THE U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
PUBLIC HEALTH SERVICE
CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY AND HEALTH

convenes the

TOWN HALL MEETING

NORA

NATIONAL OCCUPATIONAL

RESEARCH AGENDA

The verbatim transcript of the Town Hall Meeting of the National Occupational Research Agenda held in Tampa, Florida, on February 13, 2006.

C O N T E N T S

February 13, 2006

TRANSCRIPT LEGEND

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-- (sic) denotes an incorrect usage or pronunciation of a word which is transcribed in its original form as reported.

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-- "uh-huh" represents an affirmative response, and "uh-uh" represents a negative response.

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-- (inaudible)/ (unintelligible) signifies speaker failure, usually failure to use a microphone.

TOWN HALL ORGANIZERS

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P R O C E E D I N G S

(9:00 a.m.)

OPENING REMARKS

DR. DONNA PETERSEN, UNIVERSITY OF SOUTH FLORIDA

DR. PETERSEN: Good morning, it's my pleasure to welcome you to the University of South Florida. My name is Donna Petersen. I am the Dean of the College of Public Health here at the University of South Florida, and we are delighted to host this town hall meeting for the National Institutes of Occupational Safety and Health in order to inform their development of the National Occupational Research Agenda for the future.

As the oldest College of Public Health in the State, we are very proud to see so many of you here today; friends and colleagues and members of our communities. It's important to the College that we provide this kind of time and place for us to come together and learn from you about issues that affect your lives and your work because as we serve to protect the public's health, it's not only about preventing disease, it's about promoting a quality of life. It's about promoting opportunities for people to live and work in their communities

and enjoy a state of health, which means we want our workplaces where people seek careers and productive livelihoods to be free from hazard, free from exposures, free from illness, free from anxiety. We want our workplaces to be healthy and safe places.

This research agenda is important. It helps NIOSH determine where to place their resources for the future. And we've been happy to be a partner of NIOSH through our education and research center, the Sunshine ERC here at the College of Public Health at the University of South Florida for a number of years.

Through the Sunshine ERC we create and disseminate knowledge. We educate professionals and folks to lead our occupational and safety agenda here in Florida in the Tampa Bay region and around the world.

I'm pleased to see so many of you here today. I look forward to hearing your remarks and your comments. It is critically important that we engage our public and our communities in this kind of work so that we are sure that we are addressing the most pressing issues of our day and so that our research informs policy and

practice for years to come in promoting health and a good quality of life.

So again, I'm delighted to welcome you here today and I will now introduce to you our colleague from the National Institute of Occupational Safety and Health, Max Lum, who's Director of Communications at NIOSH.

DR. MAX LUM, NIOSH

DR. LUM: Well, good morning and thank you very much for being with us today at the town hall meeting. I'm really happy to be here. We had 12 inches of snow in my driveway at 6:00 a.m. yesterday and I knew my wife wasn't going to shovel it. So I was out there very early just trying to get the car out of the garage to get to the airport. So I'm really happy to be here.

It's a pleasure, really, to talk to you a little bit about the National Occupational Research Agenda. This is the fifth in a series of thirteen national town hall meetings that we're doing around the country. NIOSH is a National Institute for Occupational Safety and Health. It's part of the Centers for Disease Control and Prevention.

I think about ten years ago -- almost ten years ago to the month NIOSH looked around and decided it needed really a better way to provide guidance for its research program. We at that point developed the National Occupational Research Agenda Program. What it is is it's a framework that we use at the Institute to develop our research agenda. It's not just for the Institute. It's really the National Occupational Research Agenda. In pursuit of that -- even though NIOSH is a small federal agency, particularly compared to some of the Institutes a NIH -- we're able to leverage the resources that we get from NORA to attract additional information from other places. Not only from industry, which we're hoping to do more of, but usually from the federal government to work on research projects.

We're particularly pleased that we could do it here in south Florida. Although I'm wondering about south Florida because we're not south far enough, I think, for the weather for us. We're pleased to be here and pleased to work with Stu and his team. Diana McCluskey has really

helped us put this together; Alex LaBow (*). These are the people on the ground here that have really made this possible. We're thrilled to have the Secretary of Health with us today and the Dean. As an indication of how serious our effort is and how much we do want to hear from you today, I can remember -- then I'll get off the podium here, but let me just tell you one story.

Ten years ago -- people say well, what do you do with this stuff? When you collect all of this information, what happens to it? What we do is we do take it back. We put it into a docket, a legal document for the government. It becomes a part of what our researchers will look at in deciding and moving forward with our research agenda.

Ten years ago at a town hall meeting in Washington, D.C. a group of nurses came down from Philadelphia -- and I can still remember it to this day -- and they brought a patient with them. They testified at that meeting and they talked about the importance of the Institute tackling the issue of latex allergy and latex allergy from wearing latex gloves in

the hospital setting causing real problems for these folks leading to the point where they couldn't work anymore.

That was just one example of the Institute immediately deciding to take this on as a research issue, and I think within a rather short time we were able to issue an alert to every hospital in the United States about the importance of understanding what latex allergy is and what are the things that you can do to prevent it.

So we're looking for those items. We're looking for comments from you today. One of the things my father said that I remember is if you're going to be a speaker there are three things you have to remember. You have to be focused, you have to be on target, and you have to be seated. I think I'm finally to that last point.

We really do want to hear from you and you'll hear a little bit more from Sid Soderholm of the Institute about the specifics of what we're going to do with the information. I do want to introduce Stu Brooks, the head of the Sunshine Center here at the University of South Florida.

Thanks, Stu.

STUART BROOKS, UNIVERSITY OF SOUTH FLORIDA

DR. BROOKS: Thank you, Max. I want to welcome everyone here today. It's a real pleasure hosting this -- what I think -- is a very important event; that is this town meeting. Where the University comes in, besides having the Sunshine ERC, which is supported by funds from NIOSH -- One of the things that's a main function of the Sunshine Education Research Center is the conduction of research.

So at the ERC and at the College of Public Health at the University of South Florida we try to identify research areas that are pertinent to the State of Florida and to the area.

So we welcome this town meeting because it can help us identify areas of research that need to be followed and we can then initiate various research projects. Over the years we have tried to identify problems and issues that are pertinent to the State and that are unique. So it's a real value to have these meetings here.

It's also a real pleasure to have our guests here and the first is an individual that I'd

like to introduce who's one who has a real impact in this community. Her family has had a major impact in this University. The family has also had a very important impact on the College of Public Health. It's a real pleasure to introduce the Hillsborough County Commissioner, Kathy Castor.

KATHY CASTOR, HILLSBOROUGH COUNTY COMMISSIONER

MS. CASTOR: Good morning. I'm here on behalf of the Hillsborough County Commission, the City of Tampa, to welcome you to this community of over one million people. This is a community that values community health. It is also a hard-working community. It's very pertinent that you're going to be talking about the retail and wholesale sectors today.

This is a community that values its public health to such an extent that the County government in concert with the University of South Florida and our major hospitals has created an award-winning healthcare program on the local level to serve working families in a clinic system and get them out of the ER for their primary care.

We work with Tampa General Hospital and Saint

Joseph's Hospital in particular in our community health centers through a half-cent sales tax funded by taxpayers to provide healthcare and primary care to the uninsured. As you all go back to your communities and you do further research, if you need more information about this award-winning program I encourage you to contact and the University of South Florida. It should be the wave of the future to address our uninsured problem in this country.

This is also a very hard working community. Our unemployment rate is very low. This is a service-sector economy where we are today. We have so many tourists that come to the Tampa Bay area and our residential growth and homebuilding and commercial development -- the impact here cannot be underestimated.

So I encourage you all to have a very informative dialogue today. I'm very happy to present a proclamation to USF College of Public Health and Dr. Petersen. This is simply a token of the community's warm welcome. It's a little warmer inside this morning than it is outside, but this is a token of our warm

welcome to all of you.

If I can add one more -- since I am a politician -- one more political statement, I won't say too much about it other than if you would like to share today your concern over budget cuts at the federal level to the Centers for Disease Control and all of the Occupational Safety and Health programs that are at risk I encourage you to do that as well. Thank you very much.

DR. BROOKS: Thank you very much. As you know, NIOSH is part of the CDC, so that would be very pertinent to them. Now, once again, it's my real pleasure to introduce the next guest.

He's a person who has a diversity of expertise and interest; probably an outstanding storyteller. He's an outstanding athlete. He was a professional soccer player at one time. He received a number of degrees from a master's to a Ph.D. He was a faculty member at the University of South Florida at the College of Public Health.

It's now my pleasure to introduce the Commissioner of Heath for the State of Florida, Dr. Rony Francois.

RONY FRANCOIS, SECRETARY, FLORIDA DEPARTMENT OF HEALTH

DR. FRANCOIS: Thank you Dr. Brooks for this kind introduction. Some of you may not know this, but there are few professionals, namely occupational medicine physicians in this country that Dr. Brooks has not trained. He's been doing this for a while and it is indeed a pleasure to come back to USF, my main alma mater. I trained under Dr. Brooks and completed my residency in occupational medicine along with a master's in public health back in 1998.

When I finished my residency I was tapped to be on the faculty and also started working at Citigroup. Well, you may not know this, but Citigroup is probably one of our most successful banks and I think they figured out how to take care of their employees. The way they did this is they had a corporate health clinic onsite to take care of the employees for any issue that would come up.

What they figured out is that people actually showed up to work sick. I think the British call it sickness presenteeism. In the study

that they did they looked at heart disease and invariably they compared two groups. A group that never called in sick and a group that showed up to work sick. What they found was that the incidence of heart disease was much higher in the group that never called in sick. You can think about denial and so forth, but the bottom line is that this clinic was very successful because it protected the employees and it also kept them at work because they would show up with a urinary tract infection, migraine headache, and other more serious conditions, but the bottom line is we'd be able to treat them and then send them right back to work without the need of leaving the campus. I was quite happy doing this and being on the faculty when the Governor appointed me to be Secretary of Health. So this topic, this theme, is very dear to my heart, not only as a public health and occupational medicine physician, but also as the Secretary of Health. The mission of the Department is to promote and protect the health of all of our citizens and central to that theme are the workers. I love our workers. I know in the Department of Heath

we have dedicated professionals and I've logged about 20,000 miles on this body already in less than five months being in the trenches and meeting the folks who make it happen. It's always a pleasure to shake someone's hand and tell them how much I appreciate what they do. Likewise, this conference, this town hall meeting is the way it should be done, which is to gather the folks who are in the trenches, the folks who are involved in wholesale and retail to come tell the research institutions what the focus of the research should be and what the important areas should be.

So I applaud the University of South Florida for not only hosting this important meeting, but also for providing you with this forum so that you can tell us what's important. We may not always know what's important from where we sit, but with that kind of collaboration I think the research agenda will be moved forward by light years.

I just hope that occupational safety and health will stay at the forefront because indeed the workers are really the foundation of our economy and the foundation of our way of life.

I just hope that occupational safety and health will remain at the forefront of public health without the sinister help of tragic mine accidents. Thank you.

DR. BROOKS: Thank you, Rony; very nice. I'd like now to introduce Sid Soderholm. He will be the speaker for NIOSH and he will provide some introductions.

INTRODUCTION TO RESEARCH AGENDA PROCESS

SID SODERHOLM, NIOSH

DR. SODERHOLM: Well, thank you and thank you for your kind remarks. I'm going to deal with some of the more pedestrian issues of why we're here today and what we're going to do with your input. This was a wonderful way to kick this off, so we appreciate everyone's coming and providing the introductory remarks.

I'm going to talk about the National Occupational Research Agenda. As we've said, this is an agenda for the nation. The agenda really started probably eleven years ago with an idea and after a year of hard work about ten years ago the agenda was unveiled. The agenda was meant to be a ten-year agenda. At the time the promise was that this would be revisited.

So we have been doing that; restarting the process, reinventing the process, and trying to improve on the success of the National Occupational Research Agenda for the past decade.

The vision has always been a partnership effort to define and then conduct the priority research. The major aspects of that vision are to seek stakeholder input; that's what we're doing here today. We're in the midst of a process -- my wife well knows that I'm not going to be home much the next six weeks. It's an exciting process. We're going to use this input and through a process that I'll describe briefly identify the research priorities for the nation.

The NIOSH budget is granted by congress. We're pleased to have those funds, but there's so much more that can be done. When we gather the energies, the funds, the input, and work with partners in order to get the information that's needed for the workers to be able to protect themselves and to be protected more effectively. So working together to address those priorities is a very important part of

NORA and always has been and will remain. Leveraging funds; Max mentioned this briefly. In the first ten years we had some success. We drool at the National Institutes of Health's budget. Of course, they are dealing with very large issues, but some of those funds were able to be put into projects that had relevance both to the NIH mission and to the occupational health mission, and that wasn't happening before NORA. I think the opportunities are much greater for enlightened companies, for foundations, for others to see the advantages and helping to support research information generation on occupational safety and health as part of their mission, too. So that has always been a part of NORA.

There are some things that are going to be changing in this second decade of NORA. We're really kicking it off with our symposium in Washington, D.C. on April 18 through 20 of this year. This symposium will celebrate the successes of the first decade of NORA and really kick us off into the second decade.

The second decade -- what's new is the focus of moving research to practice in workplaces

through sector-based partnerships. So what is this sector-based approach? We're talking about addressing and identifying the most important issues in the sectors. I'll talk a little bit more later about the kinds of input that we need and the kinds of issues that we foresee that will be addressed. We will have a research council for each of eight sectors or really they're groups of sectors. These research councils will come up with research strategies.

If you're familiar with the first decade of NORA we had 21 priority areas and how we were going to work on those areas was something that was fleshed out by a team, but wasn't really as central to the overall agenda. This time we're going to eight -- or maybe in sub-sectors we'll have additional whole research strategies. What are the major issues and what needs to be done to make progress in those issues?

The sector approach does not lose the cross-sector needs. We have workers who work in sectors with hearing loss needs, the work organization and stress issues, the musculoskeletal disease issues. All of those

needs cross across sectors and the sector approach doesn’t lose that fact. We’re still doing the work that needs to be done. But by focusing not so much on the cross-sector needs, but on the sector needs we hope to bring in those partners that can really make sure the research that’s being done is the most important to be done and make sure that the results get back out into the workplace where they can be used.

So why were workplaces organized by sectors, even though many of the research needs cross sectors? There are significant differences within a sector. There’s significant differences between sectors as to what the research needs are. So we think this sector-based approach is really going to focus our goals and our objectives and focus us on the results that are needed and on having those results make a difference in the workplace.

We think the sector-based approach will facilitate partnering, especially with new partners. People we haven’t partnered with as much as we should, perhaps, in the past. The industries, the unions, the trade

organizations, the professional societies that if they aren't, need to be focusing some of their efforts realizing that part of their mission overlaps with our mission of improving occupational safety and health. So overall we think this is going to be an efficient approach to support getting the information that we need to eliminate the worse occupational safety and health problems.

So how is this going to work? We have eight NORA research councils. In these abbreviations is where I've listed the eight sectors. In the morning session today we're encouraging input in any of these areas. We have a pretty full schedule, but I hope that we'll have time to ask people to come up from the audience, even if you didn't sign up, to present just a few remarks -- five minutes -- on your issue relating to any workers in any of the sectors. This afternoon we're focusing on the sector group of wholesale and retail trade that's listed in the lower right part of this slide. So we'll have eight research councils. The research councils -- I'll talk about those a little bit in a minute. We'll have eight

research councils that will each focus on their own sector and they'll be interacting with the cross-sector research council. Each of the eight research councils is led by one person from within NIOSH and one person outside of NIOSH. So it's truly a partnership effort at all levels.

Those 16 people, those two co-leaders from each of the eight workgroups, will make up the cross-sector research council. So they'll be kind of the board of directors to try to make sure everybody is moving forward and making progress. And they'll be specifically looking for those issues that are so similar along sectors that the work needs to looked at, needs to be emphasized, needs to be sold across sectors. So this cross-sector research council will be looking for those opportunities to work across sectors.

The NIOSH role is really one of stewardship and providing some infrastructure. We don't lead the process. We realize the process wouldn't go forward without us. We try to make sure it will go forward, but it's not just our process. It's all those researchers, all of those

partners that are involved also.
So we see that the research councils will have diverse input leading what we think will be robust research strategies. Research strategies that will have some meaning to those sectors and that will really focus research in the nation for some time to come. I actually just got an e-mail from -- or noticed some comments coming into the website the other day that said I'm here in Chile and we really pay attention to what your research strategies are in the U.S. because that informs us in some of the work that we need to be doing in South America. So it's not just in the U.S.
So the research councils will be made up of yes, researchers, occupational safety and health professionals, people who have contacts through their organization with workers, with groups of employers. All of these people will be coming together on the research councils. Their initial work will be to take the various inputs that are coming in through the town hall meetings. We're having a transcript made. Shane Cox is here working hard -- Well, I guess we're all at work today, but Shane is

definitely at work today making a transcript for us and that will parsed and put into the website and into the docket. You can go to the NIOSH NORA website -- I'll give you that in a few minutes here -- and put comments in there. That will go into the docket and all of these will be organized, indexed, and categorized. Then the full comment will go to each relevant research council. So that stakeholder input is going into the research council. But we have surveillance date; we have information about what the difficult problems are and where people are getting hurt in a particular industry and what kinds of injuries are occurring. We know the surveillance data is often quite weak in health issues. It's stronger in injury issues. So the surveillance data has a lot to offer, but it can't tell us everything.

And then the expertise of the members will all be combined in a priority setting and decision making process in the research council, which will lead to a draft research strategy. That's not the end. This research strategy will talk about what the important goals are, how we're

going to get there, and who needs to be involved. That will go up on the web and we'll invite comments. And we're inviting people to volunteer to join the research council, but also to volunteer to be put on a mailing list. So if you're not checking the website everyday, and I'm sure many of you have other things to do, that we can let you know when a new research strategy is there. We'll invite your comments on what's been missed, what isn't emphasized enough, what are the good aspects of the research strategy that's been drafted. So it's meant to be a very open process, a very participatory process, and we'll continue to invite your participation just as we've invited you here today.

