

AUG 3 0 2007

Washington, D.C. 20201

The Honorable John Kerry United States Senate Washington, DC 20510

# Dear Senator Kerry:

I am writing to advise you of the results of the investigation the Office of Inspector General (OIG) conducted in response to your request of February 5, 2007. In your letter, you expressed concern regarding allegations that officials of the Centers for Disease Control (CDC) may have blocked an investigation into the failure of Personal Alert Notification System (PASS) equipment used by firefighters. A PASS device is a motion sensor that emits a series of loud beeps if it is triggered by a firefighter or if the firefighter stands still for more than 30 seconds. The sound from the device allows other firefighters to locate and assist an individual who has become disoriented or incapacitated in a fire.

In February 2007, MSNBC issued a two-part report on the deaths of firefighters allegedly related to the failure of PASS devices and on the responsibilities of the CDC, National Institute for Occupations Safety and Health (NIOSH) in this matter. MSNBC cited in its report that there were 15 fatalities between 1998 and 2005 in which firefighters' PASS devices failed or did not work properly. Specifically, the report quoted the CDC's former Fire Safety Engineer, Eric R. Schmidt, as saying that CDC officials told him to "minimize his fact gathering during investigations" and that he was instructed to "omit critical facts" regarding the performance of the PASS devices.

OIG conducted an investigation of the allegations and of the methods used by CDC/NIOSH in investigating firefighter fatalities. OIG investigators interviewed Mr. Schmidt, CDC officials, and reviewed documentation related to the specific allegations, as well as governing program authorities and operational guidelines. In conclusion, OIG found no indication of wrongdoing by CDC management. Rather, the allegations primarily stem from a difference of opinion concerning NIOSH investigative procedures. NIOSH uses a public health research model to examine workplace fatalities in a variety of employment settings. The goal of this model is to conduct a "risk assessment" and identify strategies that can prevent fatalities under similar circumstances in the future and to disseminate the results of this assessment as quickly as possible. This research-oriented approach differs from investigative methods used by more traditional law enforcement organizations.

The investigative guidelines used by the NIOSH firefighter fatality investigators have been modified since the time of Mr. Schmidt's employment and continue to evolve. However, in conducting this investigation, we identified opportunities for improvement

of the methods used to conduct the firefighter fatality investigations and in the timing of the investigations and the dissemination of the results. This letter summarizes the findings of our investigation and our suggestions for improvement.

# I. Background: The Fire Fighter Fatality Investigation and Prevention Program

Pursuant to the Occupational Safety and Health Act of 1970 (Pub. L. No. 91-596), NIOSH was established to conduct research and make recommendations for the prevention of occupational injury and illness. Federal regulations (42 CFR Part 85A) define an investigation conducted by NIOSH as "research projects, experiments, demonstrations, studies, and similar activities of NIOSH...." (42 CFR § 85a.2). The regulations authorize NIOSH to "enter without delay any place of employment for the purpose of conducting investigations of all pertinent processes." (42 CFR § 85a.3). However, during an investigation, an instruction is necessary that a person involved in the investigation is "free to withdraw his consent and to discontinue participation in the investigation any time without prejudice to the subject." (42 CFR § 85a.2).

In fiscal year 1998, Congress appropriated \$2.5 million to CDC/NIOSH to address the problem of occupational firefighter fatalities. Specifically, NIOSH is to use the additional funding to conduct investigations of firefighter line-of-duty deaths.

## Program Overview

Approximately 100 firefighters die in the line-of-duty each year. About half of these fatalities result from traumatic injuries, while a large portion of the remaining fatalities stem from heart attacks occurring in the line-of-duty. Since the inception of the Fire Fighter Fatality Investigation and Prevention Program (FFFIPP), the program has provided reports and recommendations related to close to 350 incidents involving a firefighter fatality (or multiple fatalities) occurring in almost all 50 States.

