup>	(80.66%,85.62%)	0.000	(0.000,0.000)	84.37%	(82.05%,86.68%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0012)	50,000+	97.56% <sup>2,3</sup>	(94.90%,100.00%)	1.757*	(0.414,3.100)	96.13% <sup>2,3</sup>	(91.30%,100.00%)	5.79*	(1.51,22.19)
	5,000-50,000	90.15% <sup>1,3</sup>	(87.28%,93.02%)	0.716*	(0.277,1.154)	89.88% <sup>1,3</sup>	(86.68%,93.08%)	2.05*	(1.32,3.17)
	0 – 5,000	81.09% <sup>1,2</sup>	(78.12%,84.05%)	0.000	(0.000,0.000)	81.53% <sup>1,2</sup>	(78.48%,84.58%)	1.00	n/a
FFFIPP/ Fatality (0.5567)	Fatality with Investigation	92.14% <sup>3</sup>	(87.55%,96.72%)	0.355	(-0.322,1.032)	88.24%	(81.61%,94.87%)	1.43	(0.72,2.81)
	Fatality - No Investigation	88.02%	(81.33%,94.71%)	0.140	(-0.537,0.816)	85.91%	(78.29%,93.54%)	1.15	(0.58,2.26)
	No Fatality	84.15% <sup>1</sup>	(81.94%,86.36%)	0.000	(0.000,0.000)	84.21%	(82.01%,86.41%)	1.00	n/a
Who Completed Survey (Q62) (0.3376)	Fire Chief	83.64% <sup>2</sup>	(81.02%,86.26%)	0.229	(-0.196,0.654)	84.48%	(81.97%,86.98%)	1.26	(0.82,1.92)
	Safety Officer	95.82% <sup>1,4</sup>	(89.03%,100.00%)	1.273	(-0.523,3.068)	93.76% <sup>4</sup>	(83.63%,100.00%)	3.57	(0.59,21.51)
	Training Officer	90.09%	(83.22%,96.97%)	0.525	(-0.312,1.361)	87.86%	(79.99%,95.74%)	1.69	(0.73,3.90)
	Other/Missing	82.90% <sup>2</sup>	(77.81%,88.00%)	0.000	(0.000,0.000)	81.37% <sup>2</sup>	(75.96%,86.78%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 56: Q18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles? - Most of the time or Always**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		54.93%	(52.01%,57.85%)	1.161*	(0.638,1.685)	54.93%	(52.01%,57.85%)		
Region (0.0000)	Northeast	48.63% <sup>2,4</sup>	(42.31%,54.96%)	-1.363*	(-1.864,-0.861)	48.86% <sup>2,4</sup>	(42.34%,55.38%)	0.26*	(0.16,0.42)
	South	58.53% <sup>1,3,4</sup>	(53.28%,63.77%)	-0.973*	(-1.449,-0.497)	58.31% <sup>1,3,4</sup>	(53.07%,63.54%)	0.38*	(0.23,0.61)
	Midwest	45.30% <sup>2,4</sup>	(40.40%,50.21%)	-1.482*	(-1.955,-1.009)	45.94% <sup>2,4</sup>	(41.04%,50.84%)	0.23*	(0.14,0.36)
	West	79.13% <sup>1,2,3</sup>	(72.29%,85.97%)	0.000	(0.000,0.000)	78.44% <sup>1,2,3</sup>	(71.39%,85.50%)	1.00	n/a
Department Type (0.0741)	All Career	71.09% <sup>2,3</sup>	(65.29%,76.88%)	0.244	(-0.188,0.676)	63.72% <sup>3</sup>	(54.60%,72.84%)	1.28	(0.83,1.97)
	All Volunteer	60.41% <sup>1,3</sup>	(55.15%,65.67%)	0.000	(0.000,0.000)	58.22%	(52.86%,63.58%)	1.00	n/a
	Combination	50.63% <sup>1,2</sup>	(46.88%,54.39%)	-0.243	(-0.531,0.045)	52.56% <sup>1</sup>	(48.80%,56.33%)	0.78	(0.59,1.05)
Jurisdiction Type (0.3343)	Urban	58.94%	(53.18%,64.71%)	-0.184	(-0.557,0.190)	51.35%	(43.60%,59.11%)	0.83	(0.57,1.21)
	Rural/Missing	54.12%	(50.81%,57.43%)	0.000	(0.000,0.000)	55.60%	(52.36%,58.84%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0002)	50,000+	79.53% <sup>2,3</sup>	(74.52%,84.54%)	0.987*	(0.499,1.474)	73.02% <sup>2,3</sup>	(64.65%,81.39%)	2.68*	(1.65,4.37)
	5,000-50,000	60.61% <sup>1,3</sup>	(56.11%,65.11%)	0.430*	(0.140,0.721)	61.39% <sup>1,3</sup>	(56.44%,66.33%)	1.54*	(1.15,2.06)
	0 – 5,000	51.39% <sup>1,2</sup>	(47.54%,55.23%)	0.000	(0.000,0.000)	51.41% <sup>1,2</sup>	(47.46%,55.35%)	1.00	n/a
FFFIPP/ Fatality (0.6071)	Fatality with Investigation	64.00% <sup>3</sup>	(55.85%,72.15%)	0.050	(-0.349,0.450)	56.13%	(47.13%,65.13%)	1.05	(0.71,1.57)
	Fatality - No Investigation	52.05%	(42.19%,61.91%)	-0.214	(-0.658,0.229)	50.00%	(40.04%,59.95%)	0.81	(0.52,1.26)
	No Fatality	54.89% <sup>1</sup>	(51.93%,57.86%)	0.000	(0.000,0.000)	54.97%	(52.01%,57.93%)	1.00	n/a
Who Completed Survey (Q62) (0.2713)	Fire Chief	54.56% <sup>2</sup>	(51.03%,58.09%)	0.220	(-0.098,0.538)	56.08%	(52.60%,59.56%)	1.25	(0.91,1.71)
	Safety Officer	73.15% <sup>1,4</sup>	(58.76%,87.54%)	0.649	(-0.196,1.494)	65.65%	(48.39%,82.90%)	1.91	(0.82,4.45)
	Training Officer	56.30%	(45.14%,67.46%)	-0.019	(-0.551,0.512)	50.53%	(39.72%,61.33%)	0.98	(0.58,1.67)
	Other/Missing	53.29% <sup>2</sup>	(46.85%,59.74%)	0.000	(0.000,0.000)	50.98%	(44.54%,57.42%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 57: Q21. How often is Incident Command established when responding to structure fires? - Most of the time or Always**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		84.22%	(82.01%,86.42%)	0.944*	(0.267,1.620)	84.22%	(82.01%,86.42%)		
Region (0.0287)	Northeast	91.03% <sup>2,3,4</sup>	(87.51%,94.55%)	0.672*	(0.002,1.342)	89.96% <sup>3</sup>	(86.02%,93.90%)	1.96*	(1.00,3.83)
	South	84.13% <sup>1</sup>	(80.08%,88.17%)	0.173	(-0.425,0.770)	84.69%	(80.77%,88.62%)	1.19	(0.65,2.16)
	Midwest	79.86% <sup>1</sup>	(75.75%,83.96%)	-0.116	(-0.686,0.454)	80.78% <sup>1</sup>	(76.82%,84.74%)	0.89	(0.50,1.57)
	West	82.98% <sup>1</sup>	(76.03%,89.93%)	0.000	(0.000,0.000)	82.43%	(75.50%,89.36%)	1.00	n/a
Department Type (0.2453)	All Career	93.41% <sup>2,3</sup>	(89.81%,97.01%)	-0.634	(-1.499,0.231)	73.72%	(59.09%,88.35%)	0.53	(0.22,1.26)
	All Volunteer	84.54% <sup>1</sup>	(80.45%,88.63%)	0.000	(0.000,0.000)	83.44%	(79.05%,87.84%)	1.00	n/a
	Combination	83.31% <sup>1</sup>	(80.52%,86.09%)	0.109	(-0.301,0.519)	84.81%	(82.20%,87.43%)	1.12	(0.74,1.68)
Jurisdiction Type (0.0047)	Urban	96.05% <sup>2</sup>	(93.89%,98.22%)	1.037*	(0.319,1.756)	93.13% <sup>2</sup>	(88.78%,97.47%)	2.82*	(1.38,5.79)
	Rural/Missing	81.83% <sup>1</sup>	(79.22%,84.44%)	0.000	(0.000,0.000)	83.19% <sup>1</sup>	(80.78%,85.60%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	97.03% <sup>3</sup>	(94.19%,99.87%)	1.758*	(0.454,3.062)	95.97% <sup>3</sup>	(91.13%,100.00%)	5.80*	(1.57,21.37)
	5,000-50,000	93.70% <sup>3</sup>	(91.48%,95.93%)	1.110*	(0.634,1.587)	92.62% <sup>3</sup>	(89.83%,95.40%)	3.03*	(1.88,4.89)
	0 – 5,000	79.50% <sup>1,2</sup>	(76.39%,82.61%)	0.000	(0.000,0.000)	80.88% <sup>1,2</sup>	(77.85%,83.91%)	1.00	n/a
FFFIPP/ Fatality (0.0704)	Fatality with Investigation	93.76% <sup>3</sup>	(89.46%,98.07%)	0.534	(-0.233,1.301)	89.83%	(83.19%,96.47%)	1.71	(0.79,3.67)
	Fatality - No Investigation	93.38% <sup>3</sup>	(88.84%,97.91%)	0.769	(-0.016,1.554)	91.73% <sup>3</sup>	(86.08%,97.37%)	2.16	(0.98,4.73)
	No Fatality	84.05% <sup>1,2</sup>	(81.81%,86.30%)	0.000	(0.000,0.000)	84.13% <sup>2</sup>	(81.90%,86.36%)	1.00	n/a
Who Completed Survey (Q62) (0.3742)	Fire Chief	83.61% <sup>2,3</sup>	(80.91%,86.30%)	0.165	(-0.261,0.590)	84.13%	(81.50%,86.75%)	1.18	(0.77,1.80)
	Safety Officer	94.82% <sup>1,4</sup>	(85.05%,100.00%)	1.179	(-0.876,3.235)	93.39%	(81.18%,100.00%)	3.25	(0.42,25.40)
	Training Officer	90.63% <sup>1</sup>	(84.20%,97.06%)	0.658	(-0.228,1.545)	89.48%	(82.17%,96.79%)	1.93	(0.80,4.69)
	Other/Missing	82.81% <sup>2</sup>	(77.76%,87.87%)	0.000	(0.000,0.000)	81.93%	(76.76%,87.10%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 58: Q26. How often are Rapid Intervention Teams (RITs) or Rapid Intervention Crews (RICs) available at structure fires? - Most of the time or Always**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		42.39%	(39.61%,45.17%)	-0.209	(-0.681,0.263)	42.39%	(39.61%,45.17%)		
Region (0.0000)	Northeast	61.51% <sup>2,3</sup>	(55.40%,67.62%)	0.290	(-0.167,0.748)	59.13% <sup>2,3</sup>	(52.77%,65.49%)	1.34	(0.85,2.11)
	South	36.82% <sup>1,3,4</sup>	(31.85%,41.80%)	-0.681*	(-1.105,-0.256)	37.36% <sup>1,4</sup>	(32.43%,42.28%)	0.51*	(0.33,0.77)
	Midwest	29.84% <sup>1,2,4</sup>	(25.54%,34.14%)	-0.964*	(-1.383,-0.545)	31.62% <sup>1,4</sup>	(27.36%,35.89%)	0.38*	(0.25,0.58)
	West	53.69% <sup>2,3</sup>	(45.59%,61.79%)	0.000	(0.000,0.000)	52.54% <sup>2,3</sup>	(44.40%,60.68%)	1.00	n/a
Department Type (0.6304)	All Career	73.62% <sup>2,3</sup>	(67.57%,79.67%)	0.132	(-0.340,0.605)	46.33%	(36.56%,56.10%)	1.14	(0.71,1.83)
	All Volunteer	44.64% <sup>1</sup>	(39.66%,49.63%)	0.000	(0.000,0.000)	43.52%	(38.65%,48.39%)	1.00	n/a
	Combination	38.65% <sup>1</sup>	(35.07%,42.24%)	-0.097	(-0.390,0.196)	41.49%	(37.88%,45.11%)	0.91	(0.68,1.22)
Jurisdiction Type (0.0002)	Urban	71.05% <sup>2</sup>	(65.63%,76.47%)	0.693*	(0.328,1.059)	55.34% <sup>2</sup>	(47.78%,62.89%)	2.00*	(1.39,2.88)
	Rural/Missing	36.71% <sup>1</sup>	(33.55%,39.86%)	0.000	(0.000,0.000)	40.06% <sup>1</sup>	(36.94%,43.18%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	88.28% <sup>2,3</sup>	(84.08%,92.47%)	2.003*	(1.437,2.569)	78.39% <sup>2,3</sup>	(69.76%,87.02%)	7.41*	(4.21,13.05)
	5,000-50,000	59.00% <sup>1,3</sup>	(54.46%,63.54%)	0.789*	(0.496,1.081)	53.84% <sup>1,3</sup>	(48.72%,58.96%)	2.20*	(1.64,2.95)
	0 – 5,000	33.12% <sup>1,2</sup>	(29.51%,36.73%)	0.000	(0.000,0.000)	36.18% <sup>1,2</sup>	(32.44%,39.91%)	1.00	n/a
FFFIPP/ Fatality (0.1487)	Fatality with Investigation	64.43% <sup>3</sup>	(56.16%,72.70%)	0.269	(-0.210,0.749)	47.96%	(37.91%,58.01%)	1.31	(0.81,2.11)
	Fatality - No Investigation	59.05% <sup>3</sup>	(49.06%,69.04%)	0.431	(-0.073,0.935)	51.45%	(40.91%,61.98%)	1.54	(0.93,2.55)
	No Fatality	42.06% <sup>1,2</sup>	(39.23%,44.89%)	0.000	(0.000,0.000)	42.27%	(39.45%,45.09%)	1.00	n/a
Who Completed Survey (Q62) (0.7283)	Fire Chief	40.36% <sup>2</sup>	(36.99%,43.74%)	-0.025	(-0.357,0.306)	42.02%	(38.71%,45.33%)	0.97	(0.70,1.36)
	Safety Officer	66.25% <sup>1,4</sup>	(50.16%,82.34%)	0.495	(-0.425,1.414)	53.12%	(34.07%,72.17%)	1.64	(0.65,4.11)
	Training Officer	48.32%	(37.08%,59.56%)	-0.024	(-0.598,0.549)	42.04%	(31.44%,52.65%)	0.98	(0.55,1.73)
	Other/Missing	44.18% <sup>2</sup>	(37.87%,50.48%)	0.000	(0.000,0.000)	42.55%	(36.52%,48.59%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 59: Q29. Does your fire department have enough Personal Alert Safety System (PASS) devices for all firefighters for use when fighting structure fires? Yes**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		78.77%	(76.32%,81.23%)	0.896*	(0.247,1.544)	78.77%	(76.32%,81.23%)		
Region (0.0176)	Northeast	86.69% <sup>2,3</sup>	(82.31%,91.06%)	0.167	(-0.475,0.808)	84.76% <sup>2</sup>	(79.82%,89.70%)	1.18	(0.62,2.24)
	South	72.66% <sup>1,4</sup>	(67.78%,77.53%)	-0.563	(-1.131,0.006)	73.88% <sup>1,4</sup>	(69.23%,78.53%)	0.57	(0.32,1.01)
	Midwest	78.13% <sup>1</sup>	(73.83%,82.43%)	-0.254	(-0.821,0.314)	78.96%	(74.82%,83.10%)	0.78	(0.44,1.37)
	West	82.77% <sup>2</sup>	(76.01%,89.54%)	0.000	(0.000,0.000)	82.62% <sup>2</sup>	(75.91%,89.33%)	1.00	n/a
Department Type (0.4133)	All Career	97.46% <sup>2,3</sup>	(94.59%,100.00%)	0.465	(-0.744,1.673)	83.23%	(67.68%,98.78%)	1.59	(0.48,5.33)
	All Volunteer	76.99% <sup>1</sup>	(72.35%,81.62%)	0.000	(0.000,0.000)	76.42%	(71.54%,81.30%)	1.00	n/a
	Combination	78.23% <sup>1</sup>	(75.15%,81.32%)	0.222	(-0.145,0.589)	79.86%	(76.95%,82.77%)	1.25	(0.86,1.80)