So your participation -- provide input, volunteer. The next slide talks a little bit more about that. So your input is going to be entered into the docket. It's actually displayed on the website. If you haven't visited our website, cdc.gov/niosh/nora, then please do. There's a place you can put in web input as text, but to the left of those text boxes you'll see a link that says view comments

by others. We just do a little bit of filtering to make sure we're not accidentally putting up one our IT groups' test comments or somebody who felt like typing casino poker into the box seven times, but other than filtering for those everything is there invisible on the website. So you can see what other people have put into the docket. If you happen to be in Cincinnati and want to sit down with a public docket, the good old way of doing things, there's a set of files there and it's a public docket and everyone can look at it.

So this input will be provided, as I mentioned, to the research councils. The full individual comment will be there and they'll be some categorization and some indexing so we can make sure we get the right comments to the right research councils and can the lead the members to the different subjects that they're trying to deal with that day.

Your input will be outlined at the NORA symposium. As I mentioned, it's in D.C. in April and there's information about the symposium at the website listed. There will be a set of workshops the last day of the

symposium and we'll be providing a brief summary of what's gone into the docket and inviting people -- just the assembled group -- to do some initial voting within their sectors as to what the biggest problems are. Then we'll have a set of cross-sector workshops where people can take that input from the different sectors and say okay, hearing loss came up here, here, and here. The researchers are sitting there and they know what's been done and what are the key things that need to be done next. So the symposium is going to be pretty meaty, I hope, and I we'll have some good output from that to lead forward to help guide the agenda setting.

I believe the next one's my last slide. No, not yet. Today, specifically, a little more of the housekeeping, just some suggestions about the kinds of things that we're interested in. We're here to listen. We're here to hear what you want to say about where the information gaps are and what research needs to be done. You might talk about some of the top problems in terms of diseases, or injuries, or exposures, or what populations are at risk, or

where's the system not working. What are the other groups that should be working with researchers to make sure the right research is done and that it makes a difference? And what is the research that is going to make the difference in the workplace? As a researcher, I can think of lots of things I'd like to do, but with your input we can focus on what's going to make the most difference.

We're asking for very brief presentations. We realize that in five minutes you can't say everything that needs to be said. So we're asking for the highlights. We encourage that if you have prepared remarks that you give us those prepared remarks. You can leave them on the front table here or you can leave them at the table where you signed in. We'll use those in two ways. One is that it will make it much easier for Shane to have accurate spellings in the transcript, if your remarks that have peoples' names, organization's names spelled out. Secondly, we will put your whole set of remarks into the transcript. I've seen people come up to the town hall meetings with 15 pages. They can only get through the executive

summary in five minutes, but give us the 15 pages. We'll go through that. We'll categorize it. We'll put it all into the docket. So we encourage you to do that.

One last point, we're here to listen and to hear everyone. We're not here to have a debate. We ask you not to criticize what somebody else has said before you. If you have a different opinion and the moderator says okay, who else wants to come up and say something -- even if you are not on the schedule, stand up and give your opinion. We want to hear it. I don't see the profit in criticizing what someone else has said.

I want to say thank you. Thank you for coming. Thank you for your input. Please, register for the eNews, if you don't already get it. This is a monthly e-mail that comes to your mailbox. If you have time you can read some 200-word summaries of just about everything going on in NIOSH; lots of the highlights of what's going on in NIOSH. You can follow what's happening in NORA. In a couple of minutes a month you can really keep up with where we are in the NORA process and so I encourage you if only for

that reason to sign up for eNews. You go to this website and you type in an e-mail address and that's all you need to do. Please provide additional input on the NORA website. You can go there and learn a little bit more about NORA; provide your input, view the comments by others. I encourage you to do that. If you have questions, my e-mail address is there. Please feel free to use me as a contact for the NORA process and I'll be glad to try to answer any questions I can.

So with that, I think we'll have a little bit of the changing of the guard here. I'll ask Jim McCluskey to come up. He's going to be moderating the morning session. We'll have a group of people who will be listening and we'll have the speakers and let's enjoy and learn. Thank you.

DR. BROOKS: Thank you very much. Before we start, I just want to really thank the people who really made this conference really possible. Diana McCluskey and her staff worked, I know, around the clock and for NIOSH we worked with Ginny Sublett, someone who I've worked with for many years. I think the

success of this conference is due in big part to the work of Diana and Ginny. Thank you very much. Maybe we could take a two-second break and have our people come up to the podium here and get started on the second part. I'd like now to introduce Dr. James McCluskey, who will be the moderator for this portion of the program.

REGIONAL AND LOCAL STAKEHOLDER PRESENTATIONS

MODERATOR: JAMES MCCLUSKEY

DR. MCCLUSKEY: Good morning. I'm glad to see that no one is taking a break. I'm Jim McCluskey. I appreciate you all coming today and I think there have been a lot of nice comments already. So I'll keep mine very brief.

First off, we have a timekeeper over here and I know it's been asked before, but I will say it again. This nice lady over here -- if you could keep it to about five minutes, but my wife said guess what, you're going to get to be the heavy. So I am going to get to be the heavy. Please keep it about five, but if you go a little bit over and I see that it's not going to be a 25-minute diatribe we'll let you

go on a little bit beyond that.
I want to go ahead and start out and how I'm going to do this is introduce four people and if they would please come up to the front and then run in a logical order, either beginning at this side or beginning at the other side and run through them. If you would keep your comments -- if you have some -- what I'm going to do is offer every single time for people to please write down a comment you'd like to make and then at the end of this, before lunch, I'd ask if people want to make a comment or come up and speak that they would do it at that time versus between each one, just so that we don't have a large flow difference between the groups of four.
So why don't I go ahead and start out with the first four speakers because that's the important part of this town hall meeting. I'm going to read the persons whether they're here or not. Unfortunately, with our ill weather we're missing a few people and I believe one person had their pipes freeze so I think that's a little more important than this, unfortunately. If any of these people are in

the audience please say hey, I'm here or at the end if you'd encourage those folks we'll have plenty of time for them to speak. Our first group of four is Brian Hennessy from the Tampa area OSHA office, Sherry Carberry from URS Corporation, Luis Moreno from WBC Construction, LLC, Pat Stark, I believe, from USF Safety Florida is not here and then Robert Pavlik from the University of South Florida/OSHA 21(d). This will be our first group of four.

Mr. Hennessy, if you want to go ahead and start out since you're the logical beginning that would be wonderful.

MR. HENNESSY: Good morning. I am Brian Hennessy. I am an assistant area director in the Tampa OSHA office. The Tampa OSHA office encompasses 20 counties in central Florida. So we're really the central Florida area office. We believe that there are two areas worthy of NIOSH research relating to workplace falls that result in fatalities.

The first area would be the feasibility and incomplete structures of the use of conventional fall protection. The second is more effective implementation of fall

protection systems and plans. Falls continue to be a major cause of occupational fatalities in the nation and in Florida. According to the 2004 published BLS data, falls accounted for 14 percent of nationally reported occupational-related deaths and 17 percent of the deaths reported in Florida.

During 2004, BLS reported 422 occupational fatalities in Florida, 75 of which resulted from falls. If one bears in mind that the BLS data indicate that 256 of the fatalities were transportation-related or violence/assault-related, one gains a better perspective of the ranking of falls.

If one removes the transportation and violence/assault categories, falls account for 45 percent of the remaining 166 occupational fatalities.

Of the 75 fall-related fatalities in 2004, four were from scaffolding or five percent of the total, 18 were from ladders or 25 percent of the total, 26 were from roofs or 35 percent of the total with the remaining 27 being from other surfaces.

As this sophisticated group is well aware, OSHA

mandates the use of conventional fall protection while working at elevations in excess of six feet in most construction activities and at four feet in general industry activities. Conventional fall protection is defined as one, standard guardrail at perimeters and floor openings or two, safety nets or three, personal fall arrest systems consisting of a sound anchorage, a lifeline connecting the anchorage to a person wearing a harness; all of which is joined by appropriate hardware.

A major challenge to the implementation of the use of conventional fall protection has been the issue of feasibility, especially in the construction of roofs and the framing of residences. It is very common for the residential constructor, especially in the framing phase, to assert that there is no structurally sound location that will safely support anchorages for personal fall arrest systems. Furthermore, the employer often asserts that the incomplete structure will not safely support nets or that surface areas are so incomplete that guardrails provide no

meaningful fall protection.

Despite the introduction of new fall protection equipment and technologies, their use in residential construction activities has not gained not widespread utilization in Florida. Typically, the residential constructor is a small employer who lacks the engineering expertise or the resources to hire the services of an engineer who can determine when a partially-built structure can safely support fall protection systems.

Research is needed to establish proven data that addresses the application of fall arrest systems to specific materials at specific phases of the building process. Such data needs to be published and made widely available. Since so many of our structures in Florida are of masonry construction, specific data needs to be developed regarding masonry buildings.

When OSHA implemented its excavation and trenching standard in the early 1990's, the standard allowed for shoring systems to be designed using recognized tabulated data. Much like the trench shoring systems, fall

protection systems can be developed from common and accepted engineering values. The values need to be determined and publicized so as to be far more user-friendly to the small employer.

Beyond the feasibility of fall protection issues is the challenge of assuring work crews properly utilize fall protection technologies and properly implement alternative fall protection programs in cases where conventional fall protection is genuinely not feasible. This challenge is enhanced by the fact that the workers performing such activities, both roofing and framing, are often Spanish speaking. Research needs to be conducted to determine an effective means of educating the Hispanic worker whose cultural background may differ from the traditional worker in the proper methodologies in using fall protection systems.

A better understanding of when conventional fall protection is feasible and conversely is not feasible needs to be established. More effective means of implementing fall protection systems and programs need to be developed.

Both topics are directly related to fatal workplace falls and are worthy of detailed research. Thank you.

DR. MCCLUSKEY: I would have to say on that note that he's practiced this more than once. That was about as perfect as you can get. If we can have them all like that, I'm going to be a happy person. Thank you so much for your comments. Next is Sherry Carberry.

MS. CARBERRY: My name is Sherry Carberry with URS Corporation. In preparing for this statement, I have had conversations with John Henshaw, the former Director of OSHA and he is also representing the Florida section of the American Industrial Hygiene Association. Things that we would like to state today is that we know that a lot of the existing occupational health and safety regulations are not being followed and we would like to encourage NIOSH to consider other means of having people have safe workplaces other than having more regulations or trying to enforce the existing regulations.

Some means that we think that will help to accomplish this are to have partnerships with

industry groups, if industry groups can participate and then see that there is an occupational hazard. That will lead to a solution that can be acceptable to all parties to make the workplace safer. We believe that industry groups would do it. We also would like NIOSH to consider partnering with manufacturers of equipment. If manufacturers are given some guidance on how to design equipment that would make it safer, we believe that they would follow those designs and there's many things that could be looked at. Noise, the ergonomics of it, can they add a safety feature that would not increase cost considerably, but increase the safe use of that equipment.

We also would like NIOSH to consider to look at vendors. We have a lot of different vendors out there selling equipment and products, but in general we have some big ones. For small businesses, Home Depot is a major provider of equipment, supplies, and so forth. If NIOSH could work with people such as Home Depot and say these products that you're selling create hazards in the workplace. Can you only sell

these products here that are very similar, but have safety controls on them and will not create such hazards in the workplace? Or if you are going to sell a product that has a high risk to it, can you some how educate your buyers that this product has high risks associated with it, so therefore they can take the steps to protect themselves?

So this is basically going to create a different way of NIOSH for doing their research. We're suggesting that they look at communication skills. How are they going to communicate these things to the public and to the workplace and to the owners of the businesses? Modifying behavior, getting the public and owners and workers to buy into safe behavior. That's basically it. We're just trying to look at different ways of achieving a safe workplace.

DR. MCCLUSKEY: Excellent. Thank you so much for your comments. Mr. Moreno?

MR. MORENO: Good morning. My name is Luis Moreno. I'm the director of risk management for WBC Construction. We are shell contractors building for residential homebuilders

throughout the State of Florida.
What a shell contractor is is a company that gets contracted by homebuilders and builds the shell of the structure, meaning from the slab to the sheeting of the roof. The reason I'm here today is to address and give testimony of the imperative need of research and the necessity to have clear and concise guidelines for roofers while setting trusses and during sheeting operations within the residential construction industry.
From data collected in 2005, the Bureau of Labor Statistics shows that falls to lower levels are the leading cause of construction-related fatalities and injuries requiring hospitalization. The study conducted by the University of Florida shows that roofing operations were found to be the most hazardous task performed in residential construction; with nearly 88 percent of the roofing accidents ending in a fatality or serious injury that required hospitalization.
In 2003, roofers suffered 21.1 fatalities for 100,000 full-time employees nationwide. This represents six times higher than the average

rate of 3.6 for 100,000 full-time employees. These results are certainly unacceptable and need to be reduced.

Now, most of us know that the federal OSHA requirements for fall protection mandate that the employer provide fall protection to residential workers who are subject to falls of six feet or greater to a lower level. This condition exists to all workers installing trusses and sheeting roof systems.

In ’96 the interim fall protection STD 3-0.1A was introduced to the residential construction industry. Until 2003, this interim fall protection was utilized here in Florida. Many have questioned its effectiveness in reducing falls from roofs, since the fatality and injury rate of roofers has been consistently in an increase or has stayed constant.

The interim fall protection may lead to improvements, but offers no recourse for a worker who loses his balance. In 2003 and 2004 the office of the director of construction of OSHA put forth some letters of interpretation disallowing the interim fall protection 3-0.1A to be used in dwelling structures that were

constructed with masonry concrete walls. This means that here in Florida all workers on roofs needed to have conventional fall protection as prescribed in the OSHA standards 1926.

WTC, the Wood Truss Council of America, in the guidelines found in the BCSI 3-01, strictly prohibits the use of an anchorage system on a single-truss member. Therefore, an employer in residential construction in Florida must find other means to protecting workers while setting trusses and sheeting the roofs.

Because of eventually adopting the WTCA guidelines under NC/TPI 2002 and the employer's responsibility to adhere to governing guidelines in 1910.6 incorporated by reference, the employer must find other means to properly protect their workers.

Other systems include a scaffold system that is placed on the beam or a scaffolding system erected around the structure of the building, a net system or possibly a system with a cable running from one end of a roof to the other. Unfortunately, none of these resolve the issues. The scaffold system, although would relive some of the exposure, exposes the worker

while installation procedures and do not protect the roofer from falling within the structure. In some cases, it could be several floors.

A supportive tubular scaffold around the structure will be completely infeasible due to the time to erect and the time to dismantle the scaffold system around a multi-level structure.

The net system cannot be used in all cases because a span between the window and/or door openings is too great that would not allow proper attachment of the net. Also, the workers are exposed to a fall on the outside of the structure.

The cable system cannot be used while setting trusses, therefore the workers are once again exposed to tremendous dangers. It is also questionable as to how many personnel could utilize the same cable without exceeding the 5000-pound threshold.

Currently, WTCA in unison with TPI, Truss Plate Institute, are reviewing the guidelines set forth in the BCS 3-01. This is an opportunity for NIOSH to partner with these two organizations as well as manufacturers and of

course a private industry like WBC Construction, DMHC and so forth to be able to come up with some conclusive answers. I humbly suggest and request for you and others within NIOSH to seriously consider funding a project that will find concise solutions for employers of roofers within the residential industry. Thank you.

DR. MCCLUSKEY: Thank you so much for your comments. Mr. Stark?

MR. STARK: Thank you. I'm Pat Stark, safety and health compliance specialist at the University of South Florida, the OSHA consultation program. Good morning. According to the data available from the OSHA Region Four office in Florida falls in construction were the highest accident type for fiscal year 2003, making up 36 percent of all fatalities in construction in Florida.

In Florida, in fiscal year 2004 falls in construction accounted for 47 percent of all construction fatalities. In Florida, in fiscal year 2005 31 percent of the fatalities were fall-related.

In each of these fiscal years the type of

construction and industry work that appeared to make up the majority of these fatal falls was the roofing industry. Although it was a bit difficult to determine from available data, it appears that a considerable number of these fatal falls were residential-type construction. Presently in Florida, which is covered under the Federal OSHA Standards, the fall protection height for nonstick framing-type residential construction is six foot. Unless an employer can demonstrate that it is infeasible or creates a greater hazard -- at which time a fall protection plan -- basically passive fall protection, can be used.

It is interesting that CALOSHA's trigger height for fall protection is 15 foot and 20 foot depending on the type of construction. I'd request that NIOSH research this available accident fatality data -- these Florida fall-related construction fatalities, both commercial and residential.

This research would be to determine if existing Federal OSHA fall protection standards appear to be in line with the fall-related fatalities in the construction industry and possibly to

determine if fall trigger heights for commercial and residential construction need to be increased, such as with CALOSHA, decreased, or if other non-passive active fall protection systems need to become part of an updated OSHA construction standard; a standard that incorporates more detailed fall protection systems for residential construction and residential roofing. Thank you.

DR. MCCLUSKEY: Excellent. Thank you so much to the first group of four. In thinking about this again, just because some people might not be able to stay until 12:15 and I want to make certain that everyone's comments are acted upon. Why don't we switch it to if persons have comments or would like to add upon these or have something else that they would like to speak to that deals with residential construction. There are two mics at the back of the floor, if you feel comfortable coming up and speaking about that we would be more than happy to hear your comments. I want to offer that with every single group of four. So if people have comments, I'll pause for a moment and if I see someone walking back there then

I'll go ahead and let them speak. Okay. Certainly, we appreciate your comments for the first four and I appreciate you sticking to the time. Hopefully, most people will stick to that. I'd like to call the next group of three persons, actually because the fourth person in line is not able to show today and I will be reading their comments so that you may comment upon it versus it just being recorded in the record. Our first person that I'm going to call is James McConnaughay from McConnaughay, Duffy, Conrod, Pope, and Weaver, who did make it from northern Florida and we appreciate it, Robert Pavlik from the University of South Florida/OSHA 21(d) Consultation Program and Charles Lankford from Prince, Incorporated. Mr. McConnaughay?.