There are currently no requirements regarding how the NIOSH FFFIPP should utilize its funding for the investigation of firefighter deaths. The FFFIPP is a relatively small program, with a staff of approximately 14 investigators. The essentially flat funding since 1998 has resulted in a reduced number of investigations over time. As a result, NIOSH prioritizes certain types of investigations. For example, priority is given to those events that account for a large number of deaths and those likely to result in new types of safety recommendations.

In January of 1998, NIOSH convened a meeting in Washington, DC, to obtain input from primary stakeholders, including representatives of fire departments, union representatives, and fire service organizations, to help provide direction for the new FFFIPP. These stakeholders most frequently mentioned the desire to focus on conducting line-of-duty investigations to identify factors contributing to firefighter fatalities and to disseminate this information to fire departments throughout the country. Since January 1998, NIOSH has periodically consulted with stakeholders to ensure that the FFFIPP is meeting their needs and to identify ways in which NIOSH might improve

upon the program to increase its impact on the safety and health of firefighters across the country. Most recently, NIOSH held a public stakeholders meeting in March 2006.

# Investigative Methods and Reporting

NIOSH staff conduct on-site investigations to gather facts surrounding a line-of-duty firefighter fatality and to identify potential contributory factors. NIOSH is notified of firefighter line-of-duty deaths by the U.S. Fire Administration (USFA) and individual fire departments and unions may also notify NIOSH of deaths and specifically request investigations. Firefighter fatality investigators look at what happened before, during, and after the event, and when applicable, use other agencies' investigative reports to help them develop a more complete picture of the events that led to the death of the firefighter(s) in question. NIOSH investigators typically do not respond immediately to a fatality, but attempt to respond within 3 to 6 weeks of the death(s). In questioning a NIOSH official, she indicated that this allows others, such as local law enforcement, time to complete their investigations, for families of the deceased to have mourned, and for the firefighters and other witnesses to be more focused during the interviews.

The NIOSH FFFIPP is based on the Fatality Assessment and Control Evaluation (FACE) model that was already in place and being utilized by NIOSH to identify and study other types of fatal occupational injuries. FACE uses a public health approach to fatal injury investigations. The goal of this approach is to prevent occupational fatalities across the Nation by identifying and investigating work situations at high risk for worker injury and then formulating and disseminating prevention strategies to those who can intervene in the workplace. FACE is a research model, not an enforcement model. Accordingly, investigators do not enforce compliance with State or Federal occupational safety and health standards and do not determine fault or blame. For example, the names of employers, victims, and/or witnesses are not used in written investigative reports.

A report is completed for each investigation which summarizes the sequence of events that led to the firefighter death or injury and includes recommendations for preventing future deaths and injuries under similar circumstances. These recommendations have most frequently been directed to fire departments and have suggested improvements to standard operating procedures or guidelines, personal protective equipment, communications, rapid intervention teams, strategies and tactics, and staffing.

In addition to conducting investigations of line-of-duty deaths of firefighters, the NIOSH FFFIPP also conducts Health Hazard Evaluations which entail epidemiological studies of workplace exposures. Additionally, when multiple NIOSH FFFIPP investigations identify common safety and health concerns, NIOSH develops educational documents that summarize the hazard and recommend prevention measures. Examples of topics addressed by these evaluations and educational documents include: structural collapse, exposure to electrical hazards during wildfires, live-fire training in acquired structures, deaths from tanker truck roll-overs, dive training, and hazards of working alongside roadways.

# II. Allegations of Mismanagement

In the February 2007 MSNBC reports, Eric R. Schmidt, a former employee of NIOSH FFFIPP, said that he was instructed to "omit critical facts" regarding the performance of PASS devices in an investigation of three firefighter fatalities in a December 1999 residential fire in Iowa. The article includes quotes from a February 14, 2000, "Performance Guidance" document in which Mr. Schmidt's supervisor at the time, Dawn Castillo, instructed him to "minimize your fact gathering during investigations to those pieces of information which are needed to summarize the chain of events or that have direct implications for prevention recommendations."