Jurisdiction Type (0.0001)	Urban	98.31% <sup>2</sup>	(96.66%,99.96%)	2.167*	(1.108,3.225)	96.47% <sup>2</sup>	(92.93%,100.00%)	8.73*	(3.03,25.15)
	Rural/Missing	74.85% <sup>1</sup>	(71.93%,77.78%)	0.000	(0.000,0.000)	77.00% <sup>1</sup>	(74.31%,79.69%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	98.61% <sup>2,3</sup>	(96.93%,100.00%)	2.020*	(0.635,3.405)	95.50% <sup>3</sup>	(89.72%,100.00%)	7.54*	(1.89,30.10)
	5,000-50,000	92.22% <sup>1,3</sup>	(89.70%,94.75%)	1.134*	(0.700,1.567)	89.91% <sup>3</sup>	(86.53%,93.28%)	3.11*	(2.01,4.79)
	0 – 5,000	71.96% <sup>1,2</sup>	(68.48%,75.43%)	0.000	(0.000,0.000)	75.11% <sup>1,2</sup>	(71.94%,78.28%)	1.00	n/a
FFFIPP/ Fatality (0.1163)	Fatality with Investigation	93.39% <sup>2,3</sup>	(88.95%,97.83%)	0.818*	(0.023,1.612)	88.82% <sup>3</sup>	(81.45%,96.18%)	2.27*	(1.02,5.01)
	Fatality - No Investigation	81.30% <sup>1</sup>	(72.82%,89.77%)	-0.126	(-0.768,0.516)	76.78%	(66.80%,86.77%)	0.88	(0.46,1.68)
	No Fatality	78.64% <sup>1</sup>	(76.15%,81.14%)	0.000	(0.000,0.000)	78.75% <sup>1</sup>	(76.26%,81.23%)	1.00	n/a
Who Completed Survey (Q62) (0.6975)	Fire Chief	78.17%	(75.16%,81.17%)	0.113	(-0.306,0.531)	78.82%	(75.92%,81.73%)	1.12	(0.74,1.70)
	Safety Officer	90.42%	(78.50%,100.00%)	0.784	(-0.635,2.202)	87.42%	(73.14%,100.00%)	2.19	(0.53,9.04)
	Training Officer	83.83%	(75.17%,92.49%)	0.251	(-0.512,1.014)	80.86%	(71.30%,90.42%)	1.29	(0.60,2.76)
	Other/Missing	77.65%	(71.83%,83.47%)	0.000	(0.000,0.000)	77.07%	(71.18%,82.95%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 60: Q30. About how often do you think your firefighters wear their PASS devices when fighting structure fires? - Most of the time or Always**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		87.98%	(85.97%,90.00%)	1.320*	(0.522,2.118)	87.98%	(85.97%,90.00%)		
Region (0.0023)	Northeast	96.88% <sup>2,3,4</sup>	(94.59%,99.18%)	1.279*	(0.302,2.255)	96.35% <sup>2,3,4</sup>	(93.67%,99.02%)	3.59*	(1.35,9.53)
	South	84.55% <sup>1</sup>	(80.48%,88.63%)	-0.268	(-0.957,0.420)	85.50% <sup>1</sup>	(81.69%,89.31%)	0.76	(0.38,1.52)
	Midwest	85.24% <sup>1</sup>	(81.53%,88.94%)	-0.264	(-0.940,0.413)	85.56% <sup>1</sup>	(81.95%,89.17%)	0.77	(0.39,1.51)
	West	88.08% <sup>1</sup>	(82.05%,94.11%)	0.000	(0.000,0.000)	88.38% <sup>1</sup>	(82.51%,94.25%)	1.00	n/a
Department Type (0.3209)	All Career	97.57% <sup>2,3</sup>	(94.46%,100.00%)	-0.340	(-1.664,0.984)	81.63%	(64.01%,99.25%)	0.71	(0.19,2.68)
	All Volunteer	86.35% <sup>1</sup>	(82.35%,90.36%)	0.000	(0.000,0.000)	85.82%	(81.56%,90.07%)	1.00	n/a
	Combination	88.09% <sup>1</sup>	(85.66%,90.52%)	0.323	(-0.145,0.791)	89.09%	(86.80%,91.38%)	1.38	(0.86,2.21)
Jurisdiction Type (0.0000)	Urban	99.72% <sup>2</sup>	(99.34%,100.00%)	3.341*	(2.022,4.659)	99.44% <sup>2</sup>	(98.70%,100.00%)	28.23*	(7.55,105.57)
	Rural/Missing	85.62% <sup>1</sup>	(83.21%,88.04%)	0.000	(0.000,0.000)	86.86% <sup>1</sup>	(84.67%,89.06%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0001)	50,000+	98.97% <sup>2,3</sup>	(97.44%,100.00%)	1.925*	(0.124,3.726)	97.48% <sup>3</sup>	(93.18%,100.00%)	6.85*	(1.13,41.49)
	5,000-50,000	96.48% <sup>1,3</sup>	(94.71%,98.26%)	1.287*	(0.666,1.909)	95.38% <sup>3</sup>	(92.94%,97.82%)	3.62*	(1.95,6.74)
	0 – 5,000	83.73% <sup>1,2</sup>	(80.85%,86.62%)	0.000	(0.000,0.000)	85.64% <sup>1,2</sup>	(83.06%,88.22%)	1.00	n/a
FFFIPP/ Fatality (0.2856)	Fatality with Investigation	95.63% <sup>2,3</sup>	(91.86%,99.40%)	0.504	(-0.480,1.487)	92.19%	(85.54%,98.83%)	1.65	(0.62,4.43)
	Fatality - No Investigation	87.04% <sup>1</sup>	(79.50%,94.58%)	-0.443	(-1.186,0.300)	83.01%	(73.95%,92.08%)	0.64	(0.31,1.35)
	No Fatality	87.94% <sup>1</sup>	(85.89%,89.98%)	0.000	(0.000,0.000)	88.00%	(85.97%,90.04%)	1.00	n/a
Who Completed Survey (Q62) (0.9656)	Fire Chief	88.01%	(85.61%,90.42%)	0.131	(-0.383,0.645)	88.31%	(85.97%,90.66%)	1.14	(0.68,1.91)
	Safety Officer	90.42%	(78.50%,100.00%)	0.055	(-1.419,1.530)	87.57%	(73.43%,100.00%)	1.06	(0.24,4.62)
	Training Officer	88.86%	(81.14%,96.58%)	0.038	(-0.921,0.997)	87.40%	(78.72%,96.07%)	1.04	(0.40,2.71)
	Other/Missing	87.26%	(82.47%,92.05%)	0.000	(0.000,0.000)	87.00%	(82.28%,91.72%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 61: Q33. Do your firefighters ever have to share facepieces for SCBAs? Yes**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		50.11%	(47.12%,53.10%)	0.017	(-0.480,0.514)	50.11%	(47.12%,53.10%)		
Region (0.0063)	Northeast	44.13% <sup>2</sup>	(37.60%,50.66%)	0.246	(-0.227,0.718)	45.49% <sup>2</sup>	(38.94%,52.04%)	1.28	(0.80,2.05)
	South	56.84% <sup>1,4</sup>	(51.55%,62.14%)	0.716*	(0.271,1.160)	56.36% <sup>1,4</sup>	(51.08%,61.65%)	2.05*	(1.31,3.19)
	Midwest	51.44% <sup>4</sup>	(46.37%,56.52%)	0.453*	(0.014,0.892)	50.32% <sup>4</sup>	(45.34%,55.30%)	1.57*	(1.01,2.44)
	West	38.35% <sup>2,3</sup>	(29.75%,46.95%)	0.000	(0.000,0.000)	39.85% <sup>2,3</sup>	(31.24%,48.45%)	1.00	n/a
Department Type (0.0000)	All Career	8.59% <sup>2,3</sup>	(4.60%,12.58%)	-1.608*	(-2.221,-0.995)	18.78% <sup>2,3</sup>	(9.78%,27.77%)	0.20*	(0.11,0.37)
	All Volunteer	51.03% <sup>1</sup>	(45.61%,56.45%)	0.000	(0.000,0.000)	51.68% <sup>1</sup>	(46.10%,57.25%)	1.00	n/a
	Combination	52.74% <sup>1</sup>	(48.90%,56.57%)	-0.038	(-0.334,0.259)	50.79% <sup>1</sup>	(46.97%,54.61%)	0.96	(0.72,1.29)
Jurisdiction Type (0.0202)	Urban	27.50% <sup>2</sup>	(21.67%,33.33%)	-0.468*	(-0.863,-0.073)	40.69% <sup>2</sup>	(32.28%,49.10%)	0.63*	(0.42,0.93)
	Rural/Missing	54.38% <sup>1</sup>	(51.01%,57.76%)	0.000	(0.000,0.000)	51.54% <sup>1</sup>	(48.27%,54.81%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	10.45% <sup>2,3</sup>	(5.87%,15.04%)	-1.268*	(-1.927,-0.608)	26.04% <sup>2,3</sup>	(14.31%,37.76%)	0.28*	(0.15,0.54)
	5,000-50,000	37.48% <sup>1,3</sup>	(32.77%,42.18%)	-0.552*	(-0.844,-0.260)	41.20% <sup>1,3</sup>	(35.92%,46.48%)	0.58*	(0.43,0.77)
	0 – 5,000	57.08% <sup>1,2</sup>	(53.20%,60.97%)	0.000	(0.000,0.000)	54.18% <sup>1,2</sup>	(50.25%,58.10%)	1.00	n/a
FFFIPP/ Fatality (0.2207)	Fatality with Investigation	34.96% <sup>2,3</sup>	(26.69%,43.24%)	0.038	(-0.440,0.515)	50.88%	(40.26%,61.50%)	1.04	(0.64,1.67)
	Fatality - No Investigation	54.48% <sup>1</sup>	(43.81%,65.15%)	0.437	(-0.056,0.931)	59.83%	(49.47%,70.20%)	1.55	(0.95,2.54)
	No Fatality	50.18% <sup>1</sup>	(47.14%,53.22%)	0.000	(0.000,0.000)	50.02%	(46.99%,53.05%)	1.00	n/a
Who Completed Survey (Q62) (0.1650)	Fire Chief	51.80% <sup>2,3</sup>	(48.19%,55.42%)	-0.114	(-0.439,0.212)	50.54%	(46.98%,54.11%)	0.89	(0.64,1.24)
	Safety Officer	27.24% <sup>1,4</sup>	(11.30%,43.19%)	-0.771	(-1.730,0.188)	35.64%	(15.75%,55.53%)	0.46	(0.18,1.21)
	Training Officer	36.30% <sup>1,4</sup>	(24.51%,48.09%)	-0.552	(-1.158,0.054)	40.47%	(28.30%,52.65%)	0.58	(0.31,1.06)
	Other/Missing	51.74% <sup>2,3</sup>	(45.14%,58.33%)	0.000	(0.000,0.000)	53.15%	(46.63%,59.67%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 62: Q33a. Reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters: Didn't know it was recommended**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		9.57%	(6.85%,12.29%)	-2.363*	(-3.655,-1.071)	9.57%	(6.85%,12.29%)		
Region (0.8509)	Northeast	6.78%	(1.07%,12.50%)	-0.319	(-1.670,1.031)	7.11%	(1.03%,13.19%)	0.73	(0.19,2.80)
	South	11.11%	(6.49%,15.73%)	0.149	(-0.978,1.277)	10.88%	(6.23%,15.52%)	1.16	(0.38,3.58)
	Midwest	9.21%	(4.82%,13.61%)	-0.017	(-1.154,1.121)	9.38%	(4.81%,13.94%)	0.98	(0.32,3.07)
	West	10.08%	(0.15%,20.01%)	0.000	(0.000,0.000)	9.52%	(0.84%,18.19%)	1.00	n/a
Department Type (0.5567)	All Volunteer	11.13%	(5.72%,16.54%)	0.211	(-0.494,0.916)	10.77%	(5.34%,16.20%)	1.24	(0.61,2.50)
	All Career/ Combination	8.75%	(5.73%,11.78%)	0.000	(0.000,0.000)	8.91%	(5.77%,12.06%)	1.00	n/a
Jurisdiction Type (0.9486)	Urban	9.07%	(0.53%,17.61%)	-0.039	(-1.222,1.144)	9.27%	(0.00%,18.71%)	0.96	(0.29,3.14)
	Rural/Missing	9.62%	(6.75%,12.49%)	0.000	(0.000,0.000)	9.60%	(6.75%,12.45%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.9934)	5,000+	9.51%	(4.77%,14.26%)	0.003	(-0.695,0.701)	9.59%	(4.65%,14.52%)	1.00	(0.50,2.02)
	0 – 5,000	9.59%	(6.36%,12.81%)	0.000	(0.000,0.000)	9.56%	(6.31%,12.82%)	1.00	n/a
FFFIPP/ Fatality (0.2946)	Fatality with Investigation	4.43%	(0.00%,10.49%)	-0.801	(-2.276,0.674)	4.59%	(0.00%,10.92%)	0.45	(0.10,1.96)
	Fatality - No Investigation	3.95%	(0.00%,9.53%)	-0.932	(-2.464,0.599)	4.05%	(0.00%,9.85%)	0.39	(0.09,1.82)
	No Fatality	9.65%	(6.89%,12.41%)	0.000	(0.000,0.000)	9.65%	(6.89%,12.40%)	1.00	n/a
Who Completed Survey (Q62) (0.5678)	Fire Chief	9.09%	(6.05%,12.13%)	0.006	(-0.780,0.791)	9.21%	(6.08%,12.35%)	1.01	(0.46,2.21)
	Training Officer	18.20%	(0.00%,37.17%)	0.705	(-0.712,2.122)	16.91%	(0.00%,34.41%)	2.02	(0.49,8.35)
	Safety Officer, Other, Missing	9.42%	(3.78%,15.06%)	0.000	(0.000,0.000)	9.17%	(3.55%,14.78%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 63: Q33a. Reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters: They cost too much, there is not enough money in the budget**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		63.95%	(59.69%,68.21%)	0.716	(-0.092,1.524)	63.95%	(59.69%,68.21%)		
Region (0.6721)	Northeast	58.09%	(48.20%,67.99%)	-0.291	(-1.056,0.474)	59.18%	(49.06%,69.30%)	0.75	(0.35,1.61)
	South	66.66%	(59.73%,73.60%)	0.028	(-0.682,0.738)	66.56%	(59.59%,73.54%)	1.03	(0.51,2.09)
	Midwest	63.42%	(56.29%,70.56%)	-0.126	(-0.840,0.588)	63.07%	(55.82%,70.33%)	0.88	(0.43,1.80)
	West	66.45%	(52.43%,80.47%)	0.000	(0.000,0.000)	65.94%	(51.78%,80.10%)	1.00	n/a
Department Type (0.6700)	All Career	67.49%	(44.77%,90.20%)	0.447	(-0.685,1.579)	71.79%	(49.44%,94.15%)	1.56	(0.50,4.85)
	All Volunteer	62.75%	(54.92%,70.58%)	0.000	(0.000,0.000)	62.06%	(54.08%,70.03%)	1.00	n/a
	Combination	64.54%	(59.45%,69.62%)	0.121	(-0.295,0.537)	64.84%	(59.73%,69.94%)	1.13	(0.74,1.71)
Jurisdiction Type (0.4034)	Urban	57.15%	(43.65%,70.65%)	-0.278	(-0.931,0.375)	57.99%	(42.98%,73.00%)	0.76	(0.39,1.45)
	Rural/Missing	64.60%	(60.12%,69.07%)	0.000	(0.000,0.000)	64.52%	(60.07%,68.96%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.7459)	50,000+	55.70%	(30.51%,80.90%)	-0.445	(-1.636,0.747)	53.84%	(25.31%,82.37%)	0.64	(0.19,2.11)
	5,000-50,000	61.28%	(53.43%,69.13%)	-0.082	(-0.505,0.341)	62.54%	(54.47%,70.60%)	0.92	(0.60,1.41)
	0 – 5,000	64.77%	(59.74%,69.79%)	0.000	(0.000,0.000)	64.43%	(59.32%,69.53%)	1.00	n/a
FFFIPP/ Fatality (0.7431)	Fatality with Investigation	62.65%	(47.20%,78.09%)	0.039	(-0.680,0.758)	64.89%	(49.04%,80.74%)	1.04	(0.51,2.13)