MR. MCCONNAUGHAY: Thank you, Dr. McCluskey. My name is Jim McConnaughay and I am a workers' compensation attorney. You don't have many of these in safety and health meetings, I'm sure. I practice in private practice in Tallahassee. I'm also chairman of the Florida's Workers' Compensation Institute and the Florida Safety and Health Institute. Both Institutes being

nonprofit associations devoted to trying to educate persons in regards to the general areas of workers' compensation and safety.

I take a little different slant on workers' compensation and a different slant on safety. I consider safety and health in workplace the same as workers' compensation. Each is dependent upon the success of the other as to the relevancy in workplace.

I primarily am concerned about the impact on employers versus a feel-good impact on trying to resolve accidents that occur in the workplace. In other words, I'm more interested in looking at the savings that result to industry with a competent safety and health program versus more of an esoteric look at a feel good presence and trying to reduce the number of accidents in the workplace.

Unfortunately or fortunately, industry's attention is frequently devoted to what kind of bottom-line savings are realized as to profitability of their business in regards to the attention they give to safety and health.

Based upon my experience in the area of safety and health as it relates to workers'

compensation, I can see that it is in fact the case, especially in the field of workers' compensation.

I've been practicing workers' compensation law representing insurance companies and employers for 30-plus years. If you look at the history of workers' compensation in Florida you see a cycle of problems that we've experienced that have resulted in systemic changes in our workers' compensation systems in an attempt to control cost.

Going back to 1973, originally there was a systemic change in our workers' compensation system. Again, you saw it in 1979, 1990, 1994, 2000, and 2003. It's not unlike every other state in the Union dealing with workers' compensation. Every five to ten years the legislature of a particular state looks at their workers' compensation law and addresses what they perceive to be the runaway costs that are associated with delivering benefits under the workers' compensation system.

The common theme that seemingly always occurs is trying to reduce costs by reducing benefits to injured workers. Unfortunately or

fortunately, this is the only way seemingly that industry can estimate potential savings to the system.

In 1989, I was chairman of the Florida Governor's Commission on Workers' Compensation. I again served in 1990. In that particular taskforce we were looking at alternate ways of saving money in our workers' compensation system, not just reducing benefits to injured workers. At that time as chairman of the Governor's Council on Workers' Compensation, I quite frankly was sold that the emphasis on safety and health was the remedy to reducing costs in the workers' compensation system.

In 1990, indeed, we passed legislation creating the Division of Workers' Compensation in the State of Florida. Quite frankly, that turned out not to be the answer because approximately ten years later the Division of Safety in Florida was dissolved.

So we in Florida don't have a regulatory agency relating to safety. This is pretty consistent with what you see in the industry when there is a need to cut back the jobs in a particular industry; it's always safety that goes first.

What I would like to do and what I would like to see a study on in the timeframe that I have left is the answer to several questions in regards to the effects of safety and health on the workers' compensation industry. Obviously, the creation of a regulatory agency is not the answer. What I would like to see is the answer to basically five questions.

What impact, if any, does a strong safety and health program have on overall workers' compensation costs? Quite frankly, consistent with my thoughts back in 1989, I would hope that we could find some proof rather than anecdotal answers. How can we as an industry create a strong workers' compensation program through the use of increased safety and health emphasis to create the related savings? Finally, how can we convince the legislatures in this State that safety and health is indeed the answer to our problems in workers' compensation versus reduction of benefits to injured workers? Thank you.

DR. MCCLUSKEY: Thank you very much, Mr. McConnaughay. Dr. Pavlik?

DR. PAVLIK: My name is Robert Pavlik. I'm the

industrial hygiene supervisor for the OSHA Consultation Program, which has its headquarters here at the College of Public Health at the University of South Florida. Employee exposure monitoring conducted by state agencies in Michigan and Washington have shown that employees that perform spraying of truck bed liners are routinely exposed to airborne concentrations of methylene diphenyl isocyanate, or MDI, that exceed the OSHA permissible exposure limit. Cases of exposure-related asthma have been reported in the literature, as well as a fatality in Michigan in 2003.

In conjunction with Federal OSHA compliance, the OSHA Consultation Program here in Florida has initiated a special emphasis program to visit employers who spray truck bed liners to identify hazards and recommend corrective measures. Our employee exposure measurements so far have also shown that employees are routinely exposed to airborne levels of MDI that exceed the OSHA permissible exposure limit.

In cases reported in the literature, and in our

survey results, employers rely almost entirely on respirators to protect their employees. Spray enclosures have very little ventilation or not at all.

At the present time, OSHA allows the use of air purifying cartridge respirators for protection against MDI as long as the elements of a respirator program are in place, including the implementation of a cartridge-change schedule. NIOSH recommends that only air-supplied respirators be used for protection against MDI. This lack of agreement between OSHA and NIOSH is confusing for employers, as well as safety and health professionals. I recommend that research be performed to determine definitively whether air purifying cartridge respirators can be used for protection against MDI.

Associated with this question is the uncertainty of calculating cartridge-change schedules. In both the OSHA and manufacturer's formulas for calculating cartridge-change schedules there are disclaimers that both high temperatures and high relative humidity can drastically reduce the time that cartridges can be safely used, but give no way to calculate

how much the time is actually reduced except to say that employers should determine this by experimental methods. Research is needed to determine how to calculate cartridge-change schedules more accurately in areas of high temperatures and relative humidity as found in Florida and other areas of the southeast in the summer.

Approximately half of the spray-on truck bed liner employers that we have visited in Florida use air purifying cartridge respirators to protect their employees. These same employers are finding increased applications for the same polyurethane coating for garage floors, decks, boats, and other surfaces. In order to protect the employees for MDI, research is needed to determine if and under what conditions air purifying cartridge respirators can be used to protect employees from exposure to MDI. Thank you.

DR. MCCLUSKEY: Thank you so much for your comments. Next is Mr. Lankford.

MR. LANKFORD: My name is Charles Lankford. I am an engineer and a certified safety professional. I work for a company that does

primarily excavation work in construction in the Tampa area. I'm here to request from NIOSH to develop a recommended standard for excavation safety. The competent person that is required for by OSHA excavation standards is a person that needs to have the ability to recognize hazards in excavation and trenching, as well as have the authority to take corrective action; however, many demands are on this competent person. This person needs to be able to judge whether heavy equipment is too close to an excavation and trench to pose a hazard to employees in the trench. The person is supposed to make judgments whether the surface encumbrances, such as the sidewalks, utilities, foundations are too close or can pose a hazard to the employees in the excavation.

At the same time this person is also supposed to make judgments whether loads on the surface adjacent to the trench are excessive or pose a hazard to the employees. Such loads may be heavy equipment, may be vibration of heavy equipment, or may be just moving traffic on an adjacent roadway.

The problem is that a typical competent person is a person that may be a foreman with a couple of years of experience on the job and the class that is supposed to qualify this person as a competent person by the OSHA standard typically is a four-hour class. Now, we are to believe that this four-hour class will qualify this person and that OSHA does not require him to have any technical knowledge in soils, engineering, or any other calculations of safety factors to be able to make these judgments that can mean the difference between the life or death of employees that are in these trenches.

So typically this four-hour class is just barely enough to cover basically what the OSHA standards are and to give an idea what these hazards might be, but OSHA does not presently require that this person have any training or experience in soil analysis or soil engineering. Basically, this person does not have the ability to make these kinds of judgments.

The typical competent person class has a basic review of soil analysis, which is required by

the OSHA standard. The OSHA standard currently requires both a visual and a manual soil test. The brief four-hour class is not sufficient to equip this person with the knowledge required to properly classify soils in order to make a determination what protective system is necessary for an excavation or trench.

The OSHA standard makes a reference to the USDA classification system as well as the ASDM D-2488 standards to refer the person for a proper soil analysis technique. No class that I've ever seen to qualify a person as a competent person actually includes the text of these standards and covers all of these soil testing procedures. The soil analysis is key for the competent person to properly decide what kind of protective system needs to be installed for the protection of employees.

Thus a competent person typically employed by construction companies such as mine is not going to be able to make these types of technical judgments, even though we would be in compliance with the OSHA standard by sending a person to a basic four-hour class.

Now, even three-day classes that I have been to

failed to address the detail needed to make these kinds of judgments that are basically engineering judgments. This in my view presents a problem for excavation safety. As we might know, there's about 50 fatalities a year in the United States and about 1,000 injuries each year as well from cave-ins and other excavation hazards. That's where I see a problem. We need a more detailed curriculum for these excavation courses that are supposed to be qualifying these people as competent persons in excavations. Yet OSHA does not require anything particularly special about these competent persons that they require of competent persons in other areas of the construction industry.

Therefore, I recommend that NIOSH take the decade -- hopefully, a little sooner than that -- to develop a recommended standard for excavation safety in which competent person qualifications may be spelled out or the class standards themselves might be approved.

Also, a log of inspections by the competent person, as well as what visual and manual tests have been done needs to be included as a

requirement. Thank you very much.

DR. MCCLUSKEY: Thank you so much for your comments, as well as the other speakers. As I said before, I'd like to encourage persons who didn't come with prepared comments, but would like to make some upon these to feel free to go to the back of the room and comment upon this or other issues. We have several minutes before our scheduled break at 10:30 and I'd like to encourage you if anyone has some comments, please feel free to join in at this point.

DR. BROOKS: I'd like to ask Dr. Pavlik about this point that you made about the MDI and these spraying operations that is now being applied to other types of activities and what you feel might be making this exposure more prevalent in the population.

DR. PAVLIK: Well, most, if not all of the studies I've seen in literature so far have been concerned just with exposure measurements taken for truck bed spraying. The same coating is very tough. It provides very good corrosion resistance and it has applications for a wide variety of surfaces that need protection

against the elements.
I ran into one of the truck bed sprayers down in Fort Meyers who now has a mobile unit and he's going out doing boats, decks, garage floors. They're getting into enclosed spaces. They're getting into a lot of areas and types of applications that have not been monitored so far. He's using air purifying cartridge respirator because he's out in the field. He really can't use an air-supplied system. So I'm concerned that there is going to be a lot of increased applications for this process and I think my main point was that OSHA allows the use of an air purifying cartridge respirator, but NIOSH does not. It's confusing. Employers are sure really which way to go. Professionals like myself are in a situation where we're recommending what employers should do to protect their employees and we have confusion in this matter too because our two main government agencies are at odds on what type of respirators are safe and which are not.
DR. BROOKS: I think that it's just an important issue. Adding one thing is that category of chemicals, the diphenyl

isocyanates, are the number one cause of work-related asthma in the world. They are a very important sensitizer and they very quickly produce sensitization and the onset of asthma. So it represents a potential risk if these procedures are more widespread. So we could be seeing more and more cases of asthma in the community.

DR. MCCLUSKEY: Are there any other comments? Well, thank you so much for coming to first half and we're looking forward to seeing you again. We'll start up at 10:45 and we'll begin with the next group of persons. There is coffee in the back, as well as bathrooms are readily accessible right outside the door for both gentlemen and ladies.

(Whereupon, a recess was taken from 10:30 a.m. to 10:45 a.m.)

DR. MCCLUSKEY: Thank you so much and we all appreciate you all coming back and we're looking forward to the second half of this morning's program. As I said, we'd like to have your comments to add to people who have stated that they wanted to speak formally. So we're going to have the microphones available

and we'll encourage you to come up after every group of four.

I wanted to go ahead and call up the next four persons, in addition to let you know that I'm going to be reading someone's very short, but detailed e-mail into testimony just so that you all can make comments upon it if you'd like to do that. Our next group of four -- I'm going to be reading for Gene McAvoy from the University of Florida/IFAS Hendry County Extension. He was going to talk about agricultural worker safety research issues. Rosanna Barrett from the Florida Department of Health, Lora Fleming from the University of Miami, Stuart Brooks from the College of Public Health, and Paul Osley from Chastain-Skillman, Incorporated. If you four wouldn't mind coming and Dr. Brooks you're already here.

I'd like to go ahead and speak for Mr. Gene McAvoy who sent an e-mail for it to be read into testimony. This is one page and he's speaking about agricultural worker safety research issues.

There are three major issues affecting farm safety, regulations, education, and

engineering. My focus will be on education. Some needs that my colleagues and I see include a survey of workers separated by commodity and job categories that describe the level of knowledge workers currently have with respect to workplace safety. Such an effort could help document an overall need for safety programs and perhaps target where the priorities should be placed.

Since nearly 91 percent of the farm labor in the United States are of Hispanic origin, we should strive for research on how to improve Hispanic agricultural workers through education. Number one, a study of teaching methods to improve instructional effectiveness. A, how do farmer workers learn? B, are there differences in learning styles between Hispanic and Anglo workers? C, what are effective teaching methods for an adult audience with less than a fifth grade level of formal education?

In 2001, the University of Florida began a program addressing the needs of Hispanic workers and it was designed to provide education in farm and pesticide safety.

Approximately 10,000 workers have been trained in south and central Florida. One big challenge is to measure the impact of this extension program and this may constitute an important area for research and extension. Number two, how does safety training influence job performance and overall economic performance of an agricultural operation? A, how effective have educational programs been in reducing farm accidents and injuries? B, which workers are more vulnerable to farm accidents? Is that related to education, age, or number of years in the country? C, what is the relationship of frequency of training and farm accidents? D, what education techniques are most effective to train agricultural workers? And finally, E, it would be necessary to improve farm equipment and manufacture training manuals in order to lessen this rate.

One possibility might be an analysis that would measure the impact of educational programs on farm safety and identify what we need to improve to be more effective in transferring agricultural farm equipment safety to workers. Number one, a possible strategy would be to set

up a cross-sectional study of agricultural operations. B, describe safety programs and training activities by company. C, construct an index of training intensity or create some other measure that could objectively rank companies by their training efforts. D, collect statistics, such as accident rates, worker sick rates, worker turnover rates, and worker productivity by task wherever available. Finally, E, survey worker attitudes towards the company, looking for a connection between safety training efforts and worker morale. We appreciate Mr. McAvoy's comments upon this issue. We'll now move the other group of persons who are going to be speaking, and Ms. Barrett from the Florida Department of Health is going to be speaking first. We will ask that each speaker come up to the podium and since everyone wants to be famous it will get you right in front of the video, which is the most important thing.

MS. BARRETT: Good morning. I'm Rosanna Barrett. I'm the coordinator of the pesticide exposure surveillance program at the Florida Department of Health. I'm here to speak on

pesticide-related illness and injury. I'll first start with an overview of the program and then go into the problem and the solutions. There's several occupational indicators that relate to different illnesses and injuries. Unfortunately, a lack of funding has restricted the Florida Department of Health's abilities to conduct surveillance on most occupational diseases and conditions.

Currently, the Department of Environmental Health Division focuses surveillance activity on adult lead poisoning and pesticide-related illness and injury. A pesticide exposure surveillance program was established in 1998 through the funding from the National Institute of Occupational Safety and Health, NIOSH. The funding source was discontinued in 2002. The program now operates solely on state funds, which supports one full-time position. DOA continues to contribute aggregate data to the NIOSH sentinel event notification system for occupational risk and supports prevention and intervention activities at both the state and federal levels.

For several years, data has been collected to

determine the rates of work-related injury and illness in Florida. The 2000 census data estimates that 79 percent of civilians are in full-time employment in Florida. The BLS data indicates in 2004 that 70 percent of these workers were employed to occupations of high risk for occupation morbidity and 15.5 at high risk for occupational mortality.

In 2002, the Florida health status data indicates that the rate of work-related hospitalization with primary pay encoded as workers' compensation was 180 per 100,000. These rates, though significant, are based on estimates made from the occupational documented workers and for illness and injury that have been presented to healthcare facilities for treatment.

The situation, however, is more complex when looking at pesticide poisoning. The population at risk for pesticide poisoning are mainly comprised of farm workers who are migratory, usually undocumented, and generally are not recipients of workers' compensation. Most farm workers also do not seek medical care for pesticide poisoning.

In 2001, the test data, which is supplied by the Florida Poison Control Centers, reported an annual incident rate of two percent for acute work-related pesticide poisoning. This, however, is an underestimation of the problem since only a few cases are captured by the FPCC. More accurate figures can be obtained to act as surveillance and through investigations of incidents.

The pesticide program currently operates a passive surveillance system and relies mainly on evidence and personal testimonies to substantiate pesticide poisoning. For the period 1998 to 2004, the surveillance program received 1600 pesticide exposure incident reports with less than 40 percent being work-related. Only 55 percent of these reports resulted in classified cases as guided by NIOSH. Also, more than 80 percent of the cases are classified. These cases are classified mainly by evidence provided in the exposed person’s testimony of the exposure and health effects.

Pesticide illness and injury is a reportable disease in Florida. Although the Florida

statute 64-D3 stipulates that healthcare providers and laboratory personnel should report the existence or suspicion of the disease, less than five percent of all cases are reported by these two entities. Underreporting is likely the result of the non-specific nature of symptoms of pesticide poisoning leading to difficulty in diagnosis. This is further compounded by the reluctance of physicians to report cases of poisoning without clear exposure history and conclusive laboratory findings.

In Florida, the absence of a state-wide monitoring system poses a challenge and a determination of pesticide poisoning cases. A monitoring system would provide consistent analytical data on the level of pesticide and other chemicals in the tissues and foods of persons suspected of being exposed to pesticides or chemicals. Such data would assist healthcare officials in the early detection of disease, support diagnosis, and allow for appropriate treatment and management of cases.

For cases where low-level exposures were not

detected immediately, epidemiological studies should be done to provide more complete understanding of the health impact. Resources, financial or otherwise, are needed to support the operation of monitoring systems and to conduct active surveillance on epidemiological studies. Monitoring pesticide poison in workers should require the collaboration of stakeholders such growers, state agencies, universities, laboratories, healthcare facilities, and community organizations. It may also require statutes, as well as a working agreement between partners to ensure compliance. The combination of expertise from these areas and state or federal funding support should ensure the implementation and success of such a venture.