# Nature and Context of Allegations

Mr. Schmidt worked for NIOSH from June 1999 to June 2000 as a fire safety engineer in the early years of the FFFIPP. Prior to his employment with NIOSH, he had worked as a Fire Captain, a firefighter, and fire prevention engineer. At the time of his employment with NIOSH, Mr. Schmidt was the only investigator with a background in firefighting. Additionally at that time, FFFIPP investigators relied on the general FACE investigative procedures. (Subsequent to the time of Mr. Schmidt's employment, investigation guidelines based on the FACE model have been developed for specific application to the FFFIPP.)

Based on our investigation, OIG determined that Mr. Schmidt's allegations of mismanagement and problems occurring during his employment stem primarily from a difference of opinion in the interpretation of the governing investigative procedures. Mr. Schmidt did not report any cover-up of an investigation into the possible failures of PASS devices. He indicated to investigators that he did not believe that the management at NIOSH was corrupt or dishonest in any way. In response to questions regarding whether he was told to omit critical facts from his investigations, he said that "no one ever said cover this up or don't show this because someone doesn't want us to show this."

Mr. Schmidt explained to OIG investigators that the allegation that he was told to "omit critical factors" and "minimize your fact gathering during investigations" stems from a difference of opinion between Mr. Schmidt and his supervisor, Ms. Castillo, regarding the manner in which firefighter fatality investigations should be conducted. He believed the program should be administered with more of an investigative focus and less of a research emphasis. However, as noted previously, consistent with applicable regulations, NIOSH's research of occupational fatalities of all types (not just firefighter fatalities) is based on a public health model and not on an investigative model.

Mr. Schmidt reported to OIG that his goal in bringing to attention possible failures with PASS devices was to shed light on what he perceived as shortcomings in the investigative methods used in the FFFIPP. He also stated that the potential failures of PASS devices are not really the main issue; the devices were used as an example to illustrate problems with the procedures that are used in the firefighter fatality investigations. "The issue is the procedures, or lack of, that are used in the investigation." CDC/NIOSH management confirmed that during the course of his employment with CDC, Mr. Schmidt did not raise

concerns to management regarding the performance of PASS devices, nor did he request to pursue a line of inquiry regarding PASS devices.<sup>1</sup>

Mr. Schmidt was terminated from his employment with NIOSH on June 16, 2000, prior to the end of his probationary period. OIG determined through interviews and documentation gathered, including performance documentation, internal e-mails, and work products, that Mr. Schmidt's termination was not related to his desire to investigate PASS devices. Rather, as noted in the February 2000 performance guidance memo provided to Mr. Schmidt by Ms. Castillo and in the documentation provided at the time of his termination on June 16, 2000, there were concerns regarding the timeliness and completeness of his written reports, as well as his ability to follow instructions and to work well with the rest of the team.

Mr. Schmidt appealed his termination to the Equal Employment Opportunity Commission and the Merit Systems Protection Board, requesting reinstatement to his position with NIOSH. Both of these cases were dismissed. In his appeals, Mr. Schmidt did not raise a concern with PASS devices or indicate that his supervisor prevented him from pursuing issues related to PASS devices. Further, Mr. Schmidt's investigative materials left with his supervisors at the time of his termination did not mention the need for NIOSH to follow up and gather additional information related to PASS devices.

#### NIOSH/FFFIPP Attention to PASS Devices

In 2005, the National Fire Protection Association (NFPA) published an alert advising emergency responders that high temperatures could cause a reduction in the volume of PASS alarm signals. OIG was, however, unable to substantiate allegations that mismanagement by CDC/NIOSH was connected to deaths of nine firefighters between 2001 and 2005, prior to the publication of the NFPA alert. OIG determined that at the time of Mr. Schmidt's employment and subsequently, NIOSH included examinations of PASS devices in its investigations, sent these devices for testing when warranted, and when evidence was sufficient, called attention to potential problems with PASS devices.