	Fatality - No Investigation	57.09%	(42.17%,72.01%)	-0.257	(-0.925,0.411)	57.97%	(42.49%,73.44%)	0.77	(0.40,1.51)
	No Fatality	64.02%	(59.70%,68.34%)	0.000	(0.000,0.000)	64.00%	(59.69%,68.32%)	1.00	n/a
Who Completed Survey (Q62) (0.5838)	Fire Chief	62.48%	(57.51%,67.45%)	-0.150	(-0.633,0.332)	62.52%	(57.49%,67.55%)	0.86	(0.53,1.39)
	Safety Officer	72.95%	(43.00%,100.00%)	0.382	(-1.226,1.989)	73.88%	(44.11%,100.00%)	1.46	(0.29,7.31)
	Training Officer	75.34%	(58.19%,92.50%)	0.436	(-0.604,1.476)	74.91%	(57.20%,92.62%)	1.55	(0.55,4.37)
	Other/Missing	66.03%	(56.41%,75.66%)	0.000	(0.000,0.000)	65.95%	(56.38%,75.51%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 64: Q33a. Reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters: We don't have enough equipment for all of our firefighters**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		49.45%	(45.00%,53.89%)	0.478	(-0.335,1.291)	49.45%	(45.00%,53.89%)		
Region (0.0058)	Northeast	35.92% <sup>3,4</sup>	(26.38%,45.47%)	-0.987*	(-1.776,-0.198)	36.45% <sup>3,4</sup>	(26.71%,46.20%)	0.37*	(0.17,0.82)
	South	46.25% <sup>3</sup>	(38.91%,53.59%)	-0.532	(-1.263,0.199)	47.18%	(39.78%,54.58%)	0.59	(0.28,1.22)
	Midwest	58.46% <sup>1,2</sup>	(51.28%,65.65%)	-0.125	(-0.853,0.604)	57.01% <sup>1</sup>	(49.85%,64.16%)	0.88	(0.43,1.83)
	West	60.19% <sup>1</sup>	(45.44%,74.93%)	0.000	(0.000,0.000)	59.94% <sup>1</sup>	(44.59%,75.29%)	1.00	n/a
Department Type (0.6545)	All Career	21.33% <sup>2,3</sup>	(1.16%,41.49%)	-0.660	(-2.070,0.751)	35.09%	(4.82%,65.36%)	0.52	(0.13,2.12)
	All Volunteer	48.98% <sup>1</sup>	(40.82%,57.13%)	0.000	(0.000,0.000)	50.23%	(42.24%,58.23%)	1.00	n/a
	Combination	50.04% <sup>1</sup>	(44.73%,55.35%)	-0.045	(-0.452,0.363)	49.18%	(43.84%,54.51%)	0.96	(0.64,1.44)
Jurisdiction Type (0.8243)	Urban	36.30% <sup>2</sup>	(23.09%,49.50%)	-0.075	(-0.736,0.586)	47.82%	(32.84%,62.80%)	0.93	(0.48,1.80)
	Rural/Missing	50.70% <sup>1</sup>	(46.01%,55.40%)	0.000	(0.000,0.000)	49.59%	(44.96%,54.21%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0059)	50,000+	22.69% <sup>3</sup>	(1.19%,44.19%)	-1.135	(-2.480,0.211)	27.33%	(1.76%,52.90%)	0.32	(0.08,1.23)
	5,000-50,000	35.50% <sup>3</sup>	(27.68%,43.31%)	-0.658*	(-1.089,-0.226)	37.40% <sup>3</sup>	(29.08%,45.71%)	0.52*	(0.34,0.80)
	0 – 5,000	53.62% <sup>1,2</sup>	(48.35%,58.88%)	0.000	(0.000,0.000)	52.98% <sup>2</sup>	(47.69%,58.27%)	1.00	n/a
FFFIPP/ Fatality (0.1344)	Fatality with Investigation	59.67%	(44.42%,74.92%)	0.712	(-0.033,1.457)	65.52% <sup>3</sup>	(50.02%,81.02%)	2.04	(0.97,4.29)
	Fatality - No Investigation	49.08%	(34.04%,64.12%)	0.295	(-0.406,0.997)	56.23%	(40.56%,71.89%)	1.34	(0.67,2.71)
	No Fatality	49.40%	(44.90%,53.91%)	0.000	(0.000,0.000)	49.31% <sup>1</sup>	(44.81%,53.81%)	1.00	n/a
Who Completed Survey (Q62) (0.2463)	Fire Chief	51.48% <sup>2</sup>	(46.33%,56.62%)	0.203	(-0.261,0.667)	51.42%	(46.23%,56.62%)	1.23	(0.77,1.95)
	Safety Officer	22.83% <sup>1</sup>	(0.00%,50.74%)	-1.059	(-2.631,0.514)	24.06%	(0.00%,51.01%)	0.35	(0.07,1.67)
	Training Officer	41.39%	(20.04%,62.74%)	-0.329	(-1.294,0.637)	38.97%	(19.04%,58.89%)	0.72	(0.27,1.89)
	Other/Missing	45.96%	(36.06%,55.87%)	0.000	(0.000,0.000)	46.61%	(36.94%,56.29%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 65: Q33a. Reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters: Shared systems work fine for our needs**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		47.17%	(42.72%,51.62%)	-0.024	(-0.779,0.730)	47.17%	(42.72%,51.62%)		
Region (0.9716)	Northeast	46.19%	(36.12%,56.27%)	-0.100	(-0.832,0.632)	46.00%	(35.74%,56.27%)	0.90	(0.44,1.88)
	South	46.42%	(39.11%,53.73%)	-0.084	(-0.751,0.582)	46.39%	(39.01%,53.76%)	0.92	(0.47,1.79)
	Midwest	48.64%	(41.24%,56.05%)	-0.000	(-0.671,0.671)	48.47%	(41.01%,55.93%)	1.00	(0.51,1.96)
	West	47.31%	(32.26%,62.37%)	0.000	(0.000,0.000)	48.47%	(33.69%,63.26%)	1.00	n/a
Department Type (0.8468)	All Career	49.53%	(24.99%,74.07%)	0.229	(-0.950,1.407)	53.98%	(25.49%,82.47%)	1.26	(0.39,4.08)
	All Volunteer	47.85%	(39.64%,56.06%)	0.000	(0.000,0.000)	48.32%	(40.01%,56.63%)	1.00	n/a
	Combination	46.78%	(41.48%,52.08%)	-0.074	(-0.478,0.329)	46.48%	(41.15%,51.81%)	0.93	(0.62,1.39)
Jurisdiction Type (0.3901)	Urban	41.60%	(28.49%,54.72%)	-0.279	(-0.916,0.358)	40.93%	(26.36%,55.51%)	0.76	(0.40,1.43)
	Rural/Missing	47.70%	(42.99%,52.41%)	0.000	(0.000,0.000)	47.76%	(43.09%,52.44%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.8140)	50,000+	49.21%	(24.38%,74.03%)	0.253	(-0.905,1.411)	52.74%	(24.87%,80.62%)	1.29	(0.40,4.10)
	5,000-50,000	48.42%	(40.29%,56.55%)	0.119	(-0.298,0.536)	49.43%	(40.82%,58.04%)	1.13	(0.74,1.71)
	0 – 5,000	46.80%	(41.54%,52.06%)	0.000	(0.000,0.000)	46.49%	(41.19%,51.80%)	1.00	n/a
FFFIPP/ Fatality (0.7834)	Fatality with Investigation	44.49%	(28.97%,60.00%)	-0.127	(-0.792,0.539)	44.03%	(28.15%,59.90%)	0.88	(0.45,1.71)
	Fatality - No Investigation	51.50%	(36.72%,66.27%)	0.182	(-0.453,0.818)	51.66%	(36.56%,66.75%)	1.20	(0.64,2.27)
	No Fatality	47.14%	(42.63%,51.65%)	0.000	(0.000,0.000)	47.14%	(42.63%,51.65%)	1.00	n/a
Who Completed Survey (Q62) (0.4097)	Fire Chief	48.51%	(43.37%,53.66%)	0.057	(-0.397,0.511)	48.45%	(43.24%,53.66%)	1.06	(0.67,1.67)
	Safety Officer	37.20%	(3.94%,70.46%)	-0.390	(-1.915,1.134)	37.56%	(3.19%,71.93%)	0.68	(0.15,3.11)
	Training Officer	30.36%	(11.20%,49.51%)	-0.727	(-1.743,0.289)	30.06%	(10.63%,49.50%)	0.48	(0.17,1.33)
	Other/Missing	46.77%	(36.82%,56.73%)	0.000	(0.000,0.000)	47.04%	(37.06%,57.01%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 66: Q33a. Reasons why your fire department does not have personally-fitted SCBA facepieces for all of your firefighters: Other (Please specify: \_\_\_\_\_)**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		10.05%	(7.50%,12.60%)	-3.272*	(-4.755,-1.790)	10.05%	(7.50%,12.60%)		
Region (0.2641)	Northeast	16.57% <sup>2,3</sup>	(9.41%,23.73%)	0.520	(-0.825,1.865)	14.99%	(8.50%,21.47%)	1.68	(0.44,6.45)
	South	8.42% <sup>1</sup>	(4.64%,12.20%)	-0.174	(-1.515,1.167)	8.36%	(4.53%,12.18%)	0.84	(0.22,3.21)
	Midwest	8.37% <sup>1</sup>	(4.51%,12.23%)	-0.098	(-1.458,1.262)	8.93%	(4.92%,12.94%)	0.91	(0.23,3.53)
	West	9.11%	(0.00%,18.72%)	0.000	(0.000,0.000)	9.72%	(0.00%,20.08%)	1.00	n/a
Department Type (0.8948)	All Career	19.87%	(0.08%,39.67%)	-0.301	(-1.818,1.216)	7.52%	(0.00%,17.29%)	0.74	(0.16,3.37)
	All Volunteer	9.87%	(5.42%,14.33%)	0.000	(0.000,0.000)	9.76%	(5.43%,14.09%)	1.00	n/a
	Combination	10.02%	(6.88%,13.15%)	0.061	(-0.575,0.697)	10.27%	(7.10%,13.45%)	1.06	(0.56,2.01)
Jurisdiction Type (0.6834)	Urban	19.36%	(8.45%,30.27%)	0.189	(-0.719,1.096)	11.52%	(3.34%,19.70%)	1.21	(0.49,2.99)
	Rural/Missing	9.16%	(6.58%,11.74%)	0.000	(0.000,0.000)	9.82%	(7.14%,12.51%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0001)	50,000+	45.57% <sup>3</sup>	(20.37%,70.77%)	2.640*	(1.161,4.118)	49.88% <sup>3</sup>	(16.80%,82.96%)	14.01*	(3.19,61.46)
	5,000-50,000	20.10% <sup>3</sup>	(13.58%,26.63%)	1.139*	(0.501,1.778)	18.92% <sup>3</sup>	(12.19%,25.66%)	3.13*	(1.65,5.92)
	0 – 5,000	6.93% <sup>1,2</sup>	(4.25%,9.61%)	0.000	(0.000,0.000)	7.08% <sup>1,2</sup>	(4.31%,9.85%)	1.00	n/a
FFFIPP/ Fatality (0.6836)	Fatality with Investigation	14.36%	(4.17%,24.56%)	-0.221	(-1.173,0.731)	8.30%	(1.63%,14.96%)	0.80	(0.31,2.08)
	Fatality - No Investigation	17.03%	(6.83%,27.22%)	0.287	(-0.524,1.099)	12.73%	(4.79%,20.66%)	1.33	(0.59,3.00)
	No Fatality	9.96%	(7.37%,12.54%)	0.000	(0.000,0.000)	10.03%	(7.44%,12.61%)	1.00	n/a
Who Completed Survey (Q62) (0.3938)	Fire Chief	11.31% <sup>4</sup>	(8.13%,14.48%)	0.728	(-0.101,1.557)	11.15% <sup>4</sup>	(7.99%,14.32%)	2.07	(0.90,4.75)
	Safety Officer	11.60%	(0.00%,33.19%)	0.415	(-2.391,3.221)	8.53%	(0.00%,28.62%)	1.51	(0.09,25.06)
	Training Officer	9.74%	(0.00%,21.61%)	0.660	(-0.997,2.318)	10.54%	(0.00%,23.75%)	1.94	(0.37,10.16)
	Other/Missing	5.54% <sup>1</sup>	(1.64%,9.44%)	0.000	(0.000,0.000)	5.90% <sup>1</sup>	(1.83%,9.97%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 67: Q34. About how often do you think your firefighters use SCBAs while fighting structure fires? - Most of the time or Always**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		91.39%	(89.62%,93.16%)	1.990*	(1.034,2.946)	91.39%	(89.62%,93.16%)		
Region (0.0025)	Northeast	99.14% <sup>2,3,4</sup>	(97.95%,100.00%)	2.296*	(0.736,3.856)	99.09% <sup>2,3,4</sup>	(97.84%,100.00%)	9.94*	(2.09,47.29)
	South	89.71% <sup>1</sup>	(86.26%,93.16%)	-0.266	(-1.072,0.541)	89.67% <sup>1</sup>	(86.25%,93.09%)	0.77	(0.34,1.72)
	Midwest	87.42% <sup>1</sup>	(83.85%,91.00%)	-0.435	(-1.217,0.347)	88.06% <sup>1</sup>	(84.61%,91.50%)	0.65	(0.30,1.42)
	West	92.12% <sup>1</sup>	(87.14%,97.11%)	0.000	(0.000,0.000)	91.83% <sup>1</sup>	(86.67%,96.98%)	1.00	n/a
Department Type (0.7492)	All Career	98.46% <sup>2,3</sup>	(96.47%,100.00%)	0.479	(-1.110,2.069)	94.75%	(87.14%,100.00%)	1.62	(0.33,7.91)
	All Volunteer	92.28% <sup>1</sup>	(89.03%,95.54%)	0.000	(0.000,0.000)	91.93%	(88.48%,95.37%)	1.00	n/a
	Combination	90.38% <sup>1</sup>	(88.13%,92.62%)	-0.119	(-0.697,0.460)	91.05%	(88.88%,93.23%)	0.89	(0.50,1.58)
Jurisdiction Type	Urban	---	---	---	---	---	---	---	---
	Rural/Missing	---	---	---	---	---	---	---	---
Jurisdiction Size <sup>f</sup> (0.0001)	50,000+	99.22% <sup>3</sup>	(97.70%,100.00%)	2.432*	(0.035,4.828)	98.88% <sup>3</sup>	(96.27%,100.00%)	11.38*	(1.04,125.02)
	5,000-50,000	97.73% <sup>3</sup>	(96.27%,99.20%)	1.612*	(0.844,2.379)	97.50% <sup>3</sup>	(95.81%,99.19%)	5.01*	(2.33,10.80)
	0 – 5,000	88.34% <sup>1,2</sup>	(85.82%,90.86%)	0.000	(0.000,0.000)	88.90% <sup>1,2</sup>	(86.40%,91.40%)	1.00	n/a
FFFIPP/ Fatality (0.5904)	Fatality with Investigation	96.99% <sup>3</sup>	(93.59%,100.00%)	0.617	(-0.593,1.827)	95.03%	(89.57%,100.00%)	1.85	(0.55,6.22)
	Fatality - No Investigation	94.66%	(89.16%,100.00%)	0.161	(-0.982,1.303)	92.49%	(85.11%,99.88%)	1.17	(0.37,3.68)
	No Fatality	91.32% <sup>1</sup>	(89.52%,93.12%)	0.000	(0.000,0.000)	91.37%	(89.58%,93.15%)	1.00	n/a
Who Completed Survey (Q62) (0.6970)	Fire Chief	91.13%	(89.01%,93.24%)	0.186	(-0.399,0.772)	91.44%	(89.39%,93.49%)	1.20	(0.67,2.16)
	Safety Officer	94.67%	(86.64%,100.00%)	0.307	(-1.422,2.037)	92.30%	(81.11%,100.00%)	1.36	(0.24,7.67)
	Training Officer	95.81%	(90.51%,100.00%)	0.853	(-0.589,2.295)	95.30%	(89.47%,100.00%)	2.35	(0.55,9.93)
	Other/Missing	90.48%	(86.18%,94.78%)	0.000	(0.000,0.000)	89.96%	(85.58%,94.35%)	1.00	n/a