In summary, the DOS Pest and other state-operated surveillance programs require the financial support from both state and federal governments to ensure that these programs remain viable. There’s also great need for bio-monitoring to test the level of pesticide in the bodies of persons exposed to pesticide and for the treatment of workers who

have been overexposed to pesticide. Epidemiological studies should be conducted to determine causal relationships between pesticide exposure and health problems. Thank you for your time.

DR. MCCLUSKEY: Thank you very much, Ms. Barrett. Dr. Fleming?

DR. FLEMING: Good morning. I'm Lora Fleming. I'm an occupational medicine physician and epidemiologist at the University of Miami where I am a professor. First, I want to thank NIOSH for this opportunity and also for supplying me with much of my training and education. I am part of a research group and I'll be presenting some of our findings concerning health disparities and U.S. workers.

In the U.S., race and ethnic differences and socioeconomic differences have a substantial impact on many aspects of health status, especially in terms of prevention and intervention. The reduction of health disparities is a key objective of the U.S. Healthy People 2010 to quote, eliminate health disparities among segments of the population, including differences that occur by gender,

race, ethnicity, geographic location, or sexual orientation.

However, you will note that occupation has not been identified as a significant factor in health disparities. With NIOSH funding, the University of Miami research group has been exploring the health of all U.S. workers using the National Health Interview Survey or the NHIS. It's a household survey of the U.S. population conducted annually since 1975 by the National Center for Health Statistics.

The NHS has collected demographic health and employment data on over 600,000 workers age 18 years and older representing 130 million U.S. workers annually from a sample of the entire U.S. population. This is a unique resource. Thus this uniquely representative and large data base from 1986 to 2003 -- we are using it to evaluate the issue of health disparities among all U.S. workers, particularly among the poor and minority worker sub-populations.

In general, the results of our occupational health disparities research can be summarized as the following.

Poor, less educated workers, particularly

workers in minority sub-populations are at a major disadvantage in terms of their health and resources in the U.S. For example, we have already shown that obesity rates have greatly increased over the past two decades among all employed workers irrespective of race and gender, but particularly among black women workers. Furthermore, average obesity prevalence rates and corresponding trends vary considerably across occupational worker groups, particularly among many blue-collar workers. Cigarette smoking, a preventable cause of cancer and heart disease -- morbidity, and mortality is very high in blue-collar workers. For example, 58 percent of roofers are current smokers and are not decreasing over time while white-collar workers report lower rates. For example, four percent of physicians are smokers who have correspondingly downward trends over time.

These same blue-collar workers are also less likely to have health insurance. In the NHIS study population between 1997 and 2003 representing 130 million U.S. workers annually, the annual prevalence of having medical and

dental insurance among U.S. workers was about 83 percent. However, the majority of U.S. workers during that time period had downward trends of insurance prevalence particularly among blue-collar workers. So for example, construction and extractive workers went from 64 percent to 55 percent with health insurance during this only six-year period, and all of us bear the burden of those costs.

Furthermore, using this same database, morbidity and mortality rates tend to be higher and health interventions are lower among blue-collar workers and minority workers. Those minority sub-populations reporting the worse self-rated health are also in the most racially segregated and lowest paying professions, such as private household cleaners and servants, maids and housemen, laundry and dry cleaning machine operators, nursing aids, orderlies, and attendants. With respect to health interventions workers, for example, with high ultraviolet or UV exposure are less likely to receive skin examinations. For example, only six percent of farm workers report a skin examination from a physician in the past year,

while 29 percent of health diagnosing professions report getting a skin examination. And even though 41 percent of construction workers report smoking, only 57 of them reported being told by their doctor to quit smoking.

Not only does our research illustrate the value of the surveillance of the health and resources of the U.S workers, these negative trends and health indicators and health resources, particularly for certain sub-populations of the U.S. workforce are alarming. Specifically, I just wanted to add with regards to the new sector-based NORA recommendations that are being proposed, my fear as both a physician and epidemiologist is that cross-cutting health issues which cut across these sectors will not be studied in an effective and consensus collaborative way. Thank you very much for this opportunity.

DR. MCCLUSKEY: Another perfectly timed. Thank you so much for your five exact minutes.

Dr. Brooks?

DR. BROOKS: Thank you. I'm Stuart Brooks. I'm the director of the Sunshine Education

Research Center at the University of South Florida. NORA involves a transition from NORA I, which consists of 21 priority areas of research emphasizing disease and health to a sector-based process.

As part of this process, NIOSH will recruit as many stakeholders as possible and establish numerous partnerships. By adopting the approach of multiple stakeholder inclusion and partnership development, NIOSH believes there will be better achievement of a consensus on important research initiatives.

I wish to offer caution that a process devoted mainly to building sector-based consensus by itself may not be successful. The EPA's bold experiment, the Common Sense Initiative of regulatory reinvention that was conducted from 1994 to 1998 relied on consensus building. However, it proved to be relatively ineffective in the final analysis and other approaches were found to be more important.

Purportedly, NIOSH's sector-based approach would permit the building of partnerships that lead to research to practice applications in the workplace. I wish to voice a concern that

a consensus philosophy needs not be the major criteria in making the final NORA II decisions. I am concerned that the change to a sector-based research approach will often emphasize safety issues, workplace interventions, and less effectively foster basic biomedical research, including biochemical and toxicological studies, but also diagnostic, clinical, and epidemiological approaches to important occupational disorders. I wish to illustrate my concerns by focusing on one of NIOSH's NORA priority diseases, that of occupational asthma, a condition that I have studied for more than 30 years.

Now, throughout the world and especially the United States, occupational asthma will continue to be the most important occupational lung disease during the 21st century. For about eight to twenty million workers in the United States there are workplace exposures to agents that cause occupational asthma. Perhaps two-and-a-quarter million workers in the United States have or will develop workplace asthma. In fact, occupational asthma is the most frequent occupational respiratory

disorder in westernized industrial populations. Unfortunately, effective surveillance systems and epidemiological studies for occupational asthma are limited in the United States. There's a scarcity of validated epidemiologic and surveillance research studies in the United States that examine incidences of occupational asthma in various industrial sectors and job categories.

Many informative epidemiological studies originate from outside the United States. While NIOSH has sponsored a variety surveillance programs including Sensor Programs, the number of states with this program is limited. In Florida, the fourth largest state, we don't really have a good surveillance program like Sensor looking at conditions such as occupational asthma. Thus, I urge NORA II to emphasize a need for surveillance for occupational asthma in order to provide the critical link to practicing physicians and professionals and to translate research findings into interventions that prevent occupational asthma in the workplace. Now, there may be an advantage using a sector

approach since certain industries report greater risk for occupational asthma. There are over 250 causes of occupational asthma. There are many different jobs associated with its development. I wish to emphasize four important industries or jobs that might need further study in the future.

An increase risk for asthma is found in the dental industry. It's found among household and industrial cleaners. It's found in spray-on truck bed lining. We talked about that earlier. It's also found among food processing and manufacturing.

I also want to in the time that I have just to mention some other areas. That would be the role of irritants in the workplace and how further research is needed in that, particularly with susceptibility. I want to talk about the issue dealing with the perception of chemicals and the risk for chemicals and odors in the workplace and how that affects individuals. I want to mention that there are no good diagnostic approaches for occupational asthma. That specific inhalation challenges are fought with legal and

liability issues, and really there are no methods for providing that.

So I'd like to say that in conclusion that an expectation for NORA II brings about excitement for new advances and ideas, and with NORA II there will be an opportunity to open new research vistas and make significant inroads into important occupational disorders, such as occupational asthma and in accordance with advances in medical research for other specialty areas major breakthroughs have their origin from findings derived from basic research. And it's important that there be emphasis on basic research with the introduction of NORA II. Thank you.

DR. MCCLUSKEY: Thank you, Dr. Brooks. We appreciate your comments. Mr. Osley?

MR. OSLEY: Good morning. I apologize for my laryngitis. I'm going to do the best I can to get through this quickly so you don't have to listen to the scratchy voice. I'm with Chastain-Skillman here in Tampa. We provide environmental occupational health services. My topic of concern is mold impacts and remediation services in Florida; a hot, humid,

and hurricane impacted state.
As a result of hurricane-related impacts to both the Gulf Coast and across Florida, mold is a pretentious four-letter word for many of us. Such as, but not limited to, emergency first-responders, law enforcement, rescue teams, and primarily workers in the cleanup and remediation field, not to mention the homeowner, construction and renovation contractors, the insurers, industrial hygiene, public health and safety professionals, laboratories, physicians, and last, but not least, the attorneys.
There are a few federal and state and generally agreed upon peer-reviewed scientific-based guidelines for the evaluation of potentially hazardous mold conditions or exposures. Not to mention the lack of governmental regulations, health-based or otherwise, at any level stipulating how alleged mold impact and the result on exposure should be handled.
Subsequently, from this cascade of conflicting mold exposure and potential health-effect information -- or more times than not, misinformation -- an unregulated industry of

mold assessment and remediation has been illegitimately spawned.

Consequently, the need for sound defensible scientific, academic, medical heath risk-based information as it relates to exposure, assessment and remediation guidelines or regulations coupled with appropriate levels of professional training are paramount to protect our workers from potential mold exposure.

The time is now for NIOSH through the NORA program and process to take a page out of the lesson books and learn from the torrid history and early days of the knee-jerk reactions of the asbestos inspection and abatement industry to the current manageable and level of appropriate asbestos guidelines and regulations and management programs today. Such an effort is crucial to ultimately protect those who are most at risk and those typically taken advantage of way too often; the less informed labor work force worker as well as the general public and community.

In closing, again, now is the time for NIOSH to act through NORA and to act decisively with sponsorship of appropriate peer-reviewed

scientific, academic, and medical research, professional certification, and training programs, governmental guidelines and regulations, and an adequate financial funding that will be successful in carrying through this effort to its complete and beneficial fruition for all parties involved. Thank you again for your time. I appreciate your consideration regarding this request.

DR. MCCULSKEY: I'd like to thank the first four individuals who came up and to once again offer to any of you out in the audience that if you have comments we have the mics in the back or take a quick note and I'll certainly give you the opportunity after every group of four to say something. So I'm going to encourage you once again. I'd like to call the next group of four individuals.

DR. BROOKS: They've got two people that want to say something.

DR. MCCLUSKEY: Wonderful. Why don't you go ahead and start?

MS. WATKINS: I'm Joan Watkins. I'm an occupational medicine physician based in a hospital. I trained at the Great Lakes ERC.

My concern is we recently have diagnosed in a hospital worker a case of erythema nodosum majora. This is documented first by a private dermatologist with biopsy and then by the head of dermatology here at USF. I removed this person from the hospital. It's a reaction to Capozide.

My concern is we've already sent her to the FDA and I'll send it to NIOSH this afternoon or in the morning. Once hospitals decide to use an agent, it's everywhere. I just want to see if there's other people who've had exposure to that or have had any experience that's similar.

DR. MCCLUSKEY: Thank you for your comment. Certainly, if people have comments upon that, feel free to come to the mic. Yes, sir?

DR. PATEL: Good morning. My name is Dr. Prakash Patel. I'm with the Florida Department of Health in Tallahassee. I work with Rosanna Barrett. This morning on the slide show, the doctor from NIOSH -- he showed me the study and the information -- as Dr. Brooks mentioned we don't have a central occupational program. Actually, this year we applied for occupational funding from NIOSH,

but irregardless of whether we get the funding or not, we're going to start reviewing some of the data from workers' comp, hospitalization data, and mortality. We have some data regarding cancers caused by some of the chemicals and so we reviewed some of those data for applications.

Anyway, we will continue doing some of the basic things and in the future when we get more funding we will conduct more research within the programs. Thank you.

DR. MCCLUSKEY: Once again thank you for your comments. If people have comments upon those I would encourage them to write them down and at the next group of four at the ending, we certainly would welcome your comments.

I'd like to deviate from the schedule slightly just because I had an incomplete schedule as people showed and didn't show and call four people who may not be on your schedule and I'll allow them to introduce themselves. First, Mr. Bob Nesbit from the University of South Florida/OSHA 21(d) program, Jessica Bohan, Rosa Webster from Tampa Electric, and John Byrnes. If the four of you would please come to the

front, I'd certainly appreciate it.

MR. NESBIT: Good morning. I'm Bob Nesbit, the program manager for the OSHA Training Institute Education Center here at the University of South Florida. I'm going to keep my comments real brief because three or four speakers before me have already talked about this subject. It's to develop a fall protection best practices for use in the residential construction industry.

From my experiences as an authorized OSHA trainer and as a consultant in the Florida Consultation Program, I find that the general building contractors in the residential housing construction industry could use a best practices guide for fall protection in residential construction. We see lots of different fall protection systems in use by this industry, but nowhere can we find a guide that outlines the best practices for specific types of residential construction.

There are numerous vendors of fall protection equipment that will tell you that their system is the best; however, that's not always true. We need for NIOSH to add this topic to the NORA

intervention effectiveness research agenda and perhaps do some job site intervention research. Let’s look at what vendors offer for fall protection throughout the nation and determine the most effective -- determine what most residential building contractors use on their construction projects. We need to see what most residential building contractors are willing to use and finally, determine how effective the devices are at preventing falls and share that information with us. It would also be good to know how easy and how the most effective devices are setup to use and maintain.

Maybe, your research could be the basis for an industry best practices guide. Such a guide can be used as a tool to encourage residential building contractors to adopt procedures and equipment for preventing falls. A best practices guide for fall protection in residential construction could also be used as a classroom manual for teaching new general contractors, superintendents, project managers, safety directors, and supervisors and workers. Most often we hear builders tell us that

there's no good way for them to provide fall protection for their trades, or that trades are responsible for providing their own fall protection equipment, or that they are exempt from providing fall protection for one reason or the other.

In any case, there were 1,224 fatal accidents in construction in 2004. Of these, 441 were in residential construction or remodeling. One hundred and ninety-seven of these fatal accidents were from falls. There were 84 fatal falls out of a total of 364 fatal accidents in residential construction in 2003. The numbers are similar for the past ten years.

So we hope with NIOSH's help and the NORA intervention survey that we can make some difference in the next ten years. I appreciate you giving us the opportunity to speak and thank you very much.

DR. MCCLUSKEY: Thank you very much, Mr. Nesbit. Ms. Bohan?

MS. BOHAN: Good morning. My name is Jessica Bohan. I'm from the University of South Florida OSHA Consultation Program. My proposal for NIOSH this morning is to study the impact

of applicable and accessible training for those workers who work in the highway work zones.

I brought my safety vest today to ask you when you see this color, what do you think? I think construction's coming, I'm going to be late, I'm going to be delayed, and a lot of feelings of frustration come up. I bring this up because roadside construction is a way of life. Wherever we go or what state we're in, we could be on a federal road, a city or county road, it's a widespread industry.

I'm concerned about it today because the truth of the matter is 100 people a year and 20,000 people a year are injured -- I mean, 100 people die and 20,000 are injured. The emotional and economical impact of this industry is something I can't even fathom. You may wonder how are they dying? Is it the motoring public that are killing these workers? Well, that's half of it. The other half is the workers are dying in the work zone, not from the motoring public, but from work practices that they're facing every day.

Historically, we have approached roadside safety from the motoring public point of view.

We've increased the efficiency of the personal protective equipment. We've looked at improving the barrels and engineers have worked to design the actual traffic flow better to reduce confusion. We've also included law enforcement here in Florida to help inspire people to slow down.

Even though these changes are very positive, we still have people dying each year. Heinrich's Law of Safety basically says that unsafe acts are the reasons we have injuries in near misses. So I ask you today if you don't know how to do something properly, then how can you do it right?

I was at a hockey game over the holidays. I love ice hockey, especially the fighting. The zamboni driver came out and he went around the ice and he cleaned it. I've been to hockey games all over the country and I thought how does the zamboni driver know always to clean the ice in that direction? Well, he or she obviously has been trained. So why aren't we training the workers inside the work zone?

The current regulations that we have on the Manual of Uniform Traffic Control Devices,

otherwise known as the MUTCD, and the Occupational Safety and Health Administration OSHA standards. They really only apply to flagger training. There's really no guidelines or regulations for those workers inside the work zones.

Donald Trump once said I only work with the best people. What he meant was in his organization he's the general in command, similar to an army or the Marines. He knows that every decision he makes will affect the lives of those people working for him. Although Donald Trump is a financial and real estate man, I think it's applicable to the roadside work projects. The crew leaders typically are the Donald Trumps of the construction site. They make decisions every day that affect the lives and safety of their workers.

So my proposal for NIOSH is to look into why don't we have any specific guidelines for these workers. Workers on foot are the ones who are being killed. They're being run over. They're being rolled over. They're being crushed. All of these, I believe, are preventable through

knowledge and education. Knowledge gives us tools, tools give us the ability to make good decisions and help those who can't. So let's give them the opportunity to also work with the best. Thank you.

DR. MCCLUSKEY: Thank you, Ms. Bohan. I liked your piece that you brought along and I encourage that from other people. That always makes it interesting. Ms. Webster from Tampa Electric Company.

MS. WEBSTER: Good morning. I'm Rosa Webster with Tampa Electric Company. I'm the coordinator of safety and health there. This morning I come to present to you one of the challenges that Tampa Electric Company is facing and that has to do with the aging workforce.

Within our work environment we have longevity. The average worker for Tampa Electric Company has been there 25 years. The average age of our employee is 47 years of age. As a result of that we would like for NIOSH to look at studies having to do with ergonomics and focusing on body mechanics as it's related to the aging workforce.

As a result of our workers' age and their decline in flexibility, there's difficulty as far as them being able to maneuver into some of the confined spaces that we have at our facilities. Also, the American worker no longer averages 170 pounds. It's well above that. So when you start looking at ladder safety, handrails that are rated at 200 pounds, it no longer meets the sufficiency of what our average American worker looks like.