The investigative guidelines used in conducting FACE evaluations at the time of Mr. Schmidt's employment instructed that the investigator should provide a detailed description of the incident in the narrative, including a description of the personal protective equipment and/or safety equipment used or available and a description of other equipment involved. Consistent with these guidelines, NIOSH specifically addressed the functioning of PASS devices in reports of investigations conducted during that time.

To illustrate, in the report of the investigation on which Mr. Schmidt was working when he received the February 2000 feedback on his performance and which he uses to support his allegations of mismanagement, NIOSH describes the examination of the firefighters' PASS devices. In this report, which summarizes the investigation of three fatalities

<sup>&</sup>lt;sup>1</sup> In an October 2, 2000, letter to Dr. Linda Rosenstock, the Director of NIOSH at that time, Mr. Schmidt noted his concerns related to NIOSH FFFIPP investigative procedures. In that letter, he used the PASS devices as an illustration of an issue that warrants further attention but did not provide specifics of his concerns or suggestions on what action should be taken with regard to PASS devices.

occurring in a December 1999 fire in Iowa, NIOSH reported that the victims' integrated and manual PASS devices were not heard sounding during the incident. Each of the victim's self-contained breathing apparatus (SCBA) with an integrated PASS was examined by the NIOSH investigators and was deemed too damaged by heat for testing. All three victims also wore a second, manual, PASS device. These PASS devices were also checked and found to be severely damaged but in working condition. It was unknown if the manual PASS devices were turned off after the victims' removals from the structure or if they had not been turned on prior to entering the structure. The report summarizing the December 1999 incident was finalized by NIOSH in April 2001 and posted to the Web and distributed to the mailing list shortly thereafter. This report was also included in a packet of reports that NIOSH sent to a mailing list of about 35,000 fire departments in late summer of 2001.

In a second example, in a February 2001 NIOSH report, which summarizes the investigation of two firefighter deaths occurring on February 14, 2000, NIOSH reported that the SCBAs used by the firefighters were referenced in a manufacturer safety notice. NIOSH reported that the manufacturer notice stated that the PASS alarms could inadvertently alarm, reset, or be shut off, possibly by interference from portable 2-way radios. Neither of the SCBAs in this incident could be tested, however, due to severe heat damage. This report was finalized in February 2001 and posted to the FFFIPP Web site and distributed to the mailing list shortly thereafter. This report was also included in the packet of reports sent nationwide to fire departments in late summer 2001.

NIOSH officials noted in response to questions by OIG investigators that they did not receive any questions or comments from firefighters or fire departments on the role of PASS devices in these incidents following the mailings of these two reports. In addition, they also remarked that drafts of each of these reports were reviewed by external experts and that none of the experts suggested that they follow up on these findings. Reviewers of the April 2001 report included a representative from the NFPA that has a consensus standard for testing and performance criteria for PASS devices and a representative from the National Institute for Standards and Technology (NIST). NFPA conducted its own independent investigation of the incident in the April 2001 report; however, its investigative report also did not consider the performance of the PASS devices as a critical factor in the incident.

According to official documents reviewed by OIG investigators, in January 2005, after noting a pattern in PASS devices not being heard or being barely audible, FFFIPP investigators contacted the NFPA committee chair by phone to alert the committee to evidence of potential performance issues of PASS devices identified during investigations conducted between 2001 and 2004. NIOSH then began working together with NFPA on a revision to the PASS performance standard. Based on the NIOSH findings, NIST conducted its study on the performance of PASS devices under high temperatures and issued the results in September 2005.

In early 2007, NFPA issued the 2007 edition of NFPA 1982, Standard on Personal Alert Safety Systems, which contains revisions providing for strengthened performance

requirements and testing addressing PASS alarm signal degradation and other issues. In the updated standards, NFPA has increased durability requirements for new PASS devices. Applicable manufacturers had 6 months to comply when producing the new PASS devices. The new edition also addresses other problems with the PASS devices that have been brought to the attention of NFPA by NIOSH and others. The changes include more rigorous testing in areas of shock, water infiltration, vibration, and heat. The NFPA also added a muffle test, which means that if a firefighter is unable to move, is unconscious or trapped and he/she is covering or on top of their PASS device, it still must be heard.