--- Effect not included in model.

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 68: Q38. Does your fire department have Automated External Defibrillators (AEDs)? Yes**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		77.45%	(74.93%,79.96%)	0.980*	(0.397,1.562)	77.45%	(74.93%,79.96%)		
Region (0.4309)	Northeast	78.19%	(72.79%,83.59%)	-0.116	(-0.671,0.438)	77.21%	(71.58%,82.84%)	0.89	(0.51,1.55)
	South	74.44%	(69.71%,79.17%)	-0.254	(-0.768,0.259)	74.78%	(70.07%,79.48%)	0.78	(0.46,1.30)
	Midwest	79.16%	(75.04%,83.28%)	0.045	(-0.468,0.558)	79.85%	(75.82%,83.88%)	1.05	(0.63,1.75)
	West	80.04%	(73.06%,87.01%)	0.000	(0.000,0.000)	79.14%	(72.03%,86.24%)	1.00	n/a
Department Type (0.5352)	All Career	92.15% <sup>2,3</sup>	(88.07%,96.24%)	0.389	(-0.316,1.093)	82.53%	(72.77%,92.29%)	1.47	(0.73,2.98)
	All Volunteer	76.89% <sup>1</sup>	(72.26%,81.52%)	0.000	(0.000,0.000)	76.41%	(71.57%,81.25%)	1.00	n/a
	Combination	76.58% <sup>1</sup>	(73.39%,79.77%)	0.080	(-0.265,0.426)	77.78%	(74.65%,80.91%)	1.08	(0.77,1.53)
Jurisdiction Type (0.2188)	Urban	87.81% <sup>2</sup>	(83.64%,91.98%)	0.322	(-0.191,0.836)	81.94%	(74.98%,88.91%)	1.38	(0.83,2.31)
	Rural/Missing	75.39% <sup>1</sup>	(72.50%,78.29%)	0.000	(0.000,0.000)	76.83%	(74.08%,79.57%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0003)	50,000+	95.23% <sup>2,3</sup>	(92.38%,98.08%)	1.397*	(0.594,2.200)	92.06% <sup>2,3</sup>	(86.50%,97.61%)	4.04*	(1.81,9.03)
	5,000-50,000	85.15% <sup>1,3</sup>	(81.77%,88.52%)	0.600*	(0.234,0.967)	84.02% <sup>1,3</sup>	(80.09%,87.95%)	1.82*	(1.26,2.63)
	0 – 5,000	73.31% <sup>1,2</sup>	(69.90%,76.73%)	0.000	(0.000,0.000)	74.41% <sup>1,2</sup>	(70.96%,77.86%)	1.00	n/a
FFFIPP/ Fatality (0.1374)	Fatality with Investigation	88.75% <sup>3</sup>	(83.09%,94.41%)	0.416	(-0.189,1.020)	83.64%	(75.75%,91.53%)	1.52	(0.83,2.77)
	Fatality - No Investigation	85.89% <sup>3</sup>	(78.63%,93.15%)	0.488	(-0.133,1.108)	84.58%	(76.90%,92.26%)	1.63	(0.88,3.03)
	No Fatality	77.28% <sup>1,2</sup>	(74.72%,79.83%)	0.000	(0.000,0.000)	77.34%	(74.80%,79.89%)	1.00	n/a
Who Completed Survey (Q62) (0.1093)	Fire Chief	76.08% <sup>3</sup>	(72.99%,79.16%)	0.010	(-0.372,0.393)	76.51% <sup>3</sup>	(73.45%,79.58%)	1.01	(0.69,1.48)
	Safety Officer	87.81%	(76.13%,99.48%)	0.596	(-0.573,1.765)	85.24%	(71.29%,99.20%)	1.81	(0.56,5.84)
	Training Officer	90.25% <sup>1,4</sup>	(83.19%,97.32%)	0.966*	(0.092,1.840)	89.27% <sup>1,4</sup>	(81.57%,96.96%)	2.63*	(1.10,6.30)
	Other/Missing	76.66% <sup>3</sup>	(70.90%,82.41%)	0.000	(0.000,0.000)	76.33% <sup>3</sup>	(70.49%,82.18%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 69: Q39. How often has routine maintenance, including replacement of battery packs, been performed on your AEDs? - Once a year or less**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		40.13%	(36.77%,43.49%)	-0.704*	(-1.278,-0.130)	40.13%	(36.77%,43.49%)		
Region (0.1848)	Northeast	40.40%	(33.22%,47.59%)	0.402	(-0.127,0.930)	40.64%	(33.34%,47.94%)	1.49	(0.88,2.54)
	South	44.05% <sup>4</sup>	(38.03%,50.08%)	0.542*	(0.044,1.040)	44.03% <sup>4</sup>	(38.02%,50.04%)	1.72*	(1.05,2.83)
	Midwest	39.32%	(33.56%,45.07%)	0.325	(-0.172,0.822)	38.82%	(33.05%,44.59%)	1.38	(0.84,2.28)
	West	30.80% <sup>2</sup>	(21.59%,40.02%)	0.000	(0.000,0.000)	31.51% <sup>2</sup>	(22.28%,40.75%)	1.00	n/a
Department Type (0.4703)	All Career	33.45%	(26.99%,39.91%)	0.024	(-0.453,0.501)	43.65%	(32.68%,54.63%)	1.02	(0.64,1.65)
	All Volunteer	42.16%	(35.97%,48.35%)	0.000	(0.000,0.000)	43.07%	(36.66%,49.49%)	1.00	n/a
	Combination	39.68%	(35.36%,44.00%)	-0.202	(-0.540,0.137)	38.31%	(33.95%,42.66%)	0.82	(0.58,1.15)
Jurisdiction Type (0.7401)	Urban	36.08%	(29.60%,42.55%)	-0.071	(-0.492,0.350)	38.74%	(29.97%,47.51%)	0.93	(0.61,1.42)
	Rural/Missing	41.01%	(37.16%,44.85%)	0.000	(0.000,0.000)	40.41%	(36.63%,44.20%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0034)	50,000+	20.93% <sup>2,3</sup>	(15.31%,26.54%)	-0.853*	(-1.389,-0.316)	23.18% <sup>2,3</sup>	(14.73%,31.64%)	0.43*	(0.25,0.73)
	5,000-50,000	39.66% <sup>1</sup>	(34.44%,44.87%)	-0.071	(-0.403,0.261)	39.51% <sup>1</sup>	(33.75%,45.28%)	0.93	(0.67,1.30)
	0 – 5,000	41.30% <sup>1</sup>	(36.80%,45.79%)	0.000	(0.000,0.000)	41.21% <sup>1</sup>	(36.55%,45.86%)	1.00	n/a
FFFIPP/ Fatality (0.3936)	Fatality with Investigation	33.13%	(24.07%,42.20%)	-0.051	(-0.515,0.412)	38.85%	(28.27%,49.42%)	0.95	(0.60,1.51)
	Fatality - No Investigation	45.52%	(34.64%,56.40%)	0.321	(-0.154,0.796)	47.78%	(36.64%,58.93%)	1.38	(0.86,2.22)
	No Fatality	40.12%	(36.70%,43.55%)	0.000	(0.000,0.000)	40.05%	(36.64%,43.46%)	1.00	n/a
Who Completed Survey (Q62) (0.2466)	Fire Chief	42.27%	(38.14%,46.40%)	0.189	(-0.175,0.553)	42.23%	(38.09%,46.37%)	1.21	(0.84,1.74)
	Safety Officer	26.41%	(10.24%,42.58%)	-0.426	(-1.402,0.549)	28.46%	(9.55%,47.37%)	0.65	(0.25,1.73)
	Training Officer	30.47%	(18.94%,42.01%)	-0.292	(-0.931,0.347)	31.24%	(19.17%,43.31%)	0.75	(0.39,1.41)
	Other/Missing	38.30%	(31.13%,45.46%)	0.000	(0.000,0.000)	37.75%	(30.49%,45.02%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 70: Q40. About how often do your firefighters carry radios or other two-way communication devices while responding to structure fires? - Most of the time or Always**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		91.04%	(89.33%,92.74%)	2.298*	(1.377,3.218)	91.04%	(89.33%,92.74%)		
Region (0.0456)	Northeast	88.31% <sup>2</sup>	(84.25%,92.37%)	-0.333	(-1.095,0.430)	87.91% <sup>2</sup>	(83.69%,92.13%)	0.72	(0.33,1.54)
	South	94.57% <sup>1,3</sup>	(92.08%,97.05%)	0.540	(-0.265,1.345)	94.47% <sup>1,3</sup>	(91.99%,96.96%)	1.72	(0.77,3.84)
	Midwest	88.87% <sup>2</sup>	(85.67%,92.08%)	-0.156	(-0.885,0.573)	89.62% <sup>2</sup>	(86.60%,92.65%)	0.86	(0.41,1.77)
	West	91.60%	(86.74%,96.46%)	0.000	(0.000,0.000)	90.96%	(85.77%,96.14%)	1.00	n/a
Department Type (0.0212)	All Career	98.13% <sup>2,3</sup>	(96.42%,99.85%)	0.320	(-0.810,1.451)	96.00% <sup>3</sup>	(91.88%,100.00%)	1.38	(0.44,4.27)
	All Volunteer	94.95% <sup>1,3</sup>	(92.42%,97.47%)	0.000	(0.000,0.000)	94.59% <sup>3</sup>	(91.83%,97.35%)	1.00	n/a
	Combination	88.31% <sup>1,2</sup>	(85.91%,90.71%)	-0.769*	(-1.380,-0.157)	89.14% <sup>1,2</sup>	(86.82%,91.46%)	0.46*	(0.25,0.85)
Jurisdiction Type (0.0994)	Urban	96.08% <sup>2</sup>	(93.45%,98.70%)	0.721	(-0.137,1.578)	95.03% <sup>2</sup>	(91.24%,98.81%)	2.06	(0.87,4.85)
	Rural/Missing	90.02% <sup>1</sup>	(88.05%,92.00%)	0.000	(0.000,0.000)	90.42% <sup>1</sup>	(88.52%,92.33%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.3254)	50,000+	98.64% <sup>2,3</sup>	(97.31%,99.97%)	0.872	(-0.301,2.044)	95.73%	(91.25%,100.00%)	2.39	(0.74,7.72)
	5,000-50,000	93.73% <sup>1,3</sup>	(91.37%,96.08%)	0.241	(-0.299,0.781)	92.36%	(89.28%,95.43%)	1.27	(0.74,2.18)
	0 – 5,000	89.53% <sup>1,2</sup>	(87.23%,91.83%)	0.000	(0.000,0.000)	90.53%	(88.35%,92.70%)	1.00	n/a
FFFIPP/ Fatality (0.1786)	Fatality with Investigation	98.27% <sup>3</sup>	(95.80%,100.00%)	1.270	(-0.228,2.769)	97.23% <sup>3</sup>	(93.27%,100.00%)	3.56	(0.80,15.94)
	Fatality - No Investigation	94.19%	(89.71%,98.68%)	0.386	(-0.470,1.242)	93.63%	(88.79%,98.47%)	1.47	(0.63,3.46)
	No Fatality	90.95% <sup>1</sup>	(89.22%,92.68%)	0.000	(0.000,0.000)	90.98% <sup>1</sup>	(89.26%,92.71%)	1.00	n/a
Who Completed Survey (Q62) (0.3207)	Fire Chief	91.13%	(89.12%,93.14%)	0.484	(-0.041,1.009)	91.78%	(89.90%,93.65%)	1.62	(0.96,2.74)
	Safety Officer	95.75%	(88.21%,100.00%)	0.824	(-1.162,2.809)	93.96%	(83.23%,100.00%)	2.28	(0.31,16.59)
	Training Officer	93.24%	(87.80%,98.69%)	0.417	(-0.545,1.379)	91.27%	(84.59%,97.95%)	1.52	(0.58,3.97)
	Other/Missing	89.39%	(85.17%,93.61%)	0.000	(0.000,0.000)	87.48%	(82.67%,92.29%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 71: Q41. Some radios and other two-way communication devices can have problems under field conditions. About how often do your communication devices have these or other problems? - Most of the time or Always**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		7.20%	(5.62%,8.78%)	-2.312*	(-3.210,-1.414)	7.20%	(5.62%,8.78%)		
Region (0.5476)	Northeast	6.03%	(3.01%,9.05%)	-0.114	(-0.987,0.759)	6.60%	(3.26%,9.95%)	0.89	(0.37,2.14)
	South	8.85%	(5.73%,11.97%)	0.186	(-0.594,0.965)	8.68%	(5.61%,11.75%)	1.20	(0.55,2.63)
	Midwest	6.07%	(3.66%,8.49%)	-0.234	(-1.036,0.568)	5.90%	(3.55%,8.25%)	0.79	(0.35,1.76)
	West	7.55%	(2.95%,12.15%)	0.000	(0.000,0.000)	7.33%	(2.80%,11.87%)	1.00	n/a
Department Type (0.6548)	All Career	4.53% <sup>3</sup>	(2.00%,7.06%)	0.290	(-0.711,1.292)	8.08%	(0.92%,15.24%)	1.34	(0.49,3.64)
	All Volunteer	6.47%	(3.68%,9.26%)	0.000	(0.000,0.000)	6.19%	(3.44%,8.93%)	1.00	n/a
	Combination	7.82% <sup>1</sup>	(5.76%,9.88%)	0.242	(-0.340,0.825)	7.73%	(5.62%,9.84%)	1.27	(0.71,2.28)
Jurisdiction Type (0.1022)	Urban	3.06% <sup>2</sup>	(0.85%,5.26%)	-0.868	(-1.909,0.173)	3.47% <sup>2</sup>	(0.21%,6.73%)	0.42	(0.15,1.19)
	Rural/Missing	8.03% <sup>1</sup>	(6.19%,9.88%)	0.000	(0.000,0.000)	7.85% <sup>1</sup>	(6.04%,9.66%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.3922)	50,000+	4.83%	(1.85%,7.81%)	-0.190	(-1.198,0.817)	6.60%	(0.90%,12.30%)	0.83	(0.30,2.26)
	5,000-50,000	4.67% <sup>3</sup>	(2.68%,6.66%)	-0.403	(-0.986,0.180)	5.41%	(2.97%,7.86%)	0.67	(0.37,1.20)
	0 – 5,000	8.42% <sup>2</sup>	(6.25%,10.59%)	0.000	(0.000,0.000)	7.86%	(5.78%,9.95%)	1.00	n/a
FFFIPP/ Fatality (0.9374)	Fatality with Investigation	5.22%	(1.08%,9.36%)	-0.128	(-1.014,0.758)	6.41%	(1.25%,11.57%)	0.88	(0.36,2.13)
	Fatality - No Investigation	6.14%	(1.78%,10.50%)	-0.101	(-0.919,0.717)	6.57%	(1.82%,11.33%)	0.90	(0.40,2.05)
	No Fatality	7.23%	(5.62%,8.84%)	0.000	(0.000,0.000)	7.21%	(5.61%,8.82%)	1.00	n/a
Who Completed Survey (Q62) (0.4854)	Fire Chief	6.61%	(4.80%,8.42%)	-0.305	(-0.883,0.273)	6.47%	(4.68%,8.26%)	0.74	(0.41,1.31)
	Safety Officer	6.86%	(0.00%,16.84%)	-0.097	(-1.778,1.584)	7.83%	(0.00%,19.30%)	0.91	(0.17,4.87)
	Training Officer	10.05%	(2.99%,17.10%)	0.303	(-0.637,1.243)	11.20%	(3.23%,19.17%)	1.35	(0.53,3.46)
	Other/Missing	8.38%	(4.63%,12.12%)	0.000	(0.000,0.000)	8.56%	(4.76%,12.35%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 72: Q43. How often have you seen NIOSH reports that describe recent firefighter fatalities and make recommendations for avoiding similar incidents? Once a year or more**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		73.22%	(70.57%,75.86%)	0.838*	(0.287,1.389)	73.22%	(70.57%,75.86%)		
Region (0.1831)	Northeast	78.38% <sup>2,3</sup>	(73.05%,83.71%)	-0.089	(-0.636,0.458)	76.81%	(71.17%,82.45%)	0.91	(0.53,1.58)
	South	69.82% <sup>1,4</sup>	(64.84%,74.79%)	-0.438	(-0.937,0.060)	70.34%	(65.45%,75.23%)	0.65	(0.39,1.06)
	Midwest	70.98% <sup>1</sup>	(66.36%,75.60%)	-0.357	(-0.855,0.141)	71.93%	(67.41%,76.45%)	0.70	(0.43,1.15)
	West	78.65% <sup>2</sup>	(71.54%,85.77%)	0.000	(0.000,0.000)	78.30%	(71.20%,85.41%)	1.00	n/a
Department Type (0.1367)	All Career	84.14% <sup>2,3</sup>	(78.75%,89.52%)	-0.540	(-1.146,0.065)	65.78%	(53.59%,77.97%)	0.58	(0.32,1.07)
	All Volunteer	76.51% <sup>1,3</sup>	(71.77%,81.24%)	0.000	(0.000,0.000)	76.23%	(71.32%,81.14%)	1.00	n/a
	Combination	70.56% <sup>1,2</sup>	(67.14%,73.97%)	-0.232	(-0.574,0.110)	72.00%	(68.65%,75.35%)	0.79	(0.56,1.12)
Jurisdiction Type (0.0225)	Urban	87.29% <sup>2</sup>	(83.04%,91.55%)	0.598*	(0.085,1.112)	82.03% <sup>2</sup>	(75.08%,88.98%)	1.82*	(1.09,3.04)
	Rural/Missing	70.41% <sup>1</sup>	(67.35%,73.47%)	0.000	(0.000,0.000)	71.90% <sup>1</sup>	(68.98%,74.83%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	92.69% <sup>2,3</sup>	(89.48%,95.89%)	1.586*	(0.911,2.261)	91.44% <sup>2,3</sup>	(86.56%,96.32%)	4.89*	(2.49,9.59)
	5,000-50,000	83.68% <sup>1,3</sup>	(80.19%,87.16%)	0.711*	(0.364,1.057)	81.82% <sup>1,3</sup>	(77.71%,85.92%)	2.04*	(1.44,2.88)
	0 – 5,000	67.76% <sup>1,2</sup>	(64.15%,71.36%)	0.000	(0.000,0.000)	69.17% <sup>1,2</sup>	(65.51%,72.83%)	1.00	n/a
FFFIPP/ Fatality (0.0001)	Fatality with Investigation	91.76% <sup>3</sup>	(87.00%,96.53%)	1.052*	(0.403,1.701)	88.17% <sup>3</sup>	(81.67%,94.68%)	2.86*	(1.50,5.48)
	Fatality - No Investigation	88.91% <sup>3</sup>	(83.03%,94.79%)	0.984*	(0.337,1.631)	87.47% <sup>3</sup>	(80.72%,94.21%)	2.68*	(1.40,5.11)
	No Fatality	72.92% <sup>1,2</sup>	(70.23%,75.61%)	0.000	(0.000,0.000)	73.00% <sup>1,2</sup>	(70.32%,75.68%)	1.00	n/a
Who Completed Survey (Q62) (0.1211)	Fire Chief	74.09%	(70.93%,77.25%)	0.420*	(0.069,0.772)	74.92% <sup>4</sup>	(71.82%,78.02%)	1.52*	(1.07,2.16)
	Safety Officer	77.94%	(62.76%,93.12%)	0.197	(-0.733,1.127)	70.72%	(53.27%,88.18%)	1.22	(0.48,3.09)
	Training Officer	78.67%	(69.13%,88.22%)	0.456	(-0.207,1.119)	75.56%	(65.02%,86.11%)	1.58	(0.81,3.06)