So as employers we are faced with challenges of trying to provide a safe workforce within the guidelines that the federal regulatory agencies have given us; however, within the manufacturing sector, they may not be producing that equipment that is necessary in order to maintain that.

The individuals that we feel that should be involved as a part of this is not only the private sector, as well as the governmental sectors -- the engineers that are designing new equipment, new generators, new power lines throughout the industry. There needs to an engineering design taking place as a part of this.

The best person that tells you how to do a job is the person that does it day in and day out. I think we need to look at the average worker. We need to reestablish what does the American worker look like in today's society and where is America going over the next 10 years, over the next 20 years, over the next 50 years. We need to provide safe workplaces for those individuals to be able to come in day in and day out and leave in the same state that they came to work in. Thank you for your consideration.

DR. MCCLUSKEY: Thank you so much for your comments. Dr. Byrnes?

DR. BYRNES: Thank you. Before I make my statement I'd like to say that my comments are going to address all sectors and I have a one-page written narrative in the back if anybody would like a copy of it. Conventional means of managing workplace aggression have failed us. To this end we hear comments or topics like conflict resolution and anger management. There are individuals who express their conflict with a demonstration of violence. So if we truly want to prevent

violence we must also prevent conflict. Conflict resolution and anger management are fatally flawed. You see, conflict resolution presupposes conflict. You're already reacting. You're past any chance to prevent it. If all you do is react to aggression, eventually you're going to come upon that individual who does not communicate verbally. This person communicates physically and they strike out. Worse yet, they could have a weapon. Everybody says well, where did that come from? It came because no one was observing prior to conflict. I see a lot of nodding heads out here.

Anger management is equally as flawed because you and I can experience and express the same anger differently. Therefore, the great universal axiom is if you can't measure it, you can't manage it prevails.

Thirteen years ago, we discovered and developed the means to measure human aggression. Through our ability to measure aggression in others and in ourselves enables us to manage aggression in others and in ourselves, but here's the key. It enables us to measure aggression even prior

to conflict. Thereby enabling us to even prevent -- I repeat -- prevent the conflict in the first place.

When you look at the last four shootings that have occurred; the ConAgra shooting, the Jeep plant in Toledo, Ohio, the U.S. Postal Service experience, and of course, the Martin Marietta shooting, these were individuals who came into the workplace and expressed their conflict by shooting and killing people. If you're relying on conflict resolution, you're already way too late.

I particularly like the Martin Marietta circumstances because here's an individual who left his sensitivity training class, went out and got and his weapons, came back in and shot and killed six people. This man had taken anger management only six months before. These programs are not working.

Have you ever wondered why when you have an incident and you've got people standing around and why these people never got involved. Oh, I knew that Bob was that way. I knew that Bob was eventually going to attack someone. Why didn't they get involved? Well, the answer is

simple. They didn't perceive it as in their best interest to do so. Well, the ability to measure aggression enables us to foresee conflict coming. Because we can foresee conflict coming we can now see ourselves becoming a victim. Now there's the reason or impetus to get involved.

Over the last 13 years we've actually seen this paradigm shift occur. Why would an employer get involved when they know that there is a cost of time and talent, but also the cost of this kind of training? That's brought me to Aon Corporation in the first place. They conducted a survey in the United Kingdom of the Royal Mail where they identified the cost of employee friction. Now, we're not talking violence or human crisis here. We're talking about simple employee friction which was costing them 247 million pounds a year. What they identified and more importantly measured was when you have an aggressor in your organization nobody else wants to be there. People come in late. They go home early. They stay longer at lunch. There's even a new term called presenteeism. It means you've got

someone present, but they're so distracted, in this case because of aggression, they're not productive.

So we're able to demonstrate a direct link between aggression in the workplace and productivity based upon tardiness, absenteeism, and then ultimately turnover. People would rather go somewhere else making less money so they can feel safe.

Over the last 13 years, we have been measuring aggression anecdotally. We would like very much to be able to measure it empirically, to set a standard that all can build from. So we are very interested in a grant research partner to start doing this measurement so we can put it out to all sectors of the industries. So that way we can start to prevent conflict, prevent violence, and ultimately increase productivity by the diminishing of that tardiness and absenteeism linked to this aggression. Thank you all very much.

DR. MCCLUSKEY: Our schedule continues to modify, but I'm going to go ahead and ask for primarily healthcare people. I appreciate your comments from the floor. They were definitely

very interesting. Our next group is Mary Matz from the Veterans' Health Administration, Richard Johnson from Lakeside Occupational Medicine Centers, PA, Joseph Doyle from Aetna Disability Services, and William Tomlin.

DR. MATZ: Good morning and welcome to all of our visitors. I'm a native Tampa person here and so it's just really exciting to have you here with us in such a nice situation and where we can learn from everybody out here.

I'm Mary Matz. I'm with the Veterans' Health Administration. I am a patient care ergonomics consultant with them, as well as an occupational health science researcher and industrial hygienist. I will be speaking on behalf of the VHA, although I've already done this one other time in Houston. We have a lot of things that we want to get out on the table. So I'm fortunate enough to be here again.

As the largest healthcare organization in the United States, VHA has a unique vantage point for identification of important occupational safety and health issues. I'm going to briefly discuss three of them today. The other five I already discussed in Houston.

First topic, strategies for implementation of evidence-based programs and best practices. Change strategies are needed to facilitate management and employee acceptance of new research findings and best practices, not just in the healthcare, but other areas also. This lag in implementing evidence-based strategies has been noted across healthcare. In fact, it is estimated that it takes over 17 years for healthcare facilities to adopt new evidence, and it's been found that only a moderate proportion of nurses use research as a foundation for their nursing practice. Studies that increase the understanding of management barriers and facilitators for adopting patient handling evidence-based practices would provide essential information for use in marketing efforts to overcome implementation obstacles. And because of the unique nature of clinical specialty areas, studies to determine barriers and drivers specific to each clinical specialty are needed. Due to the significant costs associated with evidence-based controls, such as patient-handling equipment, cost benefit and

return on investment studies would be helpful in persuading management to institute ergonomic programs. As well, research into patient handling productivity will assist in comprehensively defining cost benefits when justifying patient care ergonomic interventions and evaluating equipment for adoption by healthcare organizations.

Successful implementation of evidence-based programs in healthcare is also affected by the widely accepted belief by nurses that nursing safety should be sacrificed in favor of patient safety and quality of care. This belief diminishes nurses' acceptance of interventions and interferes with safe patient handling program intervention. Suggestions for research include determination of causes of the sacrificial mindset and the resulting non-acceptance and compliance with new safety strategies and best practices. Intervention studies using knowledge-transfer mechanisms that promote empowerment such as use of After Action Review are also suggestions.

Finally, implementation of evidence-based programs may be facilitated if data can

positively relate patient handling to patient outcomes and quality of care, such as using falls, skin integrity, sprain strains, and others.

My next topic is workplace violence in healthcare and I previously spoke on this in Houston, but we actually came up with some new data and some new findings so I wanted to address it again.

Violence in the workplace, both physical and psychological, is a major workplace health hazard in the United States. Almost two-thirds of non-fatal assaults at work happen in hospitals, nursing homes, and facilities that provide health or social sciences. A recent survey of nurses in a VA Medical Center found that the majority of both physical and verbal assaults were client-to-staff and that the safety climate may be an important element in the potential for assault and abuse. The study of organizational factors and unit organizational climate influence on the risk of workplace violence may shed light on this subject. What is the effect of the unit culture on reporting incidents as well as the

opposite, the impact of zero tolerance on the culture of the unit, including perceived stress and job satisfaction? How does the accepted paradigm in healthcare that patient/staff abuse is part of the job affect risk and how does personal abuse outside of the work, including intimate-partner abuse affect care giving and tolerance for abuse at work?

And I have one more page, but I understand that I'm out of time.

DR. MCCLUSKEY: At least mention it, briefly.

DR. MATZ: Patient handling musculoskeletal injury prevention. We are lacking in many of the indicators that we need for determining thresholds for cumulative injuries, as well as indicators for when patients and workers actually get to the point where they know that they need to report their injury. So this is another concern of ours and you will get it in written form. Thank you.

DR. MCCLUSKEY: Thank you so much. We appreciate your comments. Dr. Johnson?

DR. JOHNSON: I'm Richard Johnson and I do occupational health in the Tampa Bay area. You may think that this is actually a vest for

highway construction, but it's actually a required deer hunting color vest from Wisconsin that you have to wear so that people don't shoot you. They only had 1800 people in Wisconsin shot during deer hunting season in 1910, and they thought that was a good year. I'm not here to talk about that.

Although, it somewhat relates in that what we struggle with every day in our practice is trying to identify what is degenerative versus what it's an injury. With the aging workforce and your aging nurses, and with the stock market up and down and everybody lost their retirement a few years ago, nobody is able to retire when they wanted to. We have older and older workers having more expensive injuries all the time, which most of the time, at least in my medical/scientific opinion, are degenerative conditions, not injuries.

In the area of lung disease, we have B readers who will tell us what certain lung conditions are according to X-rays because they have criteria. We now have CT, spiral CT, MRI, X-ray, all kinds of sophisticated ways to evaluate a knee joint, yet we can't determine

if it’s a knee strain that the employer should pay for that new knee versus a degeneration, which is actually the major contributing cause. It goes with shoulders, too. A great example is a guy laying down and tightening a bolt and he experiences a shoulder strain. The end of case is total disability and big settlement for the employer because he has Parkinson’s disease. Clearly, the neurologist says it’s not work-related, but the compensation judge says he was working, he got hurt, now he can’t work and therefore it’s comp. So the problem isn’t just a medical definition of what’s degenerative and what isn’t, but it’s in the court system as well. Without the help of good scientific research to say no, based on this CT finding, this MRI finding your knee is degenerative and it’s not work-related. You may have had a little strain on top of it, but then we get into the whole cost issue of who’s going to buy his new knee when he isn’t ready for Medicare yet and he doesn’t have insurance because he works for one of those contractors who can’t afford to buy it anymore. Those are all of the kinds of issues.

Cumulative trauma is another one. That, in my opinion, is often just degeneration again. The employer is buying the medical care, which otherwise couldn't be afforded. When you think of this, think of deer hunting. Thank you.

DR. MCCLUSKEY: Thank you, Dr. Johnson, we appreciate your comments. Dr. Doyle?

DR. DOYLE: I might use that if I go quail hunting. Good morning. I'm Joe Doyle. I'm the regional medical director with Aetna Disability Services here in Tampa. I'm going to make three major comments -- a lot of them actually related to some of the ones you've already heard. The first one is about workplace wellness programs. During the past decade, several health insurers, including my own, and our vendors have developed wellness programs and disease management programs. Many of our larger employers have onsite fitness facilities and occupational clinics and health clinics. Dr. Francois kind of alluded to Citigroup. This encourages people to tend to their health and wellness activities during the workday. However, with more of the economic growth in recent years occurring in small and

medium-sized businesses, access to these wellness and disease management programs may be problematic for employees in these settings. Additionally, workers are being exposed to more stress and physical activity due to longer commutes and engagement in sedentary knowledge-based occupations. Disability claims, we've noticed in our claims experience, are increasing for depression, stress anxiety, and obesity.

Research is needed to assess the scope of this issue, as well as creative suggestions for insurers and employers to increase worker participation in these programs and to reduce time lost from work for mental health and obesity problems.

My second comment involves disability leave and graduated return-to-work programs. For some workers returning to the workplace after a disability leave -- graduated return-to-work strategies such as midweek restart, part-time hours, and reduced physical demand, also known as light-duty, can be useful in affecting a successful return to work.

However, some employers are reluctant to make

accommodations or to accept less than a full-duty medical release based upon a fear of a possible on-the-job injury and potential workers' compensation claim. Here we feel that research is needed to assess the validity of employer concerns about the potential workers' comp claims and to develop best-practice guidelines for graduated return to work.

My final comment deals with the aging workforce, lifelong learning, transferable skills, and productivity. Due to the natural aging process, some workers are unable to meet the physical demands of a medium and heavy occupation later in life prior to retirement, and may find themselves in a situation where it is unsafe for them to perform their own regular occupation. Often they are forced into disability retirement with the private sector, long-term disability, or Social Security disability, or as Dr. Johnson suggest even workers' comp.

Here we feel that research is needed to address the best manner of assisting the U.S. workforce in the acquisition of skills that would enable them to transfer into sedentary and light

physical demand occupations, if and when their physical capability for their usual and customary occupation diminishes.

Some solutions may involve public policy initiatives, such employer and employee tax incentives, onsite education, and distance learning. Thank you.

DR. MCCLUSKEY: Thank you, Dr. Doyle.

Mr. Tomlin?

MR. TOMLIN: Hello. My name is William Tomlin and I'm with the University of South Florida. I'm an industrial hygienist working with the 21(d) Program here. I'd like to suggest that NIOSH needs to look at exposure to silica at our construction sites, specifically looking at masonry tile workers and block masonry cutting workers over there.

Everybody understands the hazards associated with silica. It's one of the most studied toxic materials that NIOSH has looked at. We know that a restrictive and obstructive lung disease associated with that -- and there's a 20-year latency period before the onset of some of the diseases.

As a personal note, my grandfather died of a

restrictive lung disease associated with the construction industry. He was a cement worker. They called him the mud man. He mixed the cement there. Towards the end of his life he couldn't walk across the room. I'd tell training classes that he suffocated in a room full of oxygen based on his exposure to silica. In the south Florida area, we're seeing a lot of masonry tile work going in with the explosion of the housing boom. A lot of the local communities and some of the builders are requiring that masonry tile be used. To install a masonry tile roof it has to be trimmed. Therefore the workers there are trimming the masonry tile while working in an elevated situation, exposing themselves to fall hazards, but more importantly exposing themselves to a significant amount of silica. Our studies that we've done working with these workers show that every time we monitor those workers in that situation, they've been overexposed; both in masonry block cutting and in the masonry tile situation.

Currently, the only control method that they're using to reduce this exposure is personal

protective equipment. We see that a lot. NIOSH has talked about different methods, but the only one we see out there are the filtering face pieces. With that filtering face piece, we're seeing a lot of misuse or not use of the material.

Therefore, I'd like NIOSH to get together with the roofing manufacturers and some of the local exhaust manufacturers and come up with an engineering control that they can use in that situation to reduce their exposures or at least come up with a best practices method. We feel like the use of personal protective equipment to reduce this exposure is not doing what it needs to do. Thank you for your time.

DR. MCCLUSKEY: Thank you so much, Mr. Tomlin. Our next group of four is Ms. Linda Horner from Safety Products, Incorporated, Keith Brown from USF Safety Florida OSHA Consultation Program, Pete Rentos from the University of South Florida, and Roy Wood from the Florida Division of Workers' Compensation. Ms. Horner?

MS. HORNER: Good morning. My name is Linda Horner and I work for Safety Products, Incorporated as a field products specialist. I

assist our customers with product information, training, and sales. Prior to my employment with Safety Products, I worked for the Florida Safety Council and the National Safety Council for about nine years. As manager of the central Florida Occupational Safety Division I was responsible there for membership services, program development, and class coordination.

It was during my time with the Safety Council that I became very aware and concerned about the volume of violent threats and incidents, which my members were experiencing.

Our members consisted of a broad spectrum of industries in the public and private sectors. We offered a safety management class at the time called Preventing Workplace Violence. I made it a practice to routinely ask our members about their workplace violence concerns. One hundred percent of employers asked responded that they had experienced either a violent incident or the threat of violence from an employee, from a coworker, or a coworker's acquaintance.

I'm still dismayed and surprised that I did not find a single person at that time who had not

been affected by this area of concern. In 1993 I had my own experience with the threat of violence during my workplace at a medical bill review company. Unbeknownst to anyone at our company, one of my coworkers was a cocaine addict. When she didn't pay her drug dealer, he shot her. When she was released from the hospital she didn't return home, but she did return to my workplace. We ended up hiring an armed guard to sit outside our office door after the dealer made a threat to come to the office to finish the job and kill her and whomever happened to be nearby.

I tell this story not for drama, but to make a point. Statistics right now do not tell the full story, and many incidents are still not reported to public authorities. This incident wasn't reported to the Bureau of Labor. It wasn't reported to OSHA. It wasn't reported to any other agency. Yet it occurred and it was a very serious threat to the lives of an entire group of office workers.

According to a 1998 Reuters' article titled Homicides are now the second cause of U.S. jobs deaths it also reported that more than half of

all workplace victimizations were not reported to the police or to any other authority. I believe that new training and best practices would make a difference. Statistically, workplace homicides and violent incidents have decreased since 1998. I would attribute that to greater awareness of suspicious or concerting behavior, as well as the development of training programs like the one offered by the Safety Council.

Numerous public agencies and large employers like DuPont and the Post Office are including workplace violence prevention in their internal safety programs. Also, post 9-11 more companies began evaluating their security risks and international threats beyond the threat of just a disgruntled employee or family member. Proactive employers can now easily obtain similar programs and support through agencies like OSHA, Bureau of Labor, and numerous Internet sites and services. Without a doubt, these efforts have contributed toward a decrease in the number of workplace homicides. I would like to request that NIOSH take a look at doing some research into effective safety

training programs and best practices that employers can implement to decrease the risk of their workers in the workplace. According to the 2004 Bureau of Labor report, homicides have moved from the number two cause of workplace fatalities to number three now; behind transportation incidents and contact with objects and equipment. This decrease is a great thing, but it's still a non-regulated hazard and it's still a contributing factor to a large number of workplace fatalities every year. As a non-regulated factor this means that unlike some other high fatality hazards, employers are protected and prevention measures are enacted only at the whim of their employer, even though workplace violence affects every industry and even though it is a major contributor to workplace fatalities and even though it's very cost-efficient for employers to take a proactive and preventative stance with training and supervisor awareness programs.

I want to make one final point on that. Workplace fatalities are often accidents. Most of the things that we're going to be hearing

about today or talking about are considered accidents. Tragic accidents, no doubt when fatalities are involved. However, homicides are not an accident. They are deliberate and often premeditated. Homicide is still the third largest cause of on-the-job deaths. Its hand is now reaching into our schoolyards and our churches. Many times after a high-profile workplace shooting you hear on the news people acknowledging they'd noticed warning signs, but they ignored them or their upper management ignored them. Many employers will not take the initiative unless some sort of training regulation is implemented and enforced.