## III. Future Directions of the FFFIPP

In May 2007, NIOSH released a summary document on its future role in firefighter death and injury investigations. This plan describes future directions for the program based on a March 22, 2006, public stakeholders meeting and an evaluation report conducted by RTI International. The public meeting included representatives from the USFA, the National Volunteer Fire Council, NFPA, the International Association of Fire Chiefs, and the International Association of Fire Fighters, among others. Eleven individuals, (including Mr. Schmidt) submitted written comments to the docket.

Additionally, NIOSH contracted with RTI International to evaluate the FFFIPP. As part of the evaluation, RTI surveyed 3,000 fire departments and conducted a series of focus groups with front-line firefighters in the spring of 2006. The firefighters were asked to comment on the extent to which FFFIPP reports, recommendations, and other products were being utilized, specifically related to use in training, development of procedures, guidelines, policies and practices, and other prevention efforts. The final evaluation, which contains recommendations for program enhancements, is expected to be completed and posted on the NIOSH FFFIPP Web site in the near future.

Based on the stakeholder input and survey results, NIOSH determined future directions for the FFFIPP. Some of the program goals include:

- continue to make the main focus of the program performing fatality investigations and maintain investigative activity at or near the current level;
- make the prioritization of investigations transparent by posting the program's decision flow chart on the FFFIPP Web site (this chart has been posted and may be found at <a href="http://www.cdc.gov/niosh/fire/pdfs/FFFIP">http://www.cdc.gov/niosh/fire/pdfs/FFFIP</a> DecisionChart.pdf</a>);
- address the issue of safety "culture" by looking more thoroughly at the incident department's occupational safety and health program;
- strive to make recommendations more straightforward and practical;
- increase references to "best practices" and standards in reports and recommendations;
- explore modifications to the FFFIPP fatality reports to make them more userfriendly and to enhance messages, including formatting changes and the development of training aides for reports; and

 increase coordination with other NIOSH Divisions conducing research on firefighter safety and health, including the NIOSH National Personal Protective Technology Laboratory.

# IV. Improvement of the FFFIPP Program

In the course of OIG's review of the NIOSH FFFIPP investigations, we noted several critical areas where the program could be enhanced, as well as significant constraints which limit effectiveness.

First, there are opportunities to establish criteria with which to measure the progress and outcomes of the program. For instance, the FFFIP operates under a general appropriation with limited resources and lacks specific directions regarding how the program must be administered. As such, there are no standards to hold the organization accountable for how the funds are used or with which to measure the success of the program. Establishment of expectations and outcomes would assist program managers and policymakers in evaluating how the program is working.

Second, NIOSH should explore possible ways to initiate investigations closer to the date of the actual fatality. By delaying the investigation, memories of those at the scene may not be as fresh or complete, and in some investigations, the fire site itself has been altered or destroyed by the time NIOSH investigators arrive. NIOSH should also explore methods to publicize significant investigative recommendations more timely, for example when there are potential equipment safety concerns.

Finally, limitations in NIOSH's authority may inhibit the success of the FFFIPP. For example, the individuals that NIOSH interviews as part of its investigations are not required to respond to NIOSH's questions. As a consequence, NIOSH strives to maintain an atmosphere of collegiality in conducting investigations, including having a policy of not identifying individuals and manufacturers in its investigations, to obtain and/or maintain cooperation. There may be other areas in which the investigative authority of NIOSH related to the FFFIPP could be changed to provide the necessary investigative tools and methods to achieve program objectives. As such, CDC may wish to evaluate the existing investigatory authorities governing the FFFIPP.

#### V. Conclusion

Our investigation into the allegations of potential misconduct by management within CDC/NIOSH did not find any evidence of wrongdoing related to preventing investigators from examining PASS devices as part of firefighter fatality investigations. The NIOSH FFFIPP conducted its investigations within its authority and according to investigative processes consistent with its mandate.