	Other/Missing	67.95%	(61.79%,74.11%)	0.000	(0.000,0.000)	66.71% <sup>1</sup>	(60.40%,73.02%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 73: Q45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months? Yes**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		72.70%	(69.65%,75.75%)	0.473	(-0.089,1.035)	72.70%	(69.65%,75.75%)		
Region (0.7519)	Northeast	73.78%	(67.53%,80.04%)	-0.240	(-0.799,0.319)	72.41%	(65.83%,78.99%)	0.79	(0.45,1.38)
	South	70.88%	(65.12%,76.64%)	-0.256	(-0.768,0.256)	72.11%	(66.57%,77.64%)	0.77	(0.46,1.29)
	Midwest	71.37%	(65.98%,76.77%)	-0.273	(-0.790,0.244)	71.77%	(66.46%,77.08%)	0.76	(0.45,1.28)
	West	78.04%	(70.86%,85.23%)	0.000	(0.000,0.000)	76.79%	(69.30%,84.28%)	1.00	n/a
Department Type (0.6691)	All Career	82.28% <sup>2,3</sup>	(76.60%,87.96%)	-0.270	(-0.875,0.335)	67.58%	(55.58%,79.58%)	0.76	(0.42,1.40)
	All Volunteer	73.45% <sup>1</sup>	(68.13%,78.77%)	0.000	(0.000,0.000)	72.97%	(67.40%,78.55%)	1.00	n/a
	Combination	71.33% <sup>1</sup>	(67.29%,75.37%)	-0.007	(-0.378,0.364)	72.85%	(68.91%,76.78%)	0.99	(0.69,1.44)
Jurisdiction Type (0.0294)	Urban	83.29% <sup>2</sup>	(78.43%,88.14%)	0.541 <sup>*</sup>	(0.054,1.027)	80.59% <sup>2</sup>	(73.82%,87.35%)	1.72 <sup>*</sup>	(1.06,2.79)
	Rural/Missing	70.11% <sup>1</sup>	(66.51%,73.72%)	0.000	(0.000,0.000)	71.02% <sup>1</sup>	(67.52%,74.52%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0025)	50,000+	90.19% <sup>2,3</sup>	(86.19%,94.20%)	1.194 <sup>*</sup>	(0.514,1.873)	88.27% <sup>2,3</sup>	(81.94%,94.61%)	3.30 <sup>*</sup>	(1.67,6.51)
	5,000-50,000	78.35% <sup>1,3</sup>	(74.16%,82.55%)	0.346	(-0.017,0.709)	76.61% <sup>1</sup>	(71.83%,81.40%)	1.41	(0.98,2.03)
	0 – 5,000	68.68% <sup>1,2</sup>	(64.38%,72.99%)	0.000	(0.000,0.000)	70.05% <sup>1</sup>	(65.73%,74.38%)	1.00	n/a
FFFIPP/ Fatality (0.0175)	Fatality with Investigation	90.64% <sup>2,3</sup>	(85.01%,96.27%)	0.980 <sup>*</sup>	(0.292,1.668)	87.25% <sup>3</sup>	(79.88%,94.63%)	2.66 <sup>*</sup>	(1.34,5.30)
	Fatality - No Investigation	76.97% <sup>1</sup>	(68.20%,85.73%)	0.202	(-0.349,0.753)	76.26%	(67.04%,85.48%)	1.22	(0.71,2.12)
	No Fatality	72.49% <sup>1</sup>	(69.37%,75.60%)	0.000	(0.000,0.000)	72.55% <sup>1</sup>	(69.45%,75.66%)	1.00	n/a
Who Completed Survey (Q62) (0.0047)	Fire Chief	73.52% <sup>3,4</sup>	(69.90%,77.13%)	0.595 <sup>*</sup>	(0.194,0.996)	74.30% <sup>4</sup>	(70.75%,77.85%)	1.81 <sup>*</sup>	(1.21,2.71)
	Safety Officer	84.32% <sup>4</sup>	(69.51%,99.14%)	0.886	(-0.288,2.060)	79.36%	(61.10%,97.62%)	2.43	(0.75,7.85)
	Training Officer	84.96% <sup>1,4</sup>	(76.21%,93.72%)	1.143 <sup>*</sup>	(0.377,1.908)	83.19% <sup>4</sup>	(73.59%,92.79%)	3.14 <sup>*</sup>	(1.46,6.74)
	Other/Missing	63.26% <sup>1,2,3</sup>	(55.65%,70.87%)	0.000	(0.000,0.000)	61.82% <sup>1,3</sup>	(53.97%,69.68%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 74: Q52a. Agree/disagree with the following statements about the NIOSH recommendations: Recommendations are practical - Agree or Strongly Agree**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		68.45%	(65.19%,71.71%)	0.353	(-0.203,0.908)	68.45%	(65.19%,71.71%)		
Region (0.0220)	Northeast	74.77% <sup>3,4</sup>	(68.60%,80.93%)	0.767*	(0.253,1.281)	75.23% <sup>3,4</sup>	(69.13%,81.32%)	2.15*	(1.29,3.60)
	South	69.76%	(63.73%,75.79%)	0.476	(-0.008,0.960)	69.49%	(63.45%,75.53%)	1.61	(0.99,2.61)
	Midwest	65.07% <sup>1</sup>	(59.28%,70.86%)	0.304	(-0.175,0.782)	65.76% <sup>1</sup>	(59.96%,71.57%)	1.36	(0.84,2.19)
	West	60.86% <sup>1</sup>	(51.95%,69.76%)	0.000	(0.000,0.000)	58.73% <sup>1</sup>	(49.35%,68.11%)	1.00	n/a
Department Type (0.1253)	All Career	77.84% <sup>3</sup>	(71.87%,83.81%)	0.282	(-0.253,0.817)	76.88% <sup>3</sup>	(67.90%,85.86%)	1.33	(0.78,2.26)
	All Volunteer	71.35%	(65.77%,76.92%)	0.000	(0.000,0.000)	71.57%	(65.82%,77.32%)	1.00	n/a
	Combination	65.80% <sup>1</sup>	(61.42%,70.17%)	-0.275	(-0.641,0.092)	65.77% <sup>1</sup>	(61.26%,70.28%)	0.76	(0.53,1.10)
Jurisdiction Type (0.7180)	Urban	72.86%	(67.08%,78.64%)	-0.079	(-0.509,0.351)	67.07%	(58.86%,75.29%)	0.92	(0.60,1.42)
	Rural/Missing	67.32%	(63.51%,71.14%)	0.000	(0.000,0.000)	68.76%	(65.09%,72.43%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.3817)	50,000+	74.58% <sup>3</sup>	(68.08%,81.07%)	0.175	(-0.436,0.787)	70.30%	(59.20%,81.39%)	1.19	(0.65,2.20)
	5,000-50,000	72.81% <sup>3</sup>	(68.15%,77.47%)	0.249	(-0.105,0.603)	71.79%	(66.66%,76.92%)	1.28	(0.90,1.83)
	0 – 5,000	65.69% <sup>1,2</sup>	(61.14%,70.24%)	0.000	(0.000,0.000)	66.57%	(61.88%,71.27%)	1.00	n/a
FFFIPP/ Fatality (0.8288)	Fatality with Investigation	71.93%	(63.85%,80.01%)	-0.023	(-0.464,0.417)	68.00%	(58.90%,77.10%)	0.98	(0.63,1.52)
	Fatality - No Investigation	66.96%	(56.88%,77.04%)	-0.152	(-0.640,0.336)	65.21%	(54.92%,75.49%)	0.86	(0.53,1.40)
	No Fatality	68.44%	(65.11%,71.77%)	0.000	(0.000,0.000)	68.50%	(65.18%,71.81%)	1.00	n/a
Who Completed Survey (Q62) (0.7335)	Fire Chief	67.80%	(63.89%,71.72%)	0.068	(-0.346,0.481)	68.26%	(64.37%,72.15%)	1.07	(0.71,1.62)
	Safety Officer	77.70%	(63.55%,91.85%)	0.508	(-0.441,1.458)	76.82%	(61.20%,92.45%)	1.66	(0.64,4.30)
	Training Officer	71.41%	(59.69%,83.13%)	0.199	(-0.473,0.872)	70.99%	(59.24%,82.75%)	1.22	(0.62,2.39)
	Other/Missing	68.19%	(60.63%,75.75%)	0.000	(0.000,0.000)	66.81%	(58.92%,74.70%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 75: Q52b. Agree/disagree with the following statements about the NIOSH recommendations: Recommendations are easy to understand -Agree or Strongly Agree**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		69.51%	(66.28%,72.75%)	0.613*	(0.042,1.184)	69.51%	(66.28%,72.75%)		
Region (0.2475)	Northeast	74.17%	(67.99%,80.36%)	0.459	(-0.070,0.988)	74.43%	(68.18%,80.69%)	1.58	(0.93,2.69)
	South	70.27%	(64.24%,76.31%)	0.237	(-0.257,0.731)	70.05%	(63.99%,76.11%)	1.27	(0.77,2.08)
	Midwest	66.00%	(60.17%,71.83%)	0.081	(-0.412,0.573)	66.72%	(60.83%,72.61%)	1.08	(0.66,1.77)
	West	66.68%	(58.17%,75.19%)	0.000	(0.000,0.000)	64.94%	(55.91%,73.97%)	1.00	n/a
Department Type (0.0286)	All Career	84.14% <sup>2,3</sup>	(79.02%,89.26%)	0.539	(-0.011,1.089)	81.58% <sup>2,3</sup>	(73.68%,89.48%)	1.71	(0.99,2.97)
	All Volunteer	72.31% <sup>1</sup>	(66.79%,77.84%)	0.000	(0.000,0.000)	72.18% <sup>1</sup>	(66.39%,77.97%)	1.00	n/a
	Combination	66.39% <sup>1</sup>	(62.03%,70.74%)	-0.254	(-0.625,0.117)	66.85% <sup>1</sup>	(62.39%,71.31%)	0.78	(0.54,1.12)
Jurisdiction Type (0.7007)	Urban	76.57% <sup>2</sup>	(71.08%,82.05%)	0.087	(-0.359,0.533)	70.99%	(63.00%,78.98%)	1.09	(0.70,1.70)
	Rural/Missing	67.70% <sup>1</sup>	(63.88%,71.51%)	0.000	(0.000,0.000)	69.19%	(65.50%,72.89%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.5505)	50,000+	81.12% <sup>3</sup>	(75.27%,86.96%)	0.211	(-0.412,0.833)	72.35%	(61.41%,83.29%)	1.23	(0.66,2.30)
	5,000-50,000	73.91% <sup>3</sup>	(69.25%,78.57%)	0.203	(-0.165,0.570)	72.19%	(66.82%,77.56%)	1.22	(0.85,1.77)
	0 – 5,000	66.41% <sup>1,2</sup>	(61.89%,70.93%)	0.000	(0.000,0.000)	68.01%	(63.41%,72.61%)	1.00	n/a
FFFIPP/ Fatality (0.6175)	Fatality with Investigation	77.85% <sup>3</sup>	(70.11%,85.59%)	0.154	(-0.332,0.641)	72.55%	(63.29%,81.80%)	1.17	(0.72,1.90)
	Fatality - No Investigation	75.44%	(65.99%,84.88%)	0.221	(-0.313,0.754)	73.83%	(64.12%,83.54%)	1.25	(0.73,2.13)
	No Fatality	69.36% <sup>1</sup>	(66.05%,72.67%)	0.000	(0.000,0.000)	69.44%	(66.14%,72.73%)	1.00	n/a
Who Completed Survey (Q62) (0.9065)	Fire Chief	68.59%	(64.70%,72.49%)	0.029	(-0.394,0.451)	69.37%	(65.55%,73.20%)	1.03	(0.67,1.57)
	Safety Officer	79.26%	(64.17%,94.35%)	0.380	(-0.635,1.396)	76.20%	(59.13%,93.27%)	1.46	(0.53,4.04)
	Training Officer	71.68%	(60.21%,83.14%)	0.063	(-0.621,0.747)	70.08%	(58.07%,82.10%)	1.06	(0.54,2.11)
	Other/Missing	70.50%	(63.02%,77.97%)	0.000	(0.000,0.000)	68.78%	(60.86%,76.70%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 76: Q52c. Agree/disagree with the following statements about the NIOSH recommendations: Recommendations are specific and concrete - Agree or Strongly Agree**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		57.99%	(54.52%,61.45%)	0.269	(-0.271,0.810)	57.99%	(54.52%,61.45%)		
Region (0.3219)	Northeast	61.22%	(54.23%,68.20%)	0.181	(-0.310,0.671)	61.02%	(53.87%,68.18%)	1.20	(0.73,1.96)
	South	60.25%	(53.92%,66.58%)	0.152	(-0.310,0.614)	60.35%	(54.00%,66.69%)	1.16	(0.73,1.85)
	Midwest	53.07%	(46.99%,59.14%)	-0.133	(-0.592,0.326)	53.41%	(47.30%,59.52%)	0.88	(0.55,1.39)
	West	57.30%	(48.28%,66.32%)	0.000	(0.000,0.000)	56.68%	(47.34%,66.02%)	1.00	n/a
Department Type (0.3765)	All Career	67.98% <sup>2,3</sup>	(61.23%,74.74%)	0.334	(-0.146,0.813)	65.35%	(54.96%,75.74%)	1.40	(0.86,2.25)
	All Volunteer	57.92% <sup>1</sup>	(51.80%,64.04%)	0.000	(0.000,0.000)	57.52%	(51.11%,63.93%)	1.00	n/a
	Combination	57.02% <sup>1</sup>	(52.46%,61.59%)	0.001	(-0.342,0.345)	57.55%	(52.84%,62.25%)	1.00	(0.71,1.41)
Jurisdiction Type (0.4921)	Urban	62.96%	(56.63%,69.29%)	0.142	(-0.263,0.547)	60.71%	(52.34%,69.09%)	1.15	(0.77,1.73)
	Rural/Missing	56.72%	(52.68%,60.76%)	0.000	(0.000,0.000)	57.31%	(53.30%,61.32%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.9940)	50,000+	66.74% <sup>3</sup>	(59.79%,73.69%)	0.004	(-0.550,0.558)	58.19%	(46.54%,69.84%)	1.00	(0.58,1.75)
	5,000-50,000	58.99%	(53.75%,64.23%)	-0.015	(-0.352,0.322)	57.75%	(51.92%,63.57%)	0.99	(0.70,1.38)
	0 – 5,000	56.94% <sup>1</sup>	(52.19%,61.68%)	0.000	(0.000,0.000)	58.10%	(53.18%,63.03%)	1.00	n/a
FFFIPP/ Fatality (0.6415)	Fatality with Investigation	66.05%	(57.44%,74.67%)	0.174	(-0.252,0.599)	62.04%	(52.36%,71.72%)	1.19	(0.78,1.82)
	Fatality - No Investigation	62.59%	(52.10%,73.07%)	0.137	(-0.338,0.611)	61.17%	(50.51%,71.84%)	1.15	(0.71,1.84)
	No Fatality	57.85%	(54.31%,61.39%)	0.000	(0.000,0.000)	57.91%	(54.38%,61.44%)	1.00	n/a
Who Completed Survey (Q62) (0.7688)	Fire Chief	56.89%	(52.72%,61.06%)	-0.073	(-0.460,0.314)	57.37%	(53.21%,61.52%)	0.93	(0.63,1.37)
	Safety Officer	69.99%	(53.85%,86.14%)	0.363	(-0.508,1.234)	67.48%	(49.68%,85.28%)	1.44	(0.60,3.43)
	Training Officer	58.07%	(45.57%,70.56%)	-0.083	(-0.699,0.534)	57.13%	(44.37%,69.89%)	0.92	(0.50,1.71)
	Other/Missing	60.07%	(52.21%,67.93%)	0.000	(0.000,0.000)	59.13%	(50.94%,67.32%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 77: Q53. What other NIOSH materials have you seen: Pocket guide to chemical hazards**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		57.41%	(54.43%,60.40%)	0.303	(-0.177,0.784)	57.41%	(54.43%,60.40%)		
Region (0.0216)	Northeast	66.81% <sup>2,3</sup>	(60.64%,72.99%)	0.230	(-0.232,0.692)	65.60% <sup>2,3</sup>	(59.19%,72.02%)	1.26	(0.79,2.00)
	South	52.32% <sup>1</sup>	(46.91%,57.73%)	-0.327	(-0.747,0.094)	52.60% <sup>1</sup>	(47.18%,58.01%)	0.72	(0.47,1.10)
	Midwest	54.66% <sup>1</sup>	(49.51%,59.80%)	-0.200	(-0.619,0.219)	55.65% <sup>1</sup>	(50.51%,60.78%)	0.82	(0.54,1.24)
	West	61.01%	(52.83%,69.18%)	0.000	(0.000,0.000)	60.38%	(52.08%,68.69%)	1.00	n/a
Department Type (0.4048)	All Career	77.13% <sup>2,3</sup>	(71.27%,82.99%)	0.194	(-0.281,0.669)	63.55%	(53.35%,73.75%)	1.21	(0.75,1.95)
	All Volunteer	58.99% <sup>1</sup>	(53.60%,64.38%)	0.000	(0.000,0.000)	59.11%	(53.62%,64.61%)	1.00	n/a
	Combination	54.87% <sup>1</sup>	(51.02%,58.72%)	-0.128	(-0.423,0.166)	56.09%	(52.21%,59.96%)	0.88	(0.66,1.18)
Jurisdiction Type (0.0183)	Urban	73.68% <sup>2</sup>	(68.13%,79.24%)	0.476*	(0.081,0.871)	66.70% <sup>2</sup>	(58.78%,74.61%)	1.61*	(1.08,2.39)
	Rural/Missing	54.03% <sup>1</sup>	(50.61%,57.45%)	0.000	(0.000,0.000)	55.72% <sup>1</sup>	(52.37%,59.06%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0005)	50,000+	85.22% <sup>2,3</sup>	(80.33%,90.10%)	1.129*	(0.564,1.693)	78.73% <sup>2,3</sup>	(70.08%,87.37%)	3.09*	(1.76,5.44)
	5,000-50,000	64.81% <sup>1,3</sup>	(60.28%,69.34%)	0.262	(-0.033,0.558)	61.27% <sup>1</sup>	(56.06%,66.48%)	1.30	(0.97,1.75)
	0 – 5,000	52.87% <sup>1,2</sup>	(48.90%,56.83%)	0.000	(0.000,0.000)	55.04% <sup>1</sup>	(50.98%,59.09%)	1.00	n/a
FFFIPP/ Fatality (0.4502)	Fatality with Investigation	68.32% <sup>3</sup>	(60.17%,76.47%)	0.037	(-0.398,0.471)	58.19%	(48.29%,68.10%)	1.04	(0.67,1.60)
	Fatality - No Investigation	67.43% <sup>3</sup>	(57.83%,77.04%)	0.305	(-0.170,0.781)	64.33%	(54.17%,74.49%)	1.36	(0.84,2.18)
	No Fatality	57.23% <sup>1,2</sup>	(54.19%,60.26%)	0.000	(0.000,0.000)	57.34%	(54.31%,60.36%)	1.00	n/a
Who Completed Survey (Q62) (0.9627)	Fire Chief	56.78%	(53.14%,60.41%)	0.021	(-0.303,0.346)	57.66%	(54.06%,61.27%)	1.02	(0.74,1.41)
	Safety Officer	61.07%	(44.25%,77.89%)	-0.188	(-0.985,0.610)	52.71%	(34.69%,70.73%)	0.83	(0.37,1.84)
	Training Officer	60.47%	(49.46%,71.48%)	0.010	(-0.553,0.573)	57.40%	(45.80%,68.99%)	1.01	(0.58,1.77)
	Other/Missing	58.00%	(51.47%,64.53%)	0.000	(0.000,0.000)	57.16%	(50.54%,63.78%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.