I believe that workplace violence prevention training should be as important for supervisory personnel as a respirator class is for fabricators or forklift class is for equipment operators. Without some sort of research and presentation, I don't believe a regulation will be enacted. Employers will still choose to ignore the risks and these horrible kinds of fatalities will continue.

So again, I would ask that NIOSH consider applying some research funds and some efforts

into coming up with ways for the employers to reduce this risk in the workplace. Thank you.

DR. MCCLUSKEY: Mr. Brown?

MR. BROWN: I'd like to go ahead and jump ahead of the clock a moment or two and be the first to wish everybody a good afternoon. My stomach is starting to tell me it's about that time. My name is Keith Brown and I work with the OSHA 21(d) Consultation Program operated out of the College of Public Health here at the University of South Florida.

I am not a medical professional. I've never had any type of medical training outside of a very basic first aid course, usually at the spur of the moment to remedy a minor cut. However, in working with employers throughout the state and exchanging conversations with my colleagues, not only in the state, but also in other parts of the nation as well, we've identified what seems to be a disparity in the level of medical treatment provided for seemingly minor work-related injuries and similar type injuries sustained in an other than work-related environment.

This disparity places a burden on employers who

participate and are required to maintain the Occupational Safety Health Administration's log of work-related injuries and illnesses. This disparity contributes a major burden on these employers, as well as OSHA to a degree in the fact that annually OSHA collects data and targets certain employers for enforcement inspections based on the data that they are reporting to OSHA. This disparity creates an undue burden on these employers and the federal government by targeting employers that perhaps should not be targeted for these enforcement inspections. This is an issue which frustrates employers and in some cases employees alike. No one wants to be second-guessing the medical professional in the type or level of treatment that they provide a minor injury, but at times it becomes somewhat curious as to why a cut that we might receive at home would only require a bandage, but a cut that we receive at work might require a couple of stitches as opposed to a butterfly bandage and subsequently, prescription-grade medications from antibiotics to painkillers. These are things which toss the employer into that

position of having to report these issues to OSHA.

Unfortunately, I do not have any suggestions for resolving this type of an issue, but I sincerely hope and request that NIOSH and the medical industry work together to satisfactorily resolve this and remove this burden from the employers and employees alike. Thank you.

DR. MCCLUSKEY: Thank you, Mr. Brown. I appreciate your comments. Dr. Rentos, I believe you had some comments as well.

DR. RENTOS: Thank you, Dr. McCluskey. I do want to thank you for being here this morning. My story really cannot be told unless you're out there in the field and you see it. I want to congratulate our department and the College of Nursing and our program in occupational health nursing, which has had the wisdom to suggest that in this coming semester all of our graduate students will go to the field.

The story I want to tell you about is a product called delimining. Now, delimining is a very fragrant and very pleasant odor that is found in the citrus manufacturing industry. In fact,

it is manufactured in tons. The interesting thing about it, even though it does represent an inhalation problem, there is no OSHA PEL. There is no NIOSH REL. There is no ACGIHTLV. That is very interesting, isn't it? Especially in view of the fact that animal studies have shown that it can be a potential carcinogen. In fact, in one study that was specie-specific for rats, that's exactly what has happened. So my story is simply that if there is great potential for exposure to delimining in the workplace in citrus production then why don't we have the information to support and to document a safe exposure level? So therefore I would ask NIOSH to consider this and do whatever it can to provide such a level. Thank you very much.

DR. MCCLUSKEY: Thank you, Dr. Rentos. We appreciate your comments. We did save the best for last and you finally get to comment and then we'll certainly open up the mic to other interested persons, but Mr. Wood from the Florida Division of Workers' Compensation.

MR. WOOD: Good afternoon. My name is Roy Wood. I'm with the Division of Workers'

Compensation for the State of Florida. We're part of the Department of Financial Services. Formerly, we were an entity in and of ourselves. We're renewing our interest or our thrust in this area of safety and look forward to working with USF in that area.

Dr. Brooks, I submit to you that another form of occupational asthma is speaking in public. That's probably something else to study in that area. The beauty of being last is I get to hear everybody else and get to rewrite my points several different times and find out that others have the same interest in mind that we at the Division do.

I have three basic topics to briefly discuss this morning. One is the area of natural disasters. Around the southeast we are all very familiar with the hurricanes that have been taking place over the past five years. We're concerned about workers returning to a workplace where the infrastructure is down; where the employer may have damage to the workplace. They may be dealing with their products and services in a much different way. They may be thrust into a role that is much

different that what they're used to. Overall, the environmental landscape has changed for these workers and their new work roles in many instances.

From our experience in Florida we believe there should be research into the ability to promote a safe workplace in an environment that is post-disaster; whether it's hurricanes or some other disaster. Research could be done on the safety issues concerning structural damage, enlightening workers towards that area. What is the impact on medical resources in the area? What is the impact on the environment that people need to be made aware of? What can be done in these areas to prepare people for this obvious disaster that is to come? The impact of occupational hazards, the pollution in the water, the release of sewage, things of that nature are normal and should be expected, but to what extent can we prepare and be cognizant of those issues.

Finally, many workers are exposed to driving hazards that didn't exist before; the loss of power; the loss of traffic lights and just street lights of that nature. How to prepare

workers for that. Which leads me also to my next topic, which is the extended driving periods that workers may have to go through because infrastructure has been damaged.

My next topic is transportation incidents. Historically, transportation incidents are the leading cause of workplace deaths. On average in Florida it varies from 40 to 47 percent of all fatalities in Florida are transportation-related. Ms. Bohan probably pointed out one of the most important areas that transportation-related incidents occur and that is in the work zones. But there are many other cases and to my knowledge there is no definitive research that has been done on what other factors may come into play on other types of transportation-related accidents. For instance, are there distractions that we don't know about or that we do know about that may help us prevent further accidents?

Just imagine for a moment if you will that if we were able to reduce transportation-related accidents just by ten percent. That would be a significant amount of savings, both emotionally and financially. Are there safety programs

that employers aren't taking advantage of in the driving arena? What is the impact of fatigue, cell phone use, drugs and alcohol? If you look at the BLS data it tells you that there were that many fatalities, but what needs to happen is we need to drill down into that information and find out what is really causing the accidents that occur.

Finally, I want to talk about the aging workforce. January 1 of this year was the first year of the baby boomers turning 60. It became a very hot topic in everybody's mind and in all the press. When I went out and started looking for data and information in this area, I found very little. There was a lot of anecdotal information, but not a lot of concrete information that exists concerning the aging baby boomers; me being one of them. I did find a study by the American Society of Safety Engineers that suggested ergonomic changes that need to be made or considered. All of these things seem very obvious, but I think that it is probably time to begin considering what changes need to be made in the workplace that can accommodate this large mass

of workers that we have a fundamental shift from a younger age to an older age. One research topic I would think would be the study of how to adjust the safety standards recognizing the limitations that may exist because of that shift. Thank you very much and I appreciate being here.

DR. MCCLUSKEY: Thank you so much for your comments as well as the other individuals. I'd like to open up the mic because we do have a few moments. If people have comments upon things that people have presented or were not on the schedule and would like to present their own topics. I certainly appreciate all of you and these topics were very interesting and I'd like to give a round of applause to everyone who had the gumption to actually get up and speak and say things. I would encourage everyone else to. I believe that if I don't see anyone running towards the back mics then there are closing comments by both Dr. Stuart Brooks and Dr. Soderholm prior to going to lunch.

My final comment will be please come back for the afternoon. We would love to see you once

again as well as lunch can be had in the dining room right below this room. Thank you so much for coming and Dr. Brooks if you'd like to make a closing comment for this morning session.

DR. BROOKS: I'm really impressed with the speakers today and the information that was provided. I hope that it provides NIOSH with a direction. I think that one theme is this theme that is important to Florida about natural disasters. The hurricanes that are causing property damage result in this whole area of residential construction and residential safety that we've discussed in numerous ways. From fall protection for roofers and various types of injuries and accidents that result from the cleanup of these storms. The residential safety, I think, is an important area.

I think the second thing that we've discussed here that's important is the aging workforce. How it affects not only acute injuries, but how it might affect ergonomic issues, and maybe we really need to look at what is a worker in the 21st century.

We talked a little bit about some new things

that really are important and that is aggression and workplace violence. I think that's another area that can be something that NIOSH is involved in.

Then there is the whole issue of dealing with health issues, from asthma and asthma in the workplace to silica and the role of silica in masonry. We talked about pesticides in migrant workers and pesticides in agricultural workers. This State is an agricultural State, so that's an important issue. There are specific types of exposures. We talked about isocyanates and the spraying operation. There are a whole host of others.

Then it's important that we have some way of measuring issues, whether it be aggression, but also measuring illnesses. So having a good surveillance system in the state and performing epidemiological investigations and trying to identify what's really going on will allow us to provide some better intervention programs.

Again, finally, I still have an issue that deals with this approach for the sector-based approach that hopefully it doesn't get taken too much in a consensus agreement and we don't

really deal with some of the important issues in occupational safety and health.

DR. SODERHOLM: I appreciate everyone's comments. I'm sitting here to be one of the faces of NIOSH and there are many more people in NIOSH in the audience. They remind us that NIOSH is only one of the faces here at the table. There are many partners who will be involved in this work.

I appreciate everyone's input. We've heard some wonderful stories that really remind us that for those of us who aren't visiting worksites every day that it is the people that we are working for and are trying to learn better how to protect.

I would like to ask everyone who felt it was important enough to come here today to not make that a one-time act. Contact me or contact others you may know in NIOSH, but raise your hand and get involved. There is a lot more work to be done and we would like your participation. We'd like you to volunteer and don't hesitate to take that next step. If nothing else, sign up for eNews so you can follow what's happening in NORA and follow

what's going on in occupational safety and health as NIOSH is leading its part of those efforts.

So if there are no other housekeeping details, I invite everybody back for the afternoon session, which will focus on wholesale and retail trade. Certainly, if there are other issues that come up, I hope we'll have time at the end or sometime during that to invite others to come and talk about any issue. Thank you. Drive safely and work safely. Thank you.

(Whereupon, a recess was taken from 12:15 p.m. until 1:15 p.m.)

INTRODUCTION TO THE SECTOR APPROACH

PAUL SCHULTE, NIOSH

DR. SCHULTE: Good afternoon everybody and welcome back to the afternoon session to talk about developing a national occupational research agenda for the wholesale and retail trade sector. We appreciate you being here. We hope that this represents an opportunity for government really to listen to stakeholders and interested parties in giving us guidance about what research is important and what we should do.

So if you were here this morning you heard that ten years ago NIOSH started a strategic approach to develop an occupational research agenda. We did that by listening to customers, stakeholders, and interested parties. We did that for ten years and it seemed to be quite useful and successful. It allowed us to leverage resources in a time of scarce resources and focus on important things. Well, for the second ten years we hope to modify that a little bit by utilizing an approach that focuses on industrial sectors. So that we can identify the most important problems in each of the sectors and that we can have a separate research strategy for each sector. Many of our partners said your strategies are too general. We need you to focus in on our particular sector. Other partners also said that we know a lot about what causes occupational injuries and illnesses, but we haven't applied that information. So part of the effort of the second ten years of NORA is to look at how we make knowledge turn into action. How we apply knowledge. How we go from research to

practice. So that's the focus.
We didn't miss the concept that was espoused this morning that there's still a need for basic critical research, and we're going to address that in a number of ways. One is that we're going to have an overarching council made up of representatives of all the councils.
Secondly, we are keeping the programmatic priority areas from the first NORA, and we'll still be investing in them to some extent. We hear the message that there's a need for basic research, but we hear an even louder message that there's a need for research on how to figure what works and how to make it work better. So that's where we're aiming today.
To help us do this, we're doing a number of things.
One is that we're soliciting your opinion and your input. You can do it today. You can do it on our website. You can send us letters. You can come to our office. Anyway you want you can give us your input.
Secondly, for each of the sectors we hope to have a governance council that will say we are a group that's going to develop a research

agenda for the nation for a given sector. That will be owned by the nation, not just by NIOSH. NIOSH will then identify that piece of the agenda that we can do best, but we hope that other people will claim and lead in other parts. Together, we will impact a given sector. So we will do this by forming this kind of sector research council drawing on a broad variety of stakeholders.

The idea in each of these will be to analyze the most important needs, gaps, and barriers in the information base to make a difference in a sector. Then we will set a strategic plan and do some strategic thinking to figure out how we can eliminate the worse problems in a sector, and to do that in a way that we can measure our progress by having various kinds of intermediate and performance goals. Then try to bring together a series of partnerships that will allow us to leverage funds and to have a synergistic effect in a given sector.

So this afternoon this is the time that we're focusing on a particular sector, the wholesale and retail sector. I want to just brief some of you who aren't familiar with it -- many of

you are since you represent that sector -- of what it encompasses and some of the major problems in that sector.

One out of every five workers, essentially, works in the wholesale and retail sector. It's one of the eight industrial groupings that NIOSH is using. We're choosing these groupings using an industry classification known as the North American Industrial Classification System or NAICS. NAICS codes the economy in two digit, three digit, four digit, five digit, and six digit categories. So wholesale is code 42. Retail is codes 44 and 45.

Then you can down into -- as you add more digits you drill down further into the sector. So for the wholesale trade sector it's estimated using 2003 data that there are 5.6 million workers. In the retail trade it's estimated that there's close to 15 million workers. You can see that you start to get a lot of variation within this sector. So a pet store will be different than a floral shop in terms of occupational hazards and issues. So it's that variation and those differences that we're really interested in capturing as we go

about developing a research strategy.
Using 2004 data you can see that the wholesale and retail trade sectors comprised about 21 percent of all industry injuries. This is about what that sector represents in terms of the population of workers. So it's proportionally appropriate, and in fact many people in the sector don't believe that there are many hazards, but indeed, when you get into certain of the sub-sectors down to the four, five, and six digit sub-sectors NAICS codes you start to see alarmingly high rates for various injuries and illnesses.
So here's the overall for retail and wholesale. They're not far from the total, which is the industry average. What's mostly responsible in this sector are health problems and injuries related to transportation incidents, assaults, and violent acts, and then third are contact with objects and falls.
Then you can see, as I was saying, that while the overall rates in orange aren't much different than the national average. There are certain sub-sectors that have large variations and indeed are where many of the hazards

happen.

So there's two approaches we want to take. One is we want to identify the high-risk sub-sectors, but secondly, we realize that these two sectors, even though the rates are not high, have the largest amount of injuries and illnesses numerically. Hence, they have many of the costs that the society bears for occupational disease and injury. So we need strategies both to target the high-risk subset and the overall sector. Using direct and indirect cost, it's been estimated that occupational disease and injury cost the society 170 to 255 billion dollars a year. So we're talking real money and we have not only the human cost of the burden, we also have the indirect cost and the economic cost.

These are the kinds of things that we want to be able to research and we're interested in your opinions on what's important in this sector. So without further adieu, we'll bring up the first panel and hear what they have to say. We'll follow more or less the same pattern that we used this morning. We'll have three or four people come up as a panel.

They'll each speak for about five minutes. Then we'll open the floor for discussion or comments of anyone. One modification, instead of asking the person to go into the back of the room we're going to ask speakers if they want to come up here and speak so they can be seen. If you want to speak throughout various openings in the afternoon, you're quite welcome. We're here to get your input and so that's what we want. The list has jumped around about 20 times, so excuse me if I don't get everyone. The first panel is John Byrnes, Charlene Grafton, Gary Greenberg, and Rene' Salazar. If you would all please come up. While they're coming up, I'll just say that we really appreciate the time that people took out of their busy schedules to come and give NIOSH this kind of input. We hope to listen to it, to use it, and we look forward to further participation by you on some of these councils. Mr. Byrnes?

MR. BYRNES: Thank you. Once again, I'd like to point out that my comments are going to be directed to the retail and wholesale sector. I've got a one-page written narrative that's on

the back table, if you'd like it.
Those in the retail and wholesale business often wonder why they miss the workplace predator all too late or until it's too late. We're talking about the individual who comes into the retail setting or the wholesale setting and shoots and kills people because they're either robbing from them or because they have some dispute with them.
This morning you heard me mention that how we had 13 years ago developed the means to measure human aggression. What was particularly interesting about this discovery was we realized that aggression wasn't just aggression, but that aggression was primal aggression and cognitive aggression.
Primal aggression is built off of the primal instincts of fight or flight. It is fueled by adrenaline. That is the connection between aggression, the production of adrenaline, the increase in the heart rate, and the resulting bodily language and behavior that we can identify and measure. This is what most people think is aggression.
However, what about conscience, deliberate

aggression? Here, we've developed what we call cognitive aggression. This is built off of intent; malicious and hostile intent. In other words, what is your intent with this person? Is it in your interest and theirs, therefore a win/win as it ought to be or is it in your interest and their detriment? In other words, you're going to victimize this person. You're becoming a victimizer or at a slightly higher level of cognitive aggression, the predator. The person who doesn't care who they're going to get, they just know they're going to get someone like in a robbery and often with criminal intent.

The highest level of cognitive aggression is the terrorist; someone who wishes to invoke terror into the hearts and minds of their victim. Now, we often think of a terrorist in Iraq, but the individual who comes into your workplace with the intent of killing people and who has no regard for their own lives meets the same body language and behavior that we use to identify the terrorist. The same body language and behavior are utilized.