OIG notes that allegations in the MSNBC report appear to reflect a shared concern about an issue from the perspectives of different vantage points. While Mr. Schmidt advocates for an investigative/enforcement model, NIOSH has adopted a public health approach to these investigations. As noted by Mr. Schmidt, the focus on the PASS device detracts from the underlying issue, which is how the NIOSH FFFIPP can optimize the utilization of its resources under its current authorities and produce and disseminate information that can best ensure the prevention of future firefighter fatalities. Mr. Schmidt's opinion of how this can be done differed from management at the time of his employment at NIOSH. Seven years later, processes and procedures in the NIOSH FFFIPP have evolved, and NIOSH continues to take steps to build and improve upon this program.

Firefighter organizations have publicly stated that the FFFIPP has made a positive difference in preventing firefighter fatalities. For example, the findings of FFFIPP investigations have led to revisions in NFPA standards, changes in fire training programs, and equipment design. The program is viewed as an improvement over what the fire service has had in the past and is attributed to leading to many improvements and unknown saved lives. OIG appreciates the opportunity to have examined this issue and to contribute toward the efforts to improve the NIOSH firefighter fatality program.

Should you have any questions or if you would like to discuss this matter further, please contact me, or your staff may call Claire Barnard, Director of External Affairs, at 202-205-9523.

Sincerely,

Daniel R. Levinson Inspector General



Office of Investigations
330 Independence Avenue, S.W.
Washington, DC 20201

FEB 0 9 2007

The Honorable John Kerry United States Senate Washington, DC 20510

Dear Senator Kerry:

I am writing in response to your letter dated February 5, 2007, requesting that my office examine the alleged blocking of an investigation by the Center for Disease Control on the Personal Alert Notification System (PASS). In response to your request, we are initiating a review of this matter. Depending upon the results of the initial review, we will determine the appropriate action and be back in touch with you when we have information to provide.

We appreciate your interest in the programs of the Department. If you would like to discuss this request, please contact me, or have your staff call, Claire Barnard Director of External Affairs, at 202-205-9523.

Sincerely,

Michael Little

Deputy Inspector General

for Investigations

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# United States Senate

WASHINGTON, DC 20510-2102

February 5, 2007

The Honorable Daniel Levinson Inspector General Department of Health and Human Services Room 5541 Cohen Building 330 Independence Avenue, SW Washington, DC 20201

Dear Inspector General Levinson:

I write regarding an investigative report airing tonight on MSNBC that accuses officials with the Centers for Disease Control (CDC) of blocking an investigation into the deaths of six firefighters whose personal safety equipment failed between 1998 and 2000 and failing to take action until nine more firefighters died under similar circumstances. These allegations are deeply troubling and should be followed up immediately with a federal investigation.

The MSNBC report cites fifteen fatalities between 1998 and 2005 in which the firefighter's Personal Alert Notification System (PASS) devices, which sound a high-pitched alarm when a firefighter remains stationary too long, failed or did not work properly. Specifically, the report quotes the CDC's former chief fire investigator, Eric Schmidt, as saying that CDC officials told him to "minimize [your] fact gathering during investigations" and that he was instructed to "omit critical facts" regarding the performance of the PASS devices. According to MSNBC, the CDC was indifferent to Mr. Schmidt's evidence and did not want him to differ with its final reports on the fatalities.

The CDC fired Mr. Schmidt in 2000 for "marginal" performance in his investigative duties despite evidence he gathered that suggested a link between faulty PASS devices and these tragic deaths. Subsequent testing of these devices by an independent laboratory showed that they do not work properly in several conditions common in firefighting.

The allegations made by MSNBC are disturbing and warrant an exhaustive federal review. We owe it to the families of the deceased firefighters as well as the nearly 1 million firefighters who still use PASS devices to get answers and hold the negligent parties to account. Therefore, I request that you initiate an investigation into the CDC's handling of its investigations and determine the veracity of these allegations.

John Kerry

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