**Model 78: Q53. What other NIOSH materials have you seen: Respirator maintenance program guide**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		13.78%	(11.81%,15.75%)	-2.977*	(-3.641,-2.313)	13.78%	(11.81%,15.75%)		
Region (0.3658)	Northeast	16.99% <sup>4</sup>	(12.29%,21.69%)	0.528	(-0.067,1.123)	15.55%	(11.03%,20.06%)	1.70	(0.94,3.07)
	South	13.06%	(9.57%,16.56%)	0.385	(-0.176,0.945)	13.79%	(10.05%,17.54%)	1.47	(0.84,2.57)
	Midwest	13.95%	(10.50%,17.40%)	0.405	(-0.147,0.958)	14.03%	(10.56%,17.50%)	1.50	(0.86,2.61)
	West	9.76% <sup>1</sup>	(5.67%,13.84%)	0.000	(0.000,0.000)	9.88%	(5.75%,14.00%)	1.00	n/a
Department Type (0.1653)	All Career	20.06% <sup>2</sup>	(15.01%,25.11%)	0.031	(-0.511,0.574)	11.68%	(6.74%,16.62%)	1.03	(0.60,1.78)
	All Volunteer	11.32% <sup>1</sup>	(8.35%,14.28%)	0.000	(0.000,0.000)	11.36%	(8.37%,14.36%)	1.00	n/a
	Combination	14.62%	(11.88%,17.37%)	0.363	(-0.024,0.750)	15.46%	(12.58%,18.33%)	1.44	(0.98,2.12)
Jurisdiction Type (0.2270)	Urban	20.28% <sup>2</sup>	(15.53%,25.03%)	0.277	(-0.173,0.726)	16.51%	(11.22%,21.79%)	1.32	(0.84,2.07)
	Rural/Missing	12.43% <sup>1</sup>	(10.27%,14.60%)	0.000	(0.000,0.000)	13.09%	(10.87%,15.31%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0003)	50,000+	26.25% <sup>2,3</sup>	(20.13%,32.38%)	1.187*	(0.592,1.782)	29.55% <sup>2,3</sup>	(18.72%,40.38%)	3.28*	(1.81,5.94)
	5,000-50,000	17.99% <sup>1,3</sup>	(14.39%,21.60%)	0.480*	(0.114,0.846)	17.29% <sup>1,3</sup>	(13.60%,20.98%)	1.62*	(1.12,2.33)
	0 – 5,000	11.34% <sup>1,2</sup>	(8.90%,13.78%)	0.000	(0.000,0.000)	11.51% <sup>1,2</sup>	(9.03%,13.98%)	1.00	n/a
FFFIPP/ Fatality (0.5094)	Fatality with Investigation	21.07% <sup>3</sup>	(14.05%,28.08%)	0.161	(-0.318,0.639)	15.69%	(9.64%,21.75%)	1.17	(0.73,1.90)
	Fatality - No Investigation	19.10%	(11.44%,26.76%)	0.281	(-0.259,0.822)	17.31%	(10.09%,24.52%)	1.32	(0.77,2.27)
	No Fatality	13.67% <sup>1</sup>	(11.67%,15.68%)	0.000	(0.000,0.000)	13.73%	(11.72%,15.73%)	1.00	n/a
Who Completed Survey (Q62) (0.3846)	Fire Chief	14.21%	(11.76%,16.66%)	0.311	(-0.160,0.782)	14.38%	(11.92%,16.84%)	1.36	(0.85,2.19)
	Safety Officer	13.52%	(3.73%,23.32%)	0.022	(-0.919,0.963)	11.23%	(2.56%,19.91%)	1.02	(0.40,2.62)
	Training Officer	17.96%	(9.66%,26.26%)	0.553	(-0.146,1.253)	17.55%	(9.21%,25.89%)	1.74	(0.86,3.50)
	Other/Missing	11.09%	(7.20%,14.98%)	0.000	(0.000,0.000)	11.02%	(7.03%,15.01%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 79: Q53. What other NIOSH materials have you seen: CDs of firefighter program materials**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		27.99%	(25.31%,30.67%)	-1.187*	(-1.686,-0.688)	27.99%	(25.31%,30.67%)		
Region (0.8145)	Northeast	31.24%	(25.24%,37.24%)	0.130	(-0.348,0.608)	30.51%	(24.35%,36.67%)	1.14	(0.71,1.84)
	South	26.32%	(21.65%,30.99%)	-0.057	(-0.499,0.385)	26.71%	(21.96%,31.47%)	0.94	(0.61,1.47)
	Midwest	27.39%	(22.80%,31.98%)	-0.013	(-0.457,0.432)	27.59%	(22.98%,32.20%)	0.99	(0.63,1.54)
	West	28.15%	(20.82%,35.48%)	0.000	(0.000,0.000)	27.84%	(20.39%,35.29%)	1.00	n/a
Department Type (0.9828)	All Career	34.53%	(27.97%,41.09%)	-0.017	(-0.480,0.446)	27.38%	(18.72%,36.04%)	0.98	(0.62,1.56)
	All Volunteer	27.51%	(22.79%,32.24%)	0.000	(0.000,0.000)	27.72%	(22.84%,32.60%)	1.00	n/a
	Combination	27.70%	(24.23%,31.18%)	0.024	(-0.292,0.340)	28.20%	(24.60%,31.80%)	1.02	(0.75,1.40)
Jurisdiction Type (0.3009)	Urban	34.01% <sup>2</sup>	(28.29%,39.74%)	0.211	(-0.189,0.611)	31.56%	(24.02%,39.10%)	1.23	(0.83,1.84)
	Rural/Missing	26.74% <sup>1</sup>	(23.73%,29.74%)	0.000	(0.000,0.000)	27.21%	(24.16%,30.26%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.1465)	50,000+	41.21% <sup>2,3</sup>	(34.50%,47.92%)	0.504	(-0.025,1.032)	38.06%	(27.24%,48.88%)	1.65	(0.98,2.81)
	5,000-50,000	30.07% <sup>1</sup>	(25.65%,34.49%)	0.086	(-0.240,0.413)	28.86%	(23.98%,33.75%)	1.09	(0.79,1.51)
	0 – 5,000	26.48% <sup>1</sup>	(23.02%,29.94%)	0.000	(0.000,0.000)	27.13%	(23.43%,30.83%)	1.00	n/a
FFFIPP/ Fatality (0.0022)	Fatality with Investigation	47.86% <sup>2,3</sup>	(39.18%,56.54%)	0.677*	(0.296,1.058)	43.03% <sup>3</sup>	(33.99%,52.08%)	1.97*	(1.34,2.88)
	Fatality - No Investigation	32.76% <sup>1</sup>	(23.37%,42.14%)	0.175	(-0.279,0.629)	31.46%	(22.14%,40.79%)	1.19	(0.76,1.88)
	No Fatality	27.80% <sup>1</sup>	(25.07%,30.52%)	0.000	(0.000,0.000)	27.84% <sup>1</sup>	(25.12%,30.56%)	1.00	n/a
Who Completed Survey (Q62) (0.7631)	Fire Chief	28.20%	(24.95%,31.45%)	0.158	(-0.186,0.501)	28.49%	(25.22%,31.77%)	1.17	(0.83,1.65)
	Safety Officer	31.62%	(16.41%,46.82%)	0.151	(-0.644,0.946)	28.37%	(13.15%,43.58%)	1.16	(0.53,2.58)
	Training Officer	31.55%	(21.07%,42.03%)	0.266	(-0.308,0.840)	30.74%	(20.15%,41.32%)	1.30	(0.74,2.32)
	Other/Missing	25.68%	(20.09%,31.26%)	0.000	(0.000,0.000)	25.42%	(19.79%,31.04%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 80: Q53. What other NIOSH materials have you seen: Alerts**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		31.71%	(29.01%,34.41%)	-1.458*	(-1.940,-0.975)	31.71%	(29.01%,34.41%)		
Region (0.1348)	Northeast	38.76% <sup>2,3</sup>	(32.46%,45.07%)	0.119	(-0.330,0.568)	36.55% <sup>3</sup>	(30.20%,42.90%)	1.13	(0.72,1.76)
	South	29.81% <sup>1</sup>	(25.08%,34.54%)	-0.147	(-0.558,0.264)	30.94%	(26.08%,35.79%)	0.86	(0.57,1.30)
	Midwest	27.26% <sup>1</sup>	(22.79%,31.73%)	-0.302	(-0.715,0.112)	27.88% <sup>1</sup>	(23.42%,32.34%)	0.74	(0.49,1.12)
	West	34.89%	(27.51%,42.27%)	0.000	(0.000,0.000)	33.99%	(26.76%,41.21%)	1.00	n/a
Department Type (0.9953)	All Career	49.44% <sup>2,3</sup>	(42.99%,55.89%)	-0.019	(-0.448,0.410)	31.46%	(23.38%,39.54%)	0.98	(0.64,1.51)
	All Volunteer	32.14% <sup>1</sup>	(27.46%,36.82%)	0.000	(0.000,0.000)	31.85%	(27.10%,36.60%)	1.00	n/a
	Combination	29.98% <sup>1</sup>	(26.43%,33.52%)	-0.010	(-0.311,0.291)	31.66%	(28.01%,35.30%)	0.99	(0.73,1.34)
Jurisdiction Type (0.0623)	Urban	47.32% <sup>2</sup>	(41.27%,53.36%)	0.364	(-0.019,0.747)	38.07%	(30.43%,45.70%)	1.44	(0.98,2.11)
	Rural/Missing	28.46% <sup>1</sup>	(25.46%,31.47%)	0.000	(0.000,0.000)	30.26%	(27.18%,33.34%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	62.95% <sup>2,3</sup>	(56.62%,69.27%)	1.387*	(0.896,1.878)	59.00% <sup>2,3</sup>	(48.85%,69.15%)	4.00*	(2.45,6.54)
	5,000-50,000	41.33% <sup>1,3</sup>	(36.64%,46.03%)	0.541*	(0.237,0.845)	38.75% <sup>1,3</sup>	(33.68%,43.82%)	1.72*	(1.27,2.33)
	0 – 5,000	26.00% <sup>1,2</sup>	(22.58%,29.43%)	0.000	(0.000,0.000)	27.19% <sup>1,2</sup>	(23.54%,30.83%)	1.00	n/a
FFFIPP/ Fatality (0.2418)	Fatality with Investigation	48.42% <sup>3</sup>	(39.72%,57.13%)	0.242	(-0.151,0.635)	36.73%	(28.33%,45.13%)	1.27	(0.86,1.89)
	Fatality - No Investigation	41.73% <sup>3</sup>	(31.91%,51.56%)	0.301	(-0.165,0.766)	38.01%	(28.08%,47.95%)	1.35	(0.85,2.15)
	No Fatality	31.48% <sup>1,2</sup>	(28.73%,34.23%)	0.000	(0.000,0.000)	31.60%	(28.86%,34.34%)	1.00	n/a
Who Completed Survey (Q62) (0.0022)	Fire Chief	32.63% <sup>4</sup>	(29.30%,35.96%)	0.607*	(0.255,0.959)	33.73% <sup>4</sup>	(30.41%,37.05%)	1.84*	(1.29,2.61)
	Safety Officer	43.69% <sup>4</sup>	(27.52%,59.86%)	0.654	(-0.130,1.437)	34.73%	(18.76%,50.69%)	1.92	(0.88,4.21)
	Training Officer	43.44% <sup>4</sup>	(32.19%,54.70%)	0.891*	(0.315,1.467)	40.00% <sup>4</sup>	(28.57%,51.43%)	2.44*	(1.37,4.34)
	Other/Missing	23.31% <sup>1,2,3</sup>	(18.19%,28.42%)	0.000	(0.000,0.000)	22.20% <sup>1,3</sup>	(17.14%,27.26%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 81: Q53. What other NIOSH materials have you seen: Hazard IDs**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		16.60%	(14.36%,18.84%)	-1.759*	(-2.353,-1.165)	16.60%	(14.36%,18.84%)		
Region (0.4670)	Northeast	19.82%	(14.62%,25.02%)	0.173	(-0.374,0.721)	19.48%	(14.19%,24.77%)	1.19	(0.69,2.06)
	South	14.09%	(10.29%,17.90%)	-0.201	(-0.726,0.324)	14.28%	(10.45%,18.11%)	0.82	(0.48,1.38)
	Midwest	16.84%	(13.03%,20.66%)	0.000	(-0.511,0.511)	16.91%	(13.07%,20.75%)	1.00	(0.60,1.67)
	West	17.10%	(11.12%,23.07%)	0.000	(0.000,0.000)	16.91%	(10.91%,22.90%)	1.00	n/a
Department Type (0.7912)	All Career	18.49%	(13.48%,23.50%)	-0.064	(-0.608,0.481)	14.88%	(8.29%,21.46%)	0.94	(0.54,1.62)
	All Volunteer	15.43%	(11.47%,19.39%)	0.000	(0.000,0.000)	15.70%	(11.58%,19.81%)	1.00	n/a
	Combination	17.09%	(14.18%,20.01%)	0.115	(-0.278,0.509)	17.27%	(14.25%,20.30%)	1.12	(0.76,1.66)
Jurisdiction Type (0.8995)	Urban	18.86%	(14.07%,23.64%)	0.030	(-0.442,0.503)	16.95%	(11.12%,22.78%)	1.03	(0.64,1.65)
	Rural/Missing	16.13%	(13.62%,18.65%)	0.000	(0.000,0.000)	16.52%	(13.98%,19.07%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.1853)	50,000+	23.92% <sup>3</sup>	(17.90%,29.93%)	0.566	(-0.044,1.176)	24.80%	(14.80%,34.80%)	1.76	(0.96,3.24)
	5,000-50,000	17.71%	(14.02%,21.40%)	0.130	(-0.247,0.508)	17.61%	(13.61%,21.61%)	1.14	(0.78,1.66)
	0 – 5,000	15.79% <sup>1</sup>	(12.89%,18.68%)	0.000	(0.000,0.000)	15.80%	(12.80%,18.81%)	1.00	n/a
FFFIPP/ Fatality (0.4817)	Fatality with Investigation	22.91%	(15.74%,30.07%)	0.256	(-0.184,0.696)	20.37%	(13.45%,27.29%)	1.29	(0.83,2.00)
	Fatality - No Investigation	19.56%	(11.48%,27.63%)	0.142	(-0.401,0.685)	18.60%	(10.75%,26.44%)	1.15	(0.67,1.98)
	No Fatality	16.53%	(14.25%,18.80%)	0.000	(0.000,0.000)	16.55%	(14.28%,18.82%)	1.00	n/a
Who Completed Survey (Q62) (0.9655)	Fire Chief	16.65%	(13.90%,19.40%)	0.032	(-0.384,0.449)	16.61%	(13.86%,19.36%)	1.03	(0.68,1.57)
	Safety Officer	20.87%	(8.55%,33.20%)	0.216	(-0.599,1.031)	19.30%	(7.54%,31.05%)	1.24	(0.55,2.80)
	Training Officer	16.57%	(8.66%,24.49%)	0.036	(-0.633,0.706)	16.66%	(8.64%,24.69%)	1.04	(0.53,2.03)
	Other/Missing	15.88%	(11.13%,20.62%)	0.000	(0.000,0.000)	16.17%	(11.31%,21.03%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 82: Q53. What other NIOSH materials have you seen: Workplace Solutions**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		12.50%	(10.55%,14.44%)	-1.974*	(-2.589,-1.358)	12.50%	(10.55%,14.44%)		
Region (0.1956)	Northeast	15.25%	(10.58%,19.92%)	-0.106	(-0.689,0.476)	14.75%	(9.97%,19.53%)	0.90	(0.50,1.61)
	South	11.24%	(7.89%,14.60%)	-0.402	(-0.949,0.144)	11.42%	(7.98%,14.86%)	0.67	(0.39,1.15)
	Midwest	10.43%	(7.45%,13.41%)	-0.504	(-1.047,0.039)	10.44%	(7.44%,13.45%)	0.60	(0.35,1.04)
	West	15.85%	(10.24%,21.47%)	0.000	(0.000,0.000)	16.12%	(10.33%,21.91%)	1.00	n/a
Department Type (0.8355)	All Career	13.58%	(9.14%,18.03%)	-0.181	(-0.775,0.413)	10.97%	(5.52%,16.43%)	0.83	(0.46,1.51)
	All Volunteer	12.97%	(9.51%,16.43%)	0.000	(0.000,0.000)	12.85%	(9.29%,16.41%)	1.00	n/a
	Combination	12.14%	(9.63%,14.66%)	-0.036	(-0.456,0.383)	12.45%	(9.83%,15.08%)	0.96	(0.63,1.47)
Jurisdiction Type (0.8887)	Urban	14.78%	(10.51%,19.05%)	-0.035	(-0.531,0.461)	12.19%	(7.60%,16.78%)	0.97	(0.59,1.59)
	Rural/Missing	12.02%	(9.85%,14.19%)	0.000	(0.000,0.000)	12.57%	(10.34%,14.81%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0401)	50,000+	17.08% <sup>3</sup>	(11.83%,22.33%)	0.750*	(0.092,1.408)	20.23%	(10.86%,29.61%)	2.12*	(1.10,4.09)
	5,000-50,000	15.73% <sup>3</sup>	(12.22%,19.24%)	0.440*	(0.036,0.845)	15.72% <sup>3</sup>	(11.92%,19.53%)	1.55*	(1.04,2.33)
	0 – 5,000	10.83% <sup>1,2</sup>	(8.41%,13.25%)	0.000	(0.000,0.000)	10.75% <sup>2</sup>	(8.30%,13.21%)	1.00	n/a
FFFIPP/ Fatality (0.3741)	Fatality with Investigation	17.12%	(10.83%,23.41%)	0.254	(-0.237,0.746)	15.44%	(9.28%,21.59%)	1.29	(0.79,2.11)
	Fatality - No Investigation	16.97%	(9.50%,24.44%)	0.313	(-0.260,0.886)	16.20%	(8.88%,23.53%)	1.37	(0.77,2.43)
	No Fatality	12.41%	(10.44%,14.39%)	0.000	(0.000,0.000)	12.43%	(10.46%,14.40%)	1.00	n/a
Who Completed Survey (Q62) (0.3632)	Fire Chief	13.23%	(10.78%,15.68%)	0.275	(-0.193,0.743)	13.51%	(11.00%,16.01%)	1.32	(0.82,2.10)
	Safety Officer	8.81%	(1.66%,15.96%)	-0.432	(-1.391,0.526)	7.19%	(1.28%,13.10%)	0.65	(0.25,1.69)
	Training Officer	11.90%	(4.92%,18.89%)	0.047	(-0.746,0.841)	11.08%	(4.25%,17.92%)	1.05	(0.47,2.32)
	Other/Missing	10.80%	(7.03%,14.57%)	0.000	(0.000,0.000)	10.63%	(6.82%,14.44%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 83: Q53. What other NIOSH materials have you seen: None. I have not seen any NIOSH materials.**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		25.18%	(22.51%,27.85%)	-0.779*	(-1.345,-0.212)	25.18%	(22.51%,27.85%)		
Region (0.1085)	Northeast	18.24% <sup>2,3</sup>	(13.15%,23.32%)	-0.193	(-0.749,0.363)	19.46% <sup>2,3</sup>	(14.06%,24.86%)	0.82	(0.47,1.44)
	South	28.20% <sup>1</sup>	(23.21%,33.20%)	0.275	(-0.222,0.772)	27.56% <sup>1</sup>	(22.65%,32.47%)	1.32	(0.80,2.16)
	Midwest	28.11% <sup>1</sup>	(23.37%,32.85%)	0.274	(-0.221,0.770)	27.55% <sup>1</sup>	(22.87%,32.23%)	1.32	(0.80,2.16)
	West	22.38%	(15.18%,29.59%)	0.000	(0.000,0.000)	22.58%	(15.32%,29.83%)	1.00	n/a
Department Type (0.8463)	All Career	14.12% <sup>2,3</sup>	(8.92%,19.32%)	0.165	(-0.446,0.776)	28.41%	(17.01%,39.81%)	1.18	(0.64,2.17)
	All Volunteer	24.98% <sup>1</sup>	(20.13%,29.83%)	0.000	(0.000,0.000)	25.32%	(20.31%,30.32%)	1.00	n/a
	Combination	26.22% <sup>1</sup>	(22.80%,29.64%)	-0.020	(-0.362,0.322)	24.96%	(21.60%,28.31%)	0.98	(0.70,1.38)
Jurisdiction Type (0.2815)	Urban	14.07% <sup>2</sup>	(9.67%,18.48%)	-0.272	(-0.768,0.223)	21.07%	(13.61%,28.53%)	0.76	(0.46,1.25)
	Rural/Missing	27.49% <sup>1</sup>	(24.40%,30.58%)	0.000	(0.000,0.000)	25.78%	(22.86%,28.70%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.0000)	50,000+	5.47% <sup>2,3</sup>	(2.31%,8.63%)	-1.998*	(-2.812,-1.184)	5.46% <sup>2,3</sup>	(1.51%,9.42%)	0.14*	(0.06,0.31)
	5,000-50,000	15.86% <sup>1,3</sup>	(12.35%,19.37%)	-0.733*	(-1.094,-0.372)	16.89% <sup>1,3</sup>	(12.87%,20.90%)	0.48*	(0.33,0.69)
	0 – 5,000	30.26% <sup>1,2</sup>	(26.60%,33.92%)	0.000	(0.000,0.000)	29.54% <sup>1,2</sup>	(25.77%,33.30%)	1.00	n/a
FFFIPP/ Fatality (0.0249)	Fatality with Investigation	10.24% <sup>3</sup>	(4.85%,15.63%)	-0.671*	(-1.312,-0.030)	15.05% <sup>3</sup>	(7.21%,22.89%)	0.51*	(0.27,0.97)
	Fatality - No Investigation	14.04% <sup>3</sup>	(6.64%,21.44%)	-0.623	(-1.275,0.028)	15.65% <sup>3</sup>	(7.50%,23.81%)	0.54	(0.28,1.03)
	No Fatality	25.41% <sup>1,2</sup>	(22.70%,28.12%)	0.000	(0.000,0.000)	25.33% <sup>1,2</sup>	(22.62%,28.03%)	1.00	n/a
Who Completed Survey (Q62) (0.3965)	Fire Chief	24.81%	(21.60%,28.02%)	-0.230	(-0.599,0.138)	24.24%	(21.07%,27.42%)	0.79	(0.55,1.15)
	Safety Officer	26.89%	(10.73%,43.04%)	0.260	(-0.699,1.219)	33.85%	(14.42%,53.28%)	1.30	(0.50,3.38)
	Training Officer	19.49%	(10.37%,28.61%)	-0.404	(-1.069,0.260)	21.30%	(11.74%,30.85%)	0.67	(0.34,1.30)
	Other/Missing	27.98%	(21.89%,34.06%)	0.000	(0.000,0.000)	28.54%	(22.36%,34.71%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