To this end, an example is the best way to

illustrate this. We were invited to the FBI and we met with the directors of behavior sciences for both the FBI and the TSA in Quantico. The Director of the FBI said that out of every 200 people that request a presentation in front of us we permit one. That says volumes about our interest in your subject matter. At the end they gave us a publication of all the devices and apparatuses that were being developed or had been developed to identify a terrorist in an airport. After reading it I explained to them that the problem you have is you're identifying a primal aggressor. You're identifying stress, anxiety, orbital flushing. In other words, you're reading emotions, which is what we all do when we try to find this kind of an aggressor. However, a terrorist is a cognitive aggressor. This is a person who not only disconnects from their victim, but this person disconnects from their own wellbeing to the point where they find a profound calm. Why a profound calm? Because they are completely and totally disconnected from their own wellbeing. Ladies and gentlemen, this is a completely different

behavior than the primal aggressor. If you're looking for the primal aggressor then you're going to miss the individual who comes into the workplace. If you look at the last four shootings, these are people who came in and expressed their conflict by shooting and killing people. If you're not looking for the cognitive aggressor, you will miss this person all together.

If we are to identify any effective means of preventing the workplace shooter, whether the intent is to rob from you or to satisfy some kind of a dispute with you, we've got to understand cognitive aggression. How to measure it, how to engage, and how to prevent it. We've been measuring this over the last 13 years anecdotally. We have a strong interest in an ability to find a grant research partner that we can measure this empirically so that this can be the basis of preventing workplace shootings. Thank you very much.

DR. SCHULTE: The next speaker will be Charlene Grafton.

MS. GRAFTON: Good afternoon. I'm from northwest Florida and I'm Charlene Grafton.

I've been a nurse for over 50 years. Since moving back to northwest Florida, I began to write about some of my experiences with computer-related injuries. That's what my presentation is today, computer-related injuries.

The major cause in my belief is the right-hand side of the workstation is an overloaded system. We're all righties (*). I first became aware of computer-related injuries while managing workers' comp claims while living in Nevada. I was managing workers' comp office claims for workers in California, Nevada, and Utah. Then when I moved to Atlanta I managed claims in Florida, Georgia, and Alabama. What I found by managing a large number of workers' comp claims of bank workers -- I managed all the claims for one national company for all of their banks in Georgia, and for another company all of their banks in Alabama. So I have a pretty good idea of what type of injuries that happen because of not only the computer keyboard, but also the keypad and the mouse.

With that in mind, I wrote and have a patent

that is in a pending process, which is a training method to develop the left hand. By developing ambidexterity, we can prevent a lot of computer-related injuries. In the performance highlights of the NIOSH research findings -- it's in this book and if you don't have it and you work with people with hands, you really need to get this book. From this book of relevance to 40,000 employees of the IRS and millions of workers in similar work operations, they determined the use of a regimen of hourly brief rest breaks would reduce musculoskeletal disorders without loss of productivity. The study was done ten years ago, according to Dr. Naomi Swanson, who I did speak with and I am requesting follow-up studies with these same types of workers; as many changes have been made in keyboards, keypads, and peripherals by business and industry.

Directionality of the keypad with the left side of the numbers -- this is what is very interesting. When you change to the left-hand side of a keypad -- and you can buy them, but no one can tell why to buy one or the other.

That's why I wrote the patent. Directionality between the hands is the issue. So there are certain small tests that you can do that really don't cost any money to be able to determine this.

Most of the research that's been done about work with the hands, though, is with CAT scans and MRIs and you just don't have that in the workplace. Products have been made and sold, but no explanation of what to buy. The computer keyboard with modem bought in a box is generic. So my method is based on the human factor of dominance. We all have our dominance, but what do you do with it to your advantage?

In 2003, it was estimated that 73 million computer users of which 80 percent were actively providing data entry services at work using the numerical keypads. With competitive motion injuries toping the charts in workers' comp claims it's reasonable to assume that NORA would be interested in new answers for computer-related injuries. I know that only employers can change occupational environments to decrease its incidence, but scientific

investigations should be provided by NORA in the coming years.

Outsourcing of computer jobs to other countries makes this even more important for the United States because we primarily developed Silicon Valley and now so many of those jobs have gone overseas that so much of the computer business is not just our problem anymore. What I'm requesting NORA to do is to conduct research on the same types of workers, train for ambidexterity, develop work-hardening programs in our occupational centers, and also training programs to eliminate computer-related injuries. Thank you.

DR. SCHULTE: Thank you. Our next speaker will be Dr. Greenberg.

DR. GREENBERG: I appreciate the opportunity to speak to y'all today. I'm Gary Greenberg. I'm an occupational medicine doctor at the University of North Carolina, as well as at Duke University -- and yes, you can do that. I'm pleased to be able to come to Tampa and discuss how we might be able to modify or redirect some of NORA's future with this opportunity for a town meeting. I'm lucky that

I flew in from the north and it wasn't that far north and my flight was not cancelled. This is a town that I know well. I actually practiced medicine down the street at University Community Hospital and had a faculty appointment at the school in the first months of its existence as a school of public health. My point today is to try to gather some support from the audience and from NORA's planners to make sure that we include recognition of one of the more consequential and sometimes overlooked aspects of occupational health, which is disaster planning.

Disasters are a sadly recurring situation of massive public health consequence, and occupational health needs a seat at the table and a voice in the room when those issues are being discussed.

Disaster planning has been a problem within occupational medicine for decades; especially because many disasters originate with our own worksite. Where there is chemical, nuclear, or infectious hazards which are either stored or even produced we recognize that managing those situations are part of occupational health.

Recently, disasters have occurred because the workplace is the target of the disaster. That's a different situation than that in which we were trained in the past. Terrorism has focused its assault in many occasions at specific workplaces. We should right now think about some of the past contemporary situations where disaster was appropriately used.

SARS is often used as a prototype. SARS was an occupational health crisis. We probably couldn't call it a disaster because so few cases occurred, but nonetheless this was clearly an occupational health event where workforces of healthcare workers were the most primary target of the disease and the greatest sufferers in the countries where that was manifest.

9-11, clearly the first domestic episode of major terrorism needs to be recognized that the target was a workplace. 9-11, Oklahoma City were both situations which were targeted because of their metaphorical importance, but the victims of that situation were people in their job. They had no reason to anticipate that their job was one where major consequences

occurred.

Similarly, anthrax was a targeted terrorist event focused at workers, media, congress, and accidentally it was postal workers who suffered the greatest health consequences. Clearly, this is a situation of occupational consequence. We looked at the converse of this and we can talk about Katrina. Katrina was a situation where the consequences were generic. A civilization almost comprehensively was demolished. The shining light of the recovery and the response happened to be the worksite. The oil industry as the victim and retail as perhaps a rescue agent need to be recognized as a very consequential situation where disaster management was well-handled.

I was at a meeting last week where Wal-mart's director of crisis management described their war room of monitoring tools, full-time employees, disaster plans for every possible crisis from shootings to fires to earthquakes. And in this case it was a hurricane where they could plot the plans and bring their resources to bear in the perimeter, ready to work on the population as soon as it occurred. They had

scramble plans and reassemble plans for their workers. It was quite impressive and better than anything our government was able to achieve.

If we stop thinking about the past disasters and think about what's the most likely threatening and impacting disaster of the future we really need to think about pandemic flu and how that affects workforce, in addition to the population as a whole. We have to recognize that the workforce is an opportunity to respond to pandemics. It's an organizing focus of society. We have to recognize that the workforce has to respond to the situation with plans of social distancing, institutional surge capacity, new arrangements for remote work, shifted assignments, and alternative work programs.

The main point of my remarks is to recognize that disaster management within occupational medicine is public health. The core discipline of what we all trained in. It's about planning for community-based response. It happens that the community is workers. It recognizes that we are a network of providers. We are a

network of providers that mirrors and parallels what's going on in the other network of public health, the more classically considered county, state, and federal networks. We need to stimulate, initiate, and evaluate our response to disaster situations. There is a growing network now called the Occupational Health Disaster Expert Network. There is a handout in the back of the room and I have a few in my own hand. We're trying to stimulate a resource that will allow professionals in occupational settings to share plans and ideas with each other, recognizing that disaster response is a non-proprietary and non-competitive aspect of occupational health. I appreciate your listening and I'll be around for questions later.

DR. SCHULTE: Thank you very much. The last speaker in this panel is Mr. Salazar.

MR. SALAZAR: Good afternoon. My name is Rene' Salazar and I want to thank NIOSH for allowing me the opportunity to be here. I'm with a small firm in Tampa, Florida called Salazar Consulting Group. We are a small group of certified industrial hygienists. All of us

trained with either master's or Ph.D. training. We do most of our work here in Florida. We provide consulting services in the field of environmental and occupational health. Although we're trained and certified the comprehensive practice of industrial hygiene, it appears that our practice causes us to be most involved in the issues of indoor environmental quality, particularly in non-industrial environments. Most of our clients that call into the office usually have that kind of work or service that they need. The client base is quite varied. We deal with building owners, building managers, lawyers, physicians; a variety of folks. They all have essentially the same interest. That is they're all connected by this issue of the workplace and so protecting the workers is a priority. For the more traditional exposure characterization methods such as for noise or asbestos or for a variety of chemical agents, NIOSH provides us, the practicing industrial hygienist, with methods to do those assessments. We can go to the bookshelf and find NIOSH methodologies for the investigation

of these kinds of issues and also sampling methodologies that might be available. Even for general IQ issues, which are really a subset of traditional industrial hygiene, NIOSH offers us some guidance. There is some information available for us to go out and get NIOSH documents to determine how to perform an investigation.

However, these days the unfortunate factor is that most of the general IQ requests that come through are no longer general in nature. They focus specifically on one agent and that is mold, and sometimes bacterial agents. With this, of course, you would imagine that it would present a problem. We don't have standardized methods of doing investigations for these mold elements. We don't have standardized methods of data collection, of data analysis, and of data interpretation. It makes our job quite a bit harder.

We find ourselves as formerly trained and knowledgeable individuals as others doing these kinds of exposure assessments having to argue issues with those who are less qualified, not properly trained, who basically have gained an

understanding of some buzz words and phrases, which are thrown out there to the workplace or to the workers and to the general community at large. So we find ourselves having to debate these issues, which I would believe with good research and good opportunities to do assessment methods would not have to be discussed. This wastes time and money and also drags the individuals through this entire process. The workers usually have some validation of their complaints, sometimes there are legitimate complaints, many times there are not. They are just perceived hazards. What we need from NIOSH and what we need from this NORA process is to aggressively research this issue of indoor environmental quality in non-industrial indoor environments. We as practicing hygienist or as practicing environmental professionals need to be able to assess standardized investigative methods, standardized methods of data collection, analysis, and interpretation. Ultimately, we would hope that we would have some sort of response data that can be generated so that we can see the development of threshold values

developed at some point in the future. Thank you very much.

DR. SCHULTE: Thank you. Is there anyone who would like to add anything to that or who hadn't planned on making a statement? Thank you. I'll call the next panel. Next, could Brian Hennessy, Isbelia Lugo, Robert Prior, and Robert Nesbit please come up? Was anybody on the list or if I missed anyone, please do not hesitate to speak up. Robert Prior?

MR. PRIOR: Thank you. I'd to thank NIOSH for giving us the opportunity to let the community come together and to Stuart Brooks and USF for sponsoring it here at the University. Well, a little bit about me. I'm also with Aon, as Dr. Byrnes is. You're going say what is an Aon? Well, we're a large insurance brokerage world-wide and a large reinsurance company. That's what we are. It says that I'm with the Sunshine ERC, which I am as a member here with the community. Today, I just want to talk a little bit and I'm going to tell you a little story about one of the companies that we represent to get their insurance for and the problems that they have today competing in the

global environment with the worker comp cost. Before that, I've been with Aon for about five years and before that I was in the manufacturing, telecommunication, and public-service sector. I was actually a paramedic when I started. So that's how I started. I represent a number of clients in the retail and wholesale trade sector. They're always concerned about employee safety and health, and of course, what comes with that is the cost of worker compensation.

One company in particular has had a lot of rapid growth, as a lot of the ones in this trade sector have. With that, the additional worker comp claims come, sometimes yes, sometimes no. So they call somebody like me from the insurance broker to come help them. So we do an analysis of their accidents, find out what body part, what type of accidents, and those kind of things. We try to come up with a game plan to come up with some job fixes, let's call it; either engineering or administrative controls. Of course, we follow NIOSH lifting guidelines, we go to the OSHA website, and we look at everything that's out there that we can

use. We come up with a game plan. So we have these interventions, which may include controls that y'all have heard about; material handling equipment, raising and lowering work surfaces. I was involved with a big project with VDTs way back when and we were trying to tell a company that they needed 77 million dollars worth of equipment to raise and lower workstations for operator services for the telecommunication industry. That wasn't going to fly. We switched it to you picked out your own chair and you were happy, and that was the end of the game. All we did was buy chairs, but somebody else was trying to tell us that we had to do all this lifting and stuff, as you've seen. Modifying tools, some of that is pretty easy. Reducing weights, physical-demands testing, which unions get excited about. You get a post-offer, we send you to get a physical test and we find out your shoulders, and your knees, and your back can't do this particular job and we can't hire you.

Then we implement all of these things and time goes by -- let's say a couple of years -- and they go Bob, this isn't quite working like we

thought. Our costs aren't going down. Our musculoskeletal disorders aren't going down. What's the story? Well, I can always say well, you need to give it a little bit more time. It's not like that. For these companies, costs increase with this. We all know what's going on with manufacturing, it's not here very much and those kinds of things.

I've been following available research, as you heard from -- just before I came, I read the NORA MSD Team Agenda to find out what they were thinking about. At Aon, I also have an associate that works with me, Dr. Richard Roy, who's on the NAICS Committee. I've read where all the gaps are in the research from both those groups and came up with one that I think is going to work good for the trade sectors. Similar to their findings, I have two interrelated issues that need additional research. One is the impact of these multi-factorial causes of MSDs, including psycho-social, which is really important. There's a lot of loose data out there. A lot of people are pointing fingers at things and nothing definitive. We have physical

occupational and non-occupational factors and their interactions. With this, how these factors factor into the worker comp systems in all states. In fact, some states are different than others. I get this injury and am working in Alabama and they won't pay anything, but I go to Florida and this will be paid. So we need the factors in the worker comp system and the findings of causation, diagnosis, the duration of the disability, and other outcomes related to musculoskeletal disorders. Those things are tied together.

Research greatly assists the companies in this sector with managing their costs and sustaining growth. Thanks for the opportunity and if I had more coffee, I could have talked faster. Thank you.

DR. SCHULTE: Thank you very much. Mr. Nesbit?

MR. NESBIT: Thank you for the opportunity to be here again. My comments are going to follow what Mr. Prior just said there. Basically, what I'm going to do is talk to you a little bit about the need to develop better safety and training programs for people in the retail/wholesale industry.

It would be helpful if NIOSH could develop some guidelines as how to best approach the training needs for workers in this industry. We need to determine if there's a relationship between the accidents and the lack of safe work-practice training for retail and wholesale workers and the managers. We also need to look at hazards involved in the tasks retail and wholesale workers perform in order to determine if their safety and health training is adequate. There appears to be a need for developing task-specific minimum training requirements that include safe work practices.

As this industry has expanded to the use of new technology and automation over the past two decades, workplace safety and health programs and training in those programs seems to have been left behind or has not kept pace with the change in technologies. Numerous contract companies develop safety and health programs, emergency action plans, and training plans for the retail business owners. Some of these programs are canned so as to fit a number of different types of businesses with a little bit of modification. The problem is that a lot of

business owners don't look at the information to see if it really fits their situation. When an accident occurs owners often find situations that contributed to the accident, but were not covered in their safety and health training program. The result is that the retail and wholesale safety and health programs need to be evaluated for effectiveness in terms of reduction of workplace injuries and lowering workers' comp cost.

NORA could use the information gathered doing intervention research to develop a promising practices document for the retail and wholesale trade industry. This document could then be used by the retail and wholesale industry for developing custom workplace safety and health programs, training programs, and emergency action plans. I recommend that NORA look at the possibility of developing course materials that could be used to target specific retail and wholesale management groups. We have found in our consultation work and in our classroom training sessions that there is a specific need to develop safety and health program management materials for managers who have little or no

safety and health knowledge. There is a real need for developing training materials that can be used to explain the importance of good safety and health programs and demonstrate the need for effective emergency management plans. There is a need to determine adequacy of the emergency procedures and the knowledge of the managers and employees in implementing emergency action plans, as well as training programs. Again, I thank you for the time to give this presentation. Thank you.

DR. SCHULTE: Thank you very much. Is there anyone who would like to add or make a comment at this time? Okay. Gentlemen, thank you very much. I believe that we have only one more panel and that is Cameron Brooks and Michael Alvarez. Is there anyone else who had intended to speak that I didn't call? Mr. Brooks, Mr. Alvarez. I had the right organization, but the wrong name. Mr. Johnson, please.

MR. JOHNSON: Good afternoon. My name is Rich Johnson and I work for Lowe's Companies and Lowe's Home Improvement. Great thing about working for an improvement company is we don't wear ties. Even our CFO and Chairman of the

Board doesn’t wear a tie to work, so that’s pretty nice. A jacket is really dressed up for a hammer guy. I’m the director of safety for Lowe’s. We’re a Fortune 50 company. We have 1275 stores and building 150 more a year for the next five years. Our sales are going to exceed 42 billion in ’05. We actually serve about a million customers a week. Our home is in Mooresville, North Carolina. That’s where I came from today. We started as a little tiny hardware store 60 years ago in North Wilkesboro and it’s grown to what it is today. We pride ourselves on actually developing our stores in a way that it attracts a customer that feels safe in our store. We have 175,000 employees that work at Lowe’s. Of course, that number is growing at a pace of about 16 percent a year. So I’m not here to talk about a canned topic, I’m here to basically represent one of the biggest retailers in the United States and what our issues are.

The biggest thing for us is that we move about 70 percent of our products that you buy at Lowe’s through our distribution network supply chain. That supply chain piece adds even more

injury rates than the store does because everybody is driving forklifts and everybody is on power equipment when all the products get shipped. So you think about a 42 billion dollar company and 70 percent of our products coming through 11 distribution centers throughout the United States. It's quite a task. So that's what keeps me up at night, besides the fact that we have 5,000 deliver vehicles on the road. That really keeps me up at night.

The gentleman that talked about state-specific issues, we focus on California, Texas, Florida, New York, and New Jersey when it comes to work comp. Those are the states that cause us the most -- I don't want to say grief here in your hometown of Florida, but Florida is definitely one that is a real problem for us. So we focus on those states. We hold state-specific training every year for our HR and our loss-prevention teams and our store-management teams on how to deal with claims in those five states, and it's very effective for us.

I guess our biggest issue for us is really benchmarking. Our biggest issue with NIOSH and

NORA is to set an agenda to benchmark with other retailers. Everybody kind of measures it all differently. There's a similar study that's done on our loss prevention side by Dr. Hullenger out of the University of Florida. He provides us a retail security study every year that measures shoplifting, internal theft, turnover, management training. He produces this and he's done it for probably the last seven or eight years. We need that same type of measurement tool for the safety side. What dollars are spent for safety, how much money is spent on safety, what other retailers are spending on safety? We're very fortunate at Lowe's to have a board of directors, and a CFO, and a CEO that believes in safety. So when those one million customers come in every week, they're going to leave the same way that they came. Our 175,000 employees are going to go home safe every night. They put forth a lot of money, effort, and time in those practices at Lowe's, and we're very proud of that. We truly believe that safety sets our company apart from our main competitor.

I think many of you, if you think back to your

visits -- and this isn't going to be a soapbox about Lowe's. We have wider aisles. We have brighter aisles. Our customer is focused on the female. All of us guys that go in there to buy are being driven by the female in our lives that told us what we're going to buy. We recognize that at Lowe's. So we have a nice and safe setting for our customers to come in and shop.

When you talk about all of those issues in safety, again, benchmarking is our biggest piece. We saw it on the slides earlier. Back injury, ergonomic issues are a huge problem in retail, especially in big-box retail. It certainly drives our work comp. Our work comp and general liability combined is in the hundreds of millions a year. It's those customers and employees that get injured that concern us the most. I appreciate the time. It's great to be here and to listen to everybody's comments and I appreciate it. Thank you.

DR. SCHULTE: Thank you. Mr. Alvarez?

MR. ALVAREZ: Thank you. I'm from your neighboring State of California. In fact, what

brings me here is about three different projects that I'm involved with. One of things I'd like to share besides working in California for it seems all my life with occupational safety and health -- I started back in '76 with enforcement and now I'm responsible for the onsite consultative program. With respect to retail and wholesale, it's the programmatic effects. The changes that we have seen in California and the tools that we've developed is the focus that I'm bringing in today.

One is the displacement of manufacturing from service industries that have resulted in increases in retail and wholesale establishments. The focus here will be directed to the program and process element of preventing injury and illnesses in workplaces. Over a decade ago, California promulgated the injury and illness prevention program that's known as the IIP Program as a result of state legislation. Whether it's a private entity or a public agency that adopts the injury and illness prevention program or process, the question that I have here and hopefully that will stem some research would be that how can

we effectively measure the programmatic or program process as far as its effectiveness in reducing preventable occupational safety injuries and illnesses?

What I am more interested in is something that's more specific and tied directly into the elements of an injury and illness prevention program or process. NIOSH and the CDC do have the publication, but again I would ask that we continue the research that would be a little bit more definitive.

I would like to request a study that will assess the injury and illness prevention program process through the systematic process of evaluation and developing evaluation tools and that will be specific to consistent factors, which I will go into detail about a little bit later.

Retail/wholesale establishments are experiencing major influxes that are progressive in time with the aging workers, young workers, Hispanic, non-English speaking, low literacy, and immigrant workers, and workers that have two jobs or workers from temp agencies. Increased workers in businesses lead

to increased risks in exposures. From a proactive perspective, model programs have been developed and used throughout several states and include the injury and illness prevention for workplace security that I was part of many years ago. Best practice applications on ergonomic principles -- and we even have an ergonomic program in California.

How do we know which program elements work best? How can these program elements be assessed in fostering our efforts? For example, in the injury and illness prevention program we want to know if the company has a formal safety policy. Do they encourage or disencourage (*) non-performance? Do they promote safety in the workplace? What about the individual responsible? Are they being identified? Who are the competent individuals? Do they have the authority with respect to the assurance of compliance? Are there methods and means to follow through with this? Are employees encouraged to report through communication? In other words, are they given it in the language that’s clearly understood by those that certainly would be affected the

most?

So I think that it's having a systematic approach; one that is consistent and that can be used to cross state boundaries. The research data can be used during the self-evaluation during consultative interventions to demonstrate the elements that work best. In other words, we can go from one industry to another and say okay, these elements are working in the prevention of workplace violence. They're working in ergonomics. They're working in preventing slips and falls. At least we have a data system and a process that will evaluate the effectiveness of the injury and illness prevention program and process. Thank you.

DR. SCHULTE: Thank you. I'd like to invite anyone who would like to come up and say anything that they have on their mind. Yes, sir?

MR. MARINER: I'd like to thank you first for the opportunity and the invitation to come and speak with you folks today. My name is Chris Mariner and I've been a loss control consultant with the FCCI Insurance Group for 12 years.

The FCCI Insurance Group is a multi-line regional commercial insurance carrier. We conduct business in 13 contiguous states, from Florida all the way up to Indiana.

In these states we write just over 43,000 policies. These policies include workers' compensation and general liability coverage among others.

Throughout the nation and the State of Florida, roughly 80 percent of the businesses are classified as small businesses. From an insurance perspective, the clients that we deal with are almost entirely classified as small businesses. Our insurers represent a very broad scope of occupations, including manufacturing, construction, restaurants, and general mercantile-type risks.

While the NIOSH website is an excellent resource for safety and loss prevention professionals, one of the shortcomings that we see is the complexity of some of the information that's on the website, and that's available there for small businesses. Given the size of these businesses, the technical level of expertise is typically low. The

percentage that have personnel directed to safety and loss prevention is also very low. I hate to say it, but the overall ignorance level with regard to the required standards, training programs, and worksite safety tends to be fairly high.

We would like to see development of some sort of a small business compliance section. We feel that that would be very beneficial to our policy holders. In addition to some basic safe work practices, web-based written programs. For example, respiratory-protection programs; a sample template program that perhaps employers or policy holders could go into and make modifications. Lock out/tag out, blood-borne pathogens, hazard communications, and having them be in layman's terms, so that the basic shop with 15 or 30 employees can understand. Web-based training programs to assist employers in meeting the training criteria of these programs. Somebody mentioned ergonomics, we need some sort of an interactive ergonomics section where employers can look at what sort of ramifications ergonomics have. What type of work station setup may be best suited for their

type of work? Anytime an OSHA standard is cited on the site, possibly having a hotlink to that standard, so it takes you directly to the OSHA website would also be very beneficial.

In addition to the aforementioned items, certain trades in Florida have seen a deterioration in their labor pool as a very serious challenge. Statewide unemployment is hovering near 3.3 percent as of the December numbers; with certain areas of the state well under that mark. Sociologists indicate that at any given point in time, 1.8 percent of the population is incapable of working. You can begin to see the dilemma that is presenting itself to employers in this state. Employers are settling for employees that they would not have hired in the past or turning a blind eye to immigration issue so that they can have enough bodies to get their work done. This combined with the looming retirement of the baby boomers and the aging workforce spell real trouble on the horizon for employers here in the state.

Simple and easy to understand programs and training materials in several of the

predominant languages including Spanish would be very beneficial to many of the employers that I represent. Thank you very much and I appreciate the time.

DR. SCHULTE: Thank you. Why don't we take a coffee break and we'll get the last few speakers and then we'll wrap up in the next session. So let's take ten minutes.

(Whereupon, a recess was taken from 2:00 p.m. until 2:15 p.m.)

DR. SCHULTE: Okay. We have a few more speakers and then we should be able to wrap up within this session. So I'd like to reconvene the session. Our next speaker is Mr. Michael Wahl.

MR. WAHL: Good afternoon. We got up at about 5:00 this morning and tried to get here as fast as we could. My name is Michael Wahl. I'm with the Wal-mart Stores, Incorporated in Bentonville, Arkansas. I've got a couple of my colleagues with me, Ryan Stanton and Joe Dial, who are two of our other directors. I manage the southeast area of the country. As you know, Wal-mart's growth is quite popular and it's gotten itself into quite a bit of areas

within the country, and we continue to grow. I manage the southeast, which encompasses Louisiana all the way to Florida and then through to North Carolina.

I guess some of the things that we've been facing this year has to do with our propensity to grow. We have a lot of remodels, a lot of projects, a lot of expansions going on within our company. That in combination with turnover and the retail environment itself causes a lot of concerns for us and how can we maintain or sustain quality talent, new associates, associates that are willing to grow with the company, as well as keeping them safe from accidents.

We also in the retail sector have a concern for our customers as well. Cleanliness is going to be one of our mottos this year. How do we maintain cleanliness standards within our facilities to keep it a safe and healthful shopping experience for our customers? So that's some of the things that we're working on.

When you consider the retail sector, you also look at headline risk. As popular and as

expansive as we are as a company, what is headline risk to us? You look at fires, catastrophic events -- we're constantly in the media. So there's always a lot of eyes watching us on a continual basis. We also have tire lube express facilities, which is typically an oil-change facility, but we also change tires, and that can also lead to a certain catastrophic event.

We also have super centers that include grocery and the quality-assurance issues. With a lot of these undercover-type reporting that goes on we certainly want to maintain our integrity and not allow things to be placed at risk. We've got an aging workforce as many of all of us have. I think that's a concern for us as well. How do we sustain wellness programs? How do we maintain fit and healthy associates knowing that they're more susceptible to soft tissue-type injuries?

We're actually going to be attending a symposium over in the Orlando area in the next couple of days talking about off-the-job accidents. I think that's been somewhat of a concern or a possible issue with associate

injuries within our facilities. How do we identify and understand the complexity of those types of accidents that are contributing to our bottom line? Within retail, I think some of the concerns that we have is how do you measure because you have that customer element. You've got associate man hours, but how do you come up with a simple measurement for the retail sector when customers are as important as our associates in providing a safe place for them to shop as well? So we're starting to look at some different ways of measurement and because we're kind of on a scale of our own in comparison to a lot of our competitors, we're actually looking at frequency of accidents per transaction, which we think will actually take into consideration the man hours worked as well as the customer exposure.

Probably the types of accidents in our stores are probably no different than anybody else. Some of the things that we're working to improve is our inventory flow process. There's a lot of technology that's used in the way we receive and freight merchandise through our stores and then out to the customer. So

there's a lot of work and dedication involved in how we're going to ease that flow. Rather than bring merchandise on the sales floor and then expect it to go back into the back rooms, we're trying to figure out a way that we can just easily flow it through our counters or end-caps on a stack-basis, and then allowing the customers to check it out through the checkout and then exit the store. How you ease that process and reduce the amount of overstock is important to us. So those are just a couple of things that I've been thinking about as we flew in today. Thank you for your attention and if there's anything else we can do just let us know.

DR. SCHULTE: Thank you. NIOSH has had a variety of experiences in the retail sector with convenient stores. We've had some work looking at workplace violence issues. We're moving to learn more about this sector and clearly, as I said one in five people work in this sector and there's a lot of variability in it. We want to develop research that will look into a lot of these different kinds of issues. So we appreciate the kinds of comments that

we've heard today. They've been quite helpful. So we have another speaker, Cameron Brooks.

MR. BROOKS: Hi, I'm Cameron Brooks. I'm a senior at Plant High School. For the past few years I've been working as a summer intern as a contractor at the OSHA Training Institute Education Center at USF. During this time, I was involved in researching and developing training materials for teenage workers. I developed numerous safety and health topics in the OSHA general industry and construction industry regulations. I prepared Power Point presentations that were specifically aimed at the teenage audience. I also ran the USF OTI Education Center 10 and 30 hour OSHA card distribution office during the past summer. What I'd like to see as my perspective as a teenager is I would like to see NIOSH develop a training intervention study to determine the effectiveness of teenage workers retail safety health. I feel that it doesn't target the teenage audience as much as it should. I found that there's a lack of adequate safety health and training materials designed for the teenage workers themselves.

My concern is that the currently available educational material may not adequately address all of the needs of this special and important risk population. Furthermore, teaching a teenager to be safe early in his career will carry over time and create good habits for when he's older.

A training intervention study could evaluate the type of training and information programs for injury prevention in a sample of retail injuries in Florida or another state. The results of the training intervention study could be used to estimate the effects that the various training programs have on reducing workers' compensation claims and on-the-job first aid injuries.

In addition, there can be publication of the best training practices of the retail safety and health training programs in peer-review literature to be made available by NIOSH for distribution throughout the rest of the nation. Thank you.

DR. SCHULTE: Thank you. There are a lot of the workers in the retail sector that are in the 16 to 19 year age range, which is an age

range that has twice the national average in injuries. It's important that we develop programs in that regard. I want to thank again all of the speakers. I'd like to ask Dr. Vern Anderson to come up and give a brief overview. Vern is leading the trade effort and we'll ask him to just give us a brief summary of what we've heard.

SUMMARY: VERN ANDERSON

DR. ANDERSON: Good afternoon. That's a great way to start; sort of an icebreaker. At any rate, that will wake you up, if nothing else. I was really interested in what went on this afternoon. It seemed like we started off with a panel and we had some interesting areas of concern. We talked about things like the predator and how you actually can detect and determine who they were.

We talked a little about computer-related injuries. Then we talked a little bit about indoor air quality. These all hit on very basic issues that are relevant certainly to this sector and to all of the sectors.

In the second and third panel there seemed to be certain trends that I thought were fairly

common and perhaps the most important thing I heard was the emphasis on training; training dealing with safety and health. We certainly want to provide the types of training that can be effective and there is always a concern when you're providing training in measuring the effectiveness of that training. I think that was brought up by a number of the speakers. Also, we talked about metrics. How do you judge whether you're being successful? How do you compare your company to another company? Are we spending more money for workers' comp? What are they doing and how do we compare? I think there's an interest in learning a little bit about the metrics and determine what those metrics would be. What are the best measures of having an effective and safe program?

I think we also touched upon the complexity of the factors that produce occupational injuries and illnesses. One speaker talked about the many multi-factors that contribute to musculoskeletal problems. We talked about psycho-social issues and what we know or don't know in the role that they play. Again, that's been a question that we've been dealing with

for years and we're continuing to work toward the answer.

The small business issue continues to come up. One speaker talked about information on the website and how we could make it a little bit more understandable. There's also a concern with managing change. How you manage change in the workplace. Some workplaces are growing and some are not. The concerns are how do you provide the proper type of training and measurements for a company that's really growing versus one that's stabilized.

There were a number of other issues and I'd be glad to have people speak about any of them.

DR. SCHULTE: Okay. That's very helpful. Thank you. Now, I'll ask Sid or Max to wrap it up for us.

ADJOURN
DR. MAX LUM, NIOSH

DR. LUM: Vern does this every meeting to get everybody's attention. We've got to figure out another way to do this. This drives me crazy, Vern. So we're at the end of the program and this is the point where I produce a plaque and present it to the sponsors, except in my haste to get to the airport in the snowstorm the

plaque is in the back of my car. So we're going to have to do a virtual plaque for the sponsors here on the ground.

We're doing 13 of these around the country. What we heard today is just a snapshot of what the Institute really needs to pay attention to. Some of it we're going to hear in other places. Some we've heard seem like emergencies. I think those whole issue about cleaning agents in hospitals is a big issue. We're hearing in the New England area -- there's a talk show host in New York City that's really heated up this idea of looking at this particular cleaning agent that's used in hospitals. So that was kind of an emergency-thing that we heard here. Some of the issues that we heard are longstanding issues.

I think from a communications point of view, being the communications director at NIOSH, I think that what we're clearly hearing across the town hall meetings is we've got figure out a better way to get our information out the door to target audiences that can use it.

Now, it's not just small business folks who are trying to cope with a whole range of issues.

It's getting it to another level to the targets that we need. Through the ERC Network that we have around the country, it's a way that we can reach out to folks. We greatly appreciate Stu. We can't thank him enough for the amount of support that they provided so that we could do this from a distance to make this meeting happen.

The one last person that I would like to thank is actually my staff member, Ginny Sublett. I know some of you that were here this afternoon had heard from her many times because there was one person who called me and said look, I'm coming already, turn that woman that keeps calling me off. So of course, that is music to my ears as a communication person because it's often the other way, and that is we don't know what you're doing. Nobody told us about the meeting or we would have been there. So we did send out an enormous amount of mail followed by an enormous amount of e-mail. We're sorry if you got more than your share, but we do appreciate it.

Stu, come up here a minute. I wanted to compliment your haberdasher before we left. I

just want to say to you thank you very much. Thank you for your staff. I've known Stu a good 20 years and you always seem to come through and you did again. Thank you again.

DR. SCHULTE: I want to thank NIOSH for really assisting us. Of course, we've had a relationship with NIOSH that goes back to when I was in Cincinnati working there. We had an ERC and health-hazard evaluations and some of the people on the NIOSH staff we trained and researched with. So it's been a real long relationship. I've always found NIOSH to be very supportive. I'm glad we did it here in Florida because there are some unique issues from Florida and that those need to be discussed and implemented. So again, thank you very much. I want to thank the audience for coming and your participation.

DR. LUM: This is the time that I usually give the plaque. So this is a virtual plaque, be careful with it. Again, thank you for coming and thank you for staying.

(Whereupon, the meeting adjourned at 3:00 p.m.)

CERTIFICATE OF COURT REPORTER

STATE OF GEORGIA

COUNTY OF COBB

I, Shane Cox, Certified Court Reporter, do hereby certify that I reported the above and foregoing on the day of February 13, 2006; and it is a true and accurate transcript of the testimony captioned herein.

I further certify that I am neither kin nor counsel to any of the parties herein, nor have any interest in the cause named herein.

WITNESS my hand and official seal this the 15th day of March, 2006.

_____

SHANE COX, CCR

CERTIFIED COURT REPORTER

CERTIFICATE NUMBER: B-2464