**Model 84: Q53a. How satisfied or dissatisfied are you with these NIOSH materials? - Satisfied or Very Satisfied**

Characteristic <sup>a</sup>		Prevalence <sup>b</sup>		Beta <sup>c</sup>		Predicted Marginal <sup>d</sup>		Adjusted Odds Ratio <sup>e</sup>	
		Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval	Estimate	Conf Interval
Intercept		69.73%	(66.56%,72.90%)	0.313	(-0.243,0.869)	69.73%	(66.56%,72.90%)		
Region (0.0822)	Northeast	70.84%	(64.29%,77.39%)	0.442	(-0.086,0.969)	70.92%	(64.30%,77.55%)	1.56	(0.92,2.63)
	South	74.41% <sup>4</sup>	(68.80%,80.01%)	0.617 <sup>*</sup>	(0.122,1.111)	74.33% <sup>4</sup>	(68.73%,79.92%)	1.85 <sup>*</sup>	(1.13,3.04)
	Midwest	66.65%	(61.01%,72.29%)	0.278	(-0.206,0.761)	67.52%	(61.95%,73.09%)	1.32	(0.81,2.14)
	West	63.30% <sup>2</sup>	(54.56%,72.05%)	0.000	(0.000,0.000)	61.33% <sup>2</sup>	(52.14%,70.52%)	1.00	n/a
Department Type (0.0106)	All Career	83.45% <sup>2,3</sup>	(78.14%,88.76%)	0.435	(-0.133,1.003)	81.97% <sup>3</sup>	(73.87%,90.07%)	1.55	(0.88,2.73)
	All Volunteer	74.58% <sup>1,3</sup>	(69.20%,79.96%)	0.000	(0.000,0.000)	74.75% <sup>3</sup>	(69.14%,80.36%)	1.00	n/a
	Combination	65.68% <sup>1,2</sup>	(61.42%,69.94%)	-0.438 <sup>*</sup>	(-0.819,-0.057)	65.82% <sup>1,2</sup>	(61.41%,70.23%)	0.65 <sup>*</sup>	(0.44,0.94)
Jurisdiction Type (0.3669)	Urban	76.40% <sup>2</sup>	(70.80%,82.00%)	0.202	(-0.237,0.642)	73.05%	(65.51%,80.59%)	1.22	(0.79,1.90)
	Rural/Missing	68.10% <sup>1</sup>	(64.40%,71.80%)	0.000	(0.000,0.000)	69.00%	(65.39%,72.61%)	1.00	n/a
Jurisdiction Size <sup>f</sup> (0.9707)	50,000+	79.82% <sup>3</sup>	(73.71%,85.93%)	0.033	(-0.611,0.677)	70.10%	(58.37%,81.84%)	1.03	(0.54,1.97)
	5,000-50,000	72.59%	(67.91%,77.26%)	0.044	(-0.313,0.401)	70.33%	(65.01%,75.64%)	1.05	(0.73,1.49)
	0 – 5,000	67.62% <sup>1</sup>	(63.24%,72.00%)	0.000	(0.000,0.000)	69.42%	(65.03%,73.81%)	1.00	n/a
FFFIPP/ Fatality (0.0038)	Fatality with Investigation	89.74% <sup>2,3</sup>	(84.11%,95.37%)	1.102 <sup>*</sup>	(0.455,1.748)	87.05% <sup>2,3</sup>	(79.98%,94.13%)	3.01 <sup>*</sup>	(1.58,5.75)
	Fatality - No Investigation	71.68% <sup>1</sup>	(61.95%,81.41%)	0.059	(-0.453,0.572)	70.80% <sup>1</sup>	(60.95%,80.65%)	1.06	(0.64,1.77)
	No Fatality	69.54% <sup>1</sup>	(66.30%,72.77%)	0.000	(0.000,0.000)	69.59% <sup>1</sup>	(66.37%,72.82%)	1.00	n/a
Who Completed Survey (Q62) (0.1146)	Fire Chief	70.00%	(66.17%,73.82%)	0.397	(-0.000,0.794)	70.98%	(67.22%,74.75%)	1.49	(1.00,2.21)
	Safety Officer	72.06%	(54.62%,89.50%)	0.282	(-0.730,1.294)	68.62%	(48.21%,89.03%)	1.33	(0.48,3.65)
	Training Officer	78.47% <sup>4</sup>	(68.05%,88.89%)	0.743 <sup>*</sup>	(0.050,1.436)	77.42% <sup>4</sup>	(66.86%,87.98%)	2.10 <sup>*</sup>	(1.05,4.20)
	Other/Missing	65.36% <sup>3</sup>	(58.08%,72.64%)	0.000	(0.000,0.000)	62.45% <sup>3</sup>	(54.73%,70.18%)	1.00	n/a

<sup>a</sup>Numbers in parentheses in this column are the p-values associated with tests of whether all betas for the effect are simultaneously equal to zero.

<sup>b</sup>Weighted prevalence estimate.

<sup>c</sup>Beta associated with the logistic model.

<sup>d</sup>Predicted Marginal. This is the average predicted response of all the observations assuming all observations were in the effect specified by the row, controlling on all other variables in the model.

<sup>e</sup>Adjusted Odds Ratio. This provides a measure of the probability that the dependent measure occurs for the effect specified in the row relative to the probability that the dependent measure occurs for the reference level of the effect, while controlling on all other variables.

<sup>f</sup>Estimated Population Covered

\*Indicates estimate is significantly different from zero (for Betas and Adjusted Odds Ratio only).

Note: A superscript numeral indicates that the estimate is significantly different from the estimate in the row number denoted by the superscript.

*D*

**Nonresponse  
Follow-up Survey  
Forms**





Exhibit D-1. Nonresponse Survey Instrument

Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation

RTI PROJECT 0208235.030.009

Nonresponse Follow-up Survey

Case ID # \_\_\_\_\_

TI Name \_\_\_\_\_

Date of Interview \_\_\_\_\_ 2006

**DID RESPONDENT GIVE CONSENT TO PARTICIPATE?**

YES  NO

DO NOT READ TEXT IN ALL CAPS

**SECTION 1. TRAINING AND SAFETY**

1. Does your department have a Safety Officer?

- No → SKIP TO QUESTION 9  
 Yes

1a. What kind of a position does your Safety Officer have within your department? Is the Safety Officer position a ...

- Full-time paid position  
 Part-time paid position  
 Volunteer position  
 Other (Please specify: \_\_\_\_\_)

**SECTION 2. HEALTH AND SAFETY INFORMATION**

9. How familiar are you with NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP)? Would you say...

- Not at All Familiar  
 Not Very Familiar  
 Somewhat Familiar  
 Very Familiar

11. In what ways has your department used NIOSH recommendations? Have you....  
MARK ALL THAT APPLY

- Made changes to training program?  
 Developed new SOPs/SOGs?  
 Made changes to SOPs/SOGs?  
 Justified current budget/staffing?  
 Made new budget/staffing requests?  
 Justified grant applications?  
  
 DOES NOT APPLY. WE HAVE NOT USED NIOSH RECOMMENDATIONS.  
→ SKIP TO QUESTION 13

11a. Please describe the changes you made:

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11b. Can you identify topics of NIOSH recommendations that you have used for training purposes? Have you used NIOSH recommendations concerning \_\_\_\_ for training purposes? MARK ALL THAT APPLY

- Traffic hazards
- Personal protective equipment and clothing
- SCBAs
- PASS systems
- Incident Command systems
- Radio communications
- Physical fitness and cardiovascular disease (CVD)
- Building code compliance (e.g., warning against the use of wooden trusses)
- Another topic (Please specify: \_\_\_\_\_  
\_\_\_\_\_)
  
- DOES NOT APPLY. WE HAVE NOT USED NIOSH RECOMMENDATIONS FOR TRAINING PURPOSES.

**SECTION 3. FITNESS AND WELL-BEING**

13. How often do your firefighters receive screenings for cardiovascular disease (CVD) and its risk factors? Would you say ...

- One time, when they first join the department
- Less frequently than once a year
- One time a year
- More than time a year
  
- DOES NOT APPLY. FIREFIGHTERS ARE NOT REQUIRED TO RECEIVE CVD SCREENINGS.

**SECTION 4. DRIVING SAFETY**

18. About how often do you think your firefighters use their seatbelts when riding in the emergency vehicles? Would you say ...

- Never
- Some of the time
- About half the time
- Most of the time
- Always

**SECTION 5. STRUCTURE FIRES**

The following questions ask about your department's experience with as well as policies and procedures for dealing with structure fires.

20. Of the emergency calls your department responded to in the past 12 months, about how many of these were structure fires?

Total number of structure fires \_\_\_\_\_

21. How often is Incident Command established when responding to structure fires? Would you say ...

- Never
- Rarely
- About half the time
- Most of the time
- Always

24. About how often does an Incident Commander assign an Incident Safety Officer when responding to structure fires? Would you say...

- Never
- Some of the time
- About half the time
- Most of the time
- Always

32. Does your department have Self Contained Breathing Apparatuses (SCBA) for your firefighters to use when combating structure fires?

- NO → SKIP TO QUESTION 45
- YES

33. Do your firefighters ever have to share facepieces for SCBAs?

- NO
- YES

**SECTION 6. EDUCATIONAL MATERIAL**

The following questions ask about your policies and procedures for providing educational material to firefighters and others within your department.

45. Have you read part or all of a NIOSH Fire Fighter Fatality Investigation report in the last 12 months?

- NO → SKIP TO QUESTION 62
- YES

47. Overall, how would you rate the amount of detail in the NIOSH reports? Would you say...

- Too little detail
- About the right amount of detail
- Too much detail

50. Does the fire department disseminate the information it receives from NIOSH to the firefighters?

- NO → SKIP TO QUESTION 51
- YES

50a. How is this information disseminated to firefighters? Is it disseminated through ...  
MARK ALL THAT APPLY.

- Regular staff meetings?
- Training sessions?
- Provide copies of NIOSH reports to firefighters?
- Provide copies of NIOSH report summaries to firefighters?
- Provide summaries prepared by department to firefighters?
- Postings on bulletin boards?
- Post report on the department website?
- Send message to firefighters by email?
- Another means? (Please specify: \_\_\_\_\_  
\_\_\_\_\_)

51. NIOSH reports always include recommendations that are designed to help improve the health and safety of firefighters. How much do you agree or disagree with the following statements about the NIOSH recommendations? Please tell me if you strongly agree, disagree, neither agree nor disagree, agree, or strongly agree.

	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neither Agree nor Disagree</b>	<b>Agree</b>	<b>Strongly Agree</b>
a. Recommendations are practical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Recommendations are easy to understand	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Recommendations are specific and concrete	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION 7. YOUR DEPARTMENT INFORMATION**

62. What is your position in the fire department? [WHO COMPLETED THIS SURVEY?]

- Fire Chief
- Safety officer
- Training officer
- Other (Please specify: \_\_\_\_\_)

**Those are all the questions we have for you. Thank you for taking the time to answer this survey!**



**Exhibit D-2. Informed Consent Script**

**Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation**  
(RTI Project 0208235.030.009)

**Introduction and Informed Consent Script**

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**Step 1: Confirm Fire Department Identity**

1. CORRECT FIRE DEPARTMENT?

- YES → SKIP TO 3
- NO

2. Hello, is this the \_\_\_\_\_ [NAME OF FIRE DEPARTMENT] ?

- YES → SKIP TO 3
- NO

OR, FOR NON-BUSINESS NUMBERS:

Hello, I'm calling to speak to [Chief \_\_\_\_\_ / the Chief] of the \_\_\_\_\_ Fire Department.

IF THE NAME OF THE DEPARTMENT, FIRE CHIEF OR PHONE NUMBER HAS  
CHANGED, PROBE:

Does this fire department still exist?

OR

Can you tell me the name of the current Fire Chief for this Fire Department?

OR

I'm sorry. I must have the wrong number for that department. Do you happen to have the correct number?

- YES  
→ **OBTAIN CORRECT PHONE NUMBER AND RECORD ON CONTACT SHEET**

- YES, BUT IT HAS MERGED WITH ANOTHER DEPARTMENT  
→ **CODE INELIGIBLE ON CONTACT SHEET**

Okay, in that case I won't need any additional information from you.  
Thank you so much for your time!

- NO (PROBE, IF NEEDED, TO DETERMINE IF FIRE DEPARTMENT IS STILL A SELF-STANDING DEPARTMENT)  
→ **IF NOT, CODE INELIGIBLE ON CONTACT SHEET**

Okay, in that case I won't need any additional information from you.  
Thank you so much for your time!

- OTHER (EXPLAIN: \_\_\_\_\_)



**Step 2: Identify Respondent**

3. (Hello, I'm calling on behalf of the National Institute of Occupational Safety and Health.)

May I speak with Chief \_\_\_\_ [LAST NAME]?

OR

May I speak with the Fire Chief?

WRONG NAME:

I'm sorry. The name we had on our records must be out of date. I'd like to speak with the current Fire Chief. Could you tell me his or her name? → **RECORD NAME OF FIRE CHIEF ON CONTACT SHEET**

May I speak with Chief \_\_\_\_ [CORRECT LAST NAME] ?

CHIEF IS UNAVAILABLE:

Is there another officer on duty I could speak with about a research study?

**YES CHIEF IS UNAVAILABLE, BUT SOMEONE ELSE IS:**

(TRY TO TALK TO ANOTHER OFFICER SUCH AS THE ASSISTANT CHIEF, A BATTALION CHIEF, ADMINISTRATIVE CHIEF, TRAINING OFFICER, OR SAFETY OFFICER.)

→ **NOTE NAME OF PROXY RESPONDENT ON CONTACT SHEET**

Thank you. May I speak with \_\_\_\_ [PROXY RESPONDENT] ?

**NO CHIEF IS UNAVAILABLE. CALL BACK:**

Thank you. I'll try to call again later. Could you tell me when would be a good time to call him/her back?

→ **NOTE POSSIBLE CALL BACK TIMES ON CONTACT SHEET**

### **STEP 3: Initial Contact with Fire Chief (or Proxy)**

Hello, this is \_\_\_\_ [YOUR NAME], calling from RTI International in North Carolina. I'm calling in connection with a study that the National Institute of Occupational Safety and Health (NIOSH) is conducting. NIOSH is an agency in the U.S. Centers for Disease Control and Prevention (CDC). We sent a questionnaire to your department a few weeks ago, and I'm just following up to ask a few questions.

**“If you send me a new copy of the questionnaire, I'll fill it out for you.”**

Thank you. I'll be glad to send it. Just to confirm the mailing address, is it:

\_\_\_\_\_ [RESPONDENT'S NAME] ?  
\_\_\_\_\_ [STREET ADDRESS – NOT P.O. BOX] ?  
\_\_\_\_\_ [CITY] \_\_\_\_\_ [STATE] \_\_\_\_\_ [ZIP] ?

**➔ CORRECT ADDRESS AS NEEDED ON CONTACT SHEET**

OPTIONAL [WE HAVE LIMITED COPIES AVAILABLE; NOT ENOUGH FOR ALL SAMPLE MEMBERS.]:

I'll also enclose (another) copy of the FFFIPP CD-ROM if you would like one. The CD-ROM includes all of the FFFIPP reports that have been published. Should I enclose one along with the questionnaire?

**➔ INDICATE REQUESTS ON THE RESEND QUESTIONNAIRE FORM**

### **STEP 4: Informed Consent**

In case you didn't see the materials we sent to you earlier, I need to tell you a few things more about why I am calling. This is part of NIOSH's evaluation of their program to develop knowledge about firefighter safety. NIOSH investigates firefighter fatalities and disseminates information about the fatalities to the fire service. The program is called FFFIPP (the Fire Fighter Fatality Investigation and Prevention Program). NIOSH hired my company, RTI International, to conduct this evaluation. The purpose is to help them identify ways of improving their dissemination efforts. We have already conducted focus groups in North Carolina and at the recent FDIC in Indianapolis and we are just finishing a mail survey of fire departments across the country.

I am calling you today as part of the follow-up to that Fire Department Survey. Your fire department was one of the 3,000 fire departments that were selected for that original Fire Department Survey. Your department should have received materials about the survey in the mail a few weeks ago. For the follow-up telephone calls we are doing now, we randomly selected about 200 of the departments that have not yet returned the Fire Department Survey. Your department is one of those.

The interview takes about 4 to 5 minutes. I'd like you to know that participating in this short interview is voluntary, and the answers you give me will be kept confidential. Also, the information we give NIOSH will not identify the source of information or the identity of the fire departments that participate.

Finally, if you have any questions about this telephone survey or about the study as a whole, you can call the study leader, Dr. Kristina Peterson, at RTI. Her toll-free number is 1-800-334-8571, x7722. If you have a question about your rights as a study participant, you can also call RTI's Office of Research Protection toll-free at 1-866-214-2043. You may also contact Dr. Michael J. Colligan with the NIOSH Human Subjects Review Board (HSRB) at (513) 533-8222. Do you have any questions about this telephone follow-up survey?

If it's all right, we can just get started now.

**“I don't have time now”**

I can try to call again later. (We estimate the interview will take 4 to 5 minutes.) Could you tell me when would be a good time to call?

**“If you send me a new copy of the questionnaire, I'll fill it out for you.”**

SAME PROCEDURE AS ABOVE, STEP 3

➔ ANSWER QUESTIONS, AS NEEDED. INDICATE THAT RESPONDENT GAVE CONSENT AT THE TOP OF THE QUESTIONNAIRE

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**Step 5: Conduct Interview**

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[IF THE RESPONDENT DOES NOT OBJECT]

The first question is..... [GO TO QUESTIONNAIRE]

## **Exhibit D-3. Frequently Asked Questions**

### **Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) Evaluation** (RTI Project 0208235.030.009)

## **Frequently Asked Questions**

### **What is the FFFIPP?**

The Fire Fighter Fatality Investigation and Prevention Program (FFFIPP) is conducted by the National Institute for Occupational Safety and Health (NIOSH). This program examines fire fighter deaths and serious injuries. NIOSH then provides recommendations that may prevent similar deaths and injuries from happening again.

The goals of the program are to: 1. Learn about the events that lead to fire fighter deaths; 2. Think of ideas to keep deaths and injuries from occurring again, and 3. Share these strategies with the fire service.

### **What is the FFFIPP Evaluation?**

The FFFIPP Evaluation will give NIOSH information to improve the value of the program. We have already collected information from a mailed survey and from focus groups of active firefighters.

The Fire Department Survey was sent to fire department chiefs. It asks about the training and safety procedures at the fire department. It also asks how the FFFIPP reports are used by the department.

### **How will this evaluation help my department?**

Taking part in this study gives NIOSH the chance to learn what information is useful to your fire department. NIOSH will use that knowledge in the Fire Fighter Fatality Investigation and Prevention Program to better meet your needs.

### **Who is doing this evaluation?**

This study is being done by the National Institute for Occupational Safety and Health. NIOSH is part of the Centers for Disease Control and Prevention (CDC) in the U.S. Department of Health and Human Services. NIOSH provides research, products and services to prevent work-related illness, injuries, and death. NIOSH and CDC have asked RTI International (RTI) to conduct the study.

### **What is RTI?**

RTI is a non-profit research organization located in Research Triangle Park, NC. RTI is committed to improving the human condition through research. RTI is closely associated with Duke University, the University of North Carolina at Chapel Hill, and North Carolina State University. RTI does research for government and industrial clients.

### **How did you select my fire department?**

Most fire departments were selected from a list of all fire departments in the country. Some departments were chosen at random. Other fire departments were chosen on purpose based on their size and whether they have had a FFFIPP investigation. About 3,000 fire departments will be asked to answer the Fire Department Survey.

I am calling because your department was on the original list of departments to participate in the Fire Department Survey. Yours is among about 1,400 fire departments that have not yet responded to the survey. In order to make certain that our results are as accurate as possible, we selected a random sample of about 200 of these fire departments to call and ask a few of the questions from the main survey.

### **What Does this Interview Involve?**

I will ask you (or someone you designate) a series of about 16 questions over the phone. It takes about 4 to 5 minutes to do. There is nothing else involved.

### **Are there any risks?**

There are no risks in taking part in the study.

### **What will my department get for participating in the survey?**

Participating also gives you the chance to give information to NIOSH about how it communicates information from the FFFIPP investigations back to the fire service. We can also ask NIOSH to place you or your department on its mailing list for future FFFIPP reports if you are not already receiving them.

### **How long will it take?**

These questions will take no more than about 4 to 5 minutes to complete.

### **Am I required to participate?**

No, your participation is voluntary. You are an important part in this research study, so we hope you participate. By answering these few questions, you will help us to determine the reliability of the other information we collected from the survey.

Participating also gives you the chance to give information to NIOSH about how it communicates information from the FFFIPP investigations back to the fire service.

### **What about confidentiality?**

No identifying facts about you, your fire department, or your co-workers will be seen by anyone outside of the research team. We do not use names in our results. The answers we collect from you will be combined with answers from other fire departments.

### **Where do I get more information?**

Information about FFFIPP is available online at: <http://www.cdc.gov/niosh/firehome.html>.

If you have other questions about this evaluation, you can call Dr. Kristina Peterson at RTI. Her toll-free number is 1-800-334-8571, x7722.

If you have a question about your rights as a study participant, you can also call RTI's Office of Research Protection toll-free at 1-866-214-2043. You may also contact Dr. Michael J. Colligan with the NIOSH Human Subjects Review Board (HSRB) at (513) 533-8222.

If you need help as a result of thinking about these issues, you may contact the National Suicide Prevention Lifeline at 1-800-273-

*E*

**Focus Group  
Materials**



## Exhibit E-1. Announcement

### ANNOUNCEMENTS: Focus Group Recruiting Announcement

#### FDIC Fire Engineering Conference (Indianapolis) Announcement:

##### Firefighter Safety Research Opportunity

Are you attending the **FDIC Fire Engineering** conference in Indianapolis this spring?

If so, you may be eligible to participate in a focus group on firefighter safety.

The focus groups are part of a nationwide evaluation of the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP). This is a program of the National Institute of Occupational Safety and Health (NIOSH). NIOSH is part of the Centers for Disease Control and Prevention (CDC). The focus groups will be organized by professional staff from RTI International. RTI is conducting the FFFIPP evaluation for NIOSH and CDC.

The purpose of the focus groups is to tell the researchers about fire safety issues from the firefighters' perspective.

To be eligible for the focus group, you must have worked with your current fire department for at least one year and be an active firefighter who is involved with fire suppression. Most officers are not eligible for the focus groups. These include Chiefs, Station Captains or Commanders, Safety Officers, Training Officers, and Administrative Officers.

The focus group will take 1 ½ hours of your time. They will take place at the conference. A meal will be provided. Each focus group will have up to 9 participants.

For further information about these focus groups, please contact Murrey Olmsted at RTI. He can be reached toll free at 1-800-334-8571, ext. 5506 or by email at [MOlmsted@rti.org](mailto:MOlmsted@rti.org).







## STEP 2: CONDUCT SCREENING INTERVIEW

**READ:** Hello, this is \_\_\_\_\_ [NAME] from RTI International. I am calling about the focus group discussion on firefighter safety that we are organizing [this Spring / during the upcoming \_\_\_\_\_ Conference]. I understand that you may be interested in participating and I wanted to tell you some more about it. We are conducting a study on behalf of the National Institute for Occupational Safety and Health. It is an evaluation of their Fire Fighter Fatality Investigation and Prevention Program.

A focus group is a discussion among a small group of people that is facilitated by a moderator. The group we are planning will be moderated by a professional moderator from RTI. There will be about eight to nine other people in the group with you at the same time. The focus group will discuss firefighter safety information, safety guidelines, and common problems encountered in using safety practices. We will tape record and take notes during the discussion to be certain we get all the information that the group provides.

You may be able to provide valuable information on how to improve the health and safety of firefighters. Before we go any further, I first need to find out if you qualify to participate in the focus group. I have just a few questions for you about your own and your department's background. They will take less than five minutes to cover, and they will help me understand whether you have the characteristics we need for this study.

1. Have you been with your current fire department for at least 1 year?

- NO → NOT eligible. Thank them and terminate the call
- YES

2. Do your duties at the fire department involve fire suppression?

- NO → NOT eligible. Thank them and terminate the call
- YES

3. What is your job title in your department?

- Firefighter
- Chief → NOT eligible. Thank them and terminate the call
- Station captain or commander → NOT eligible. Thank them and terminate the call.
- Safety officer → NOT eligible. Thank them and terminate the call
- Training officer → NOT eligible. Thank them and terminate the call
- Administrative officer → NOT eligible. Thank them and terminate the call
- Other → NOT eligible unless their primary role is as a firefighter.

If other, specify: \_\_\_\_\_

4. Are you a career or volunteer firefighter?

- CAREER FIREFIGHTER
- VOLUNTEER FIREFIGHTER
- OTHER (Please specify: \_\_\_\_\_)

5. About how many firefighters are currently employed by your fire department?

- FEWER THAN 30
- BETWEEN 30 AND 50
- MORE THAN 50

6. What kind of jurisdiction does your fire department serve? Is it rural or urban?

- RURAL
- URBAN

**READ:** It looks like you are eligible to take part in our study. The focus group will be conducted at \_\_\_\_\_ (PLACE, DATE, & TIME). If you decide to participate, anything say during the session will be kept confidential and private. As a way of thanking you for the time you spend with us, we will be providing a meal and other refreshments during the focus group. Overall, it will take about 1 ½ hours of your time to participate in the study.

Do you think you would like to participate in the focus group?

- NO [PROBE]
- YES

**READ:** I'm glad that you are interested. We are currently in the process of compiling a list of eligible firefighters. The project team will be making the selections for the groups over the next few weeks. I will get back to you then about whether you have been selected for a focus group. To make it easier to get back to you later about whether you have been selected and to let you know about the schedule of the groups, I would like to ask you for some additional contact information.

**NOTE: UPDATE CONTACT INFORMATION ON PAGE 1.**

**STEP 3: INVITE ELIGIBLE PARTICIPANTS**

**READ:** Hello, this is \_\_\_\_\_[NAME] from RTI International. If you remember, I recently talked with you about participating in a focus group related to an evaluation of the Fire Fighter Fatality Investigation and Prevention Program. You had agreed to participate if selected for this study, and I am now calling back to let you know the decision of the project team.

**READ:** I'm happy to let you know that you have been selected to participate in a focus group. The focus group will be conducted at \_\_\_\_\_ (PLACE, DATE, & TIME). Overall the focus group will take 1 ½ hours. We will provide a meal/other refreshments during the focus group discussion.

**NOTE: PROVIDE PARTICIPANT WITH DETAILS OF WHEN AND WHERE THE FOCUS GROUPS WILL OCCUR. ANSWER ANY QUESTIONS.**

**STEP 4: MAKE REMINDER CALL TO FOCUS GROUP PARTICIPANTS**

**READ:** Hello, this is \_\_\_\_\_ [NAME] from RTI International. I am calling to remind you that we will be having a focus group at \_\_\_\_\_ (PLACE, DATE, & TIME). Are you still planning on attending the focus group? (IF NO, ASK WHY. TRY TO FIND A WORK AROUND SO

HE/SHE CAN ATTEND. IF YES, THEN PROCEED.) I look forward to seeing you at the focus group. We will finalize the order for \_\_\_\_ [lunch/ the meal] in the next few days. Do you have any dietary restrictions we should know about?

## Exhibit E-3. Consent Form

### Evaluation of the Fire Fighter Fatality Investigation & Prevention Program (FFFIPP)

#### Informed Consent for Focus Group Participants

**What is the purpose of this focus group?**

This focus group is part of a research study. The study is being conducted by the Centers for Disease Control and Prevention (CDC), the National Institute for Occupational Safety and Health (NIOSH). This is one of six focus groups that are being held around the country. In addition to these focus groups, the overall study also includes a survey of fire departments across the country. The purpose of the focus group is to learn more about how safety information is used by fire departments. We are interested in the impact of safety guidelines on fire departments and firefighters, and in common problems encountered in following these safety guidelines. In addition, we are interested in how we can improve the safety reports and guidelines developed by NIOSH's Fire Fighter Fatality Investigation and Prevention Program (FFFIPP). The answers from this study can help the FFFIPP better serve the needs of fire departments and can help prevent future firefighter fatalities or injuries.

**Why was I chosen?** You are being asked to be part of a focus group discussion because you responded to announcements or were identified by a fire service organization as someone who might be interested in being in this study.

**What will happen during the focus group?**

The focus group will last about an hour and a half. There will be about eight to nine other people in the group with you at the same time. The topics for discussion will include how safety information is handled in your fire department, the impact of safety guidelines on departments and firefighters, and common problems encountered in using safety practices. We also plan to talk about the safety information provided by NIOSH and other organizations. Specifically, we are interested in your ideas about how we can improve the way this information is distributed to fire departments and firefighters. The focus group will be led by a staff person from RTI International (RTI). RTI is a non-profit research organization headquartered in Research Triangle Park, NC. RTI is conducting the focus groups for NIOSH as part of the FFFIPP Evaluation. The RTI staff will take notes during the focus group. The discussion will also

be tape recorded. The tapes will help us get what all of you have to say.

We will be providing you with a meal and/or other refreshments during the focus group time. This is a token of our appreciation for your time and your inconvenience for being a part of this study. The only cost to you for being in our study is the time you spend and what it costs you to get here today.

**Can I tell others what is discussed in the group?**

In the course of the focus group you may learn certain facts about others in the group (or other people who are not in attendance). For instance, you may learn their names, what department they are from, and the common safety problems they encounter. Some of what you hear might be private. Please treat all information as confidential. We ask that you not share any of this information with others. This includes not talking about any details of what you heard here today outside of this focus group. We are asking all the other participants agree to do the same. However, we cannot guarantee that other participants will not repeat things you say in this group outside the group.

**Are there risks?** We do not expect any risks to you from being in this study. It is an open discussion, so it is possible that some of the things we discuss could make you feel uneasy. You might also talk about private things and later wish you had not.

**Will this be kept private?** The project will not use your name in any written reports. The reports will put together what we learn from everyone in this study. Everything we learn will be kept private by RTI staff to the fullest extent of the law. We will keep what you tell us in a locked file cabinet or on a secure computer file. At the end of the study, we will destroy all records that could in any way be linked to you.

**Do I have to participate?** You are free to join the study or not. You can stop being in the discussion at any time. You can also refuse to answer any question. Your choice to take part will not have any impact on your fire department's benefits from the FFFIPP.

**Who do I call if I have questions?** If you have any questions about the study, you can call the Project Leader, Dr. Kristina Peterson. Her toll free number is 1-800-334-8571, x7722. If you have any questions about your rights as a study participant, you can also call RTI's Office of Research Protection and Ethics toll-free at 1-866-214-2043. You may also call Dr. Michael J.

Colligan with the NIOSH Human Subjects Review Board (HSRB) at (513) 533 – 8222.

If you need help as a result of talking about the issues raised during the focus group discussion, you may contact the National Suicide Prevention Lifeline at 1-800-273-TALK (8255).

By signing below, you are saying it is your choice to be in this study. You are also saying we have given you a copy of this consent form. If there is any part of this form that is not clear to you, be sure to ask about it. You are also saying you have read this form and you agree to the terms above. Sign here only when you have gotten answers to all your questions and you are ready to be a part of this study.

---

*Name*

---

*Date*

Evaluation of the Fire Fighter Fatality Investigation & Prevention Program (FFFIPP)

Focus Group Moderator's Guide

*(Estimated Total Time: 90 minutes)*

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**READ:** Thank you for participating in today's focus group about fire department safety and the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP). Today's focus group is one of 6 that we are conducting around the country with firefighters to try to more fully understand factors that impact the safety and well-being of firefighters. The focus groups are part of a larger study that is evaluating the impact of FFFIPP. The complete study includes a survey of fire departments, discussions with stakeholders, and these focus groups. Specifically, we are interested in issues such as the safety climate of your department, safety problems that you encounter, and the safety training and information you receive.

Over the next 90 minutes, we will be asking you all as a group to talk about a series of questions we have about these issues. The discussion will be led by \_\_\_\_\_ [NAMES]. We will ask questions and take notes throughout the discussion to make sure that we fully understand your answers to our questions. With your permission, we will record the session so that we can check our notes for accuracy. The recording will not be used for any other purpose, and will be destroyed as soon as the analysis of your information is completed. All individual responses will be kept private. No identifying information will be used in our notes so comments will not be able to be tracked back to you.

We encourage you to raise issues or ask questions throughout the discussion if you feel that there are additional issues related to the topics being discussed today. There is no right or wrong answer to any of the questions discussed, but we do expect that you will respect the opinions of others. Your participation is completely voluntary so if at any time you feel uncomfortable, you are free to leave without any explanation.

**NOTE: OBTAIN INFORMED CONSENT. HAVE PARTICIPANTS READ AND SIGN THE FORM BEFORE PROCEEDING TO THE GROUP DISCUSSION.**

Public reporting burden of this collection of information is estimated to average 90 minutes per session, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to a collection of information, unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1600 Clifton Road NE, MS D-74, Atlanta, Georgia 30333; ATTN: PRA (0920-XXXX).



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**1. Tell us your first name, what fire department you are from, and what kind of job you hold in your department.**

*(This is a question to introduce the participants. It will get them talking and will help to get people oriented to who is in the room with them.)*

**2. We are interested in what your experience with firefighter safety problems has been. We would like to ask about your best and worst experiences with firefighter safety.**

- What is the worst safety incident that you have experienced in your career?
- What is the best example of a safety success that you have experienced in your career?

**3. [FOR NON-JURISDICTIONAL FOCUS GROUPS ONLY] What do you think is the general attitude toward safety in your fire department?**

- Your fellow firefighters?
- Your officers and senior officers?
- Are there safety recommendations or procedures that people tend to ignore? If so, what are they?

**4. How do you usually get your safety information?**

- What are your favorite sources? Why?
- What are your least favorite sources? Why?
- What kind of safety information do you usually receive from your department?
- What kind of safety information do you usually have to find on your own?

**5. How does your department deliver safety information?**

- Is the current approach effective? Why, or why not?
- Is this information seen as important by firefighters and officers?
- How well is it received by firefighters and officers?

**6. Does the safety information you and your department receive have an impact on what people do either in training or fighting fires?**

- Do you change the way you do things after you have read or heard a presentation on new safety guidelines?
- Have you noticed any changes in the way your department does things as a result of new safety guidelines?
- Have there been events within your department that have had an impact on how your department follows safety guidelines?

**7. How familiar are you with the National Institute for Occupational Safety and Health (NIOSH) and its Fire Fighter Fatality Investigation & Prevention Program (FFFIPP)?**

- What do you know about the program?
- Have you seen or read any of the Fire Fighter Fatality Investigation reports or any other NIOSH fire safety reports?
- If you have read these reports, what did you think about them?
- What kind of impact have these FFFIPP reports and other materials had on your department?

**8. (PASS OUT COPIES OF A FFFIPP REPORT TO PARTICIPANTS) What can NIOSH do to improve the FFFIPP materials to better meet firefighter needs?**

**9. Are there other concerns you have about safety that are not being addressed by either your department or NIOSH at this point?**

**NOTE: THE PURPOSE OF THE FOCUS GROUPS:**

- To identify the impact of FFFIPP on the knowledge of firefighters.
- To identify the impact of FFFIPP on fire department operations (for example, training, standard operating procedures, and standard operating guidelines).
- To identify the impact of FFFIPP on safety practices.



National Suicide Prevention Lifeline



On the phone at **1-800-273-TALK (8255)**

On the Web at <http://www.suicidepreventionlifeline.org/crisis.aspx>



## If you are in crisis

### If you need help, please call us

If you need help for yourself, a friend, or family member, call **1-800-273-TALK (8255)** right away.

- Call for yourself.
- Call for someone you care about.
- Call to talk.
- Call to get help.
- Call to save a life.

We can help:

- The hotline is staffed by trained counselors,
- We are available 24 hours a day, 7 days a week,
- We have information about support services that can help you.

#### TTY Users

If you are a TTY user, please use our TTY number: **1-800-799-4TTY (4889)**

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