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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 College Park, Maryland, on
December 5, 2005.

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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.

-- "*" denotes a spelling based on phonetics, without reference available.

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

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PROCEEDINGS

(9:00 a.m.)

OPENING REMARKS**DIANE PORTER, NIOSH**

MS. PORTER: Good morning, everybody. Thank you for such a great turnout on a day for which there may be some inclement weather, but we'll work together on this.

My name's Diane Porter and I work for and with lots of you here at NIOSH, and I'm excited to be here this morning and kick off the first town hall meeting for the National Occupational Research Agenda, NORA, as you all know it's come to be known. This is the first in a series of 11 town hall meetings across the country that we're holding over the next three months, in cooperation and co-sponsorship with several of our local partners -- today, Johns Hopkins and -- University and Harvard -- leading up to the NORA symposium in April on April 18th, 2006 in Washington, D.C.

We're particularly pleased that all of you are here to join us today, and we look forward to your comments, suggestions and guidance. Your support will help shape the next decade of NORA.

1 The groundwork for NORA was laid some ten years
2 ago in town hall meetings like this, and NIOSH
3 and others realized that the needs of the
4 occupational safety and health research were
5 too big for any one organization or agency to
6 address by itself. A national framework was
7 essential for identifying the priority needs of
8 occupational safety and health, designing
9 programs and projects to meet those needs and
10 building a network of partnerships.
11 Through town hall meetings in early 1996 we
12 heard directly from our stakeholders. They
13 spoke eloquently about the issues that mattered
14 most to them, and that input was instrumental
15 in shaping the first decade of the research
16 agenda.
17 They also helped us to reach out to additional
18 partners. In all more than 500 diverse
19 organizations and individuals participated in
20 the original introduction of NORA, and we
21 appreciate their help, your help, in matching
22 or exceeding that level of grass root support
23 for this next decade.
24 Based on the input from the 1996 town hall
25 meetings and other interactions, the first

1 decade of NORA was built around 21 priority
2 research areas. These were the areas in which
3 NORA partners generally agreed that new
4 research would go the furthest towards reducing
5 the toll of work-related injuries and
6 illnesses.

7 We can point to real successes from NORA that
8 have made U.S. businesses safer and stronger in
9 the field of transportation. For example, NORA
10 provided the template for a diverse partnership
11 that developed and tested new designs for
12 reducing highway paving workers' exposure to
13 hot mix asphalt fumes. Joining forces, the
14 partners came up with innovations that reduced
15 exposures by as much as 80 percent.

16 As an example from the NORA priority area of
17 traumatic injuries, employee back injuries in a
18 national nursing home chain were significantly
19 reduced as a result of the NORA collaboration
20 involving employers, employees, NIOSH and
21 others. The partnership reduced the frequency
22 of back injuries by 57 percent, with a 71
23 percent decrease in Workers Compensation
24 expenses.

25 We can also point to other successes in

1 advancing research to prevent motor vehicle
2 fatalities, terrorism-related dangers, latex
3 allergies, needle stick injuries, workplace
4 homicides and many other hazards. From the
5 outset we and our partners were confident that
6 NORA would lead to such successes.

7 Also at the outset we and our partners also
8 agreed that we would reassess NORA at the end
9 of the first decade. We anticipated correctly
10 the new needs and challenges were bound to
11 occur in this ever-changing workplace. And as
12 U.S. industry entered the 21st century, to stay
13 robust NORA would have to keep pace with those
14 changes.

15 This past year, year nine of NORA, was devoted
16 to reassessment of the pledges that we made in
17 1996. From that reassessment emerged a sector-
18 based approach that evolved from the original
19 design. You will hear more about that soon.
20 And for now I'd like to introduce Dr. Jackie
21 Agnew of the Johns Hopkins ERC, a co-sponsor of
22 this meeting.

23 **JACKIE AGNEW, JOHNS HOPKINS**

24 **DR. AGNEW:** Thank you, Diane. It is a pleasure
25 to be here, and it's an honor for our region to

1 be the first to do the kickoff for this series
2 of town hall meetings -- at least I think it's
3 an honor. It was pretty short-term.

4 I've been given five minutes to speak, thanks
5 to Max Lum, and I think one of the reasons is
6 he wants me to have an appreciation for the
7 very short time we'll be allotting to each
8 presenter this morning. And I think he also
9 wants me to have some empathy for everyone when
10 I am the one forced to get out the hook and
11 pull people away from the mike.

12 So welcome to Region 3. We span Pennsylvania,
13 Delaware, Maryland, West Virginia, Virginia and
14 the District of Columbia. Region 3 is the home
15 of watermen, crab pickers, farmers, workers at
16 all levels of the poultry industry, as well as
17 raising other livestock. We're the home of
18 coal miners, construction workers, health care
19 workers and office workers -- lots of office
20 workers, thanks to the density of service
21 agencies here, and also federal agencies,
22 including the Office of the Director of NIOSH
23 where, as far as I can tell, everyone's an
24 office worker. And we're also home to many of
25 the long-recognized, traditional hazards that

1 we see in construction and in mining, and in
2 all of the other sectors represented in our
3 region.

4 However, I envision that we may become home to
5 yet new health hazards to workers, new and yet
6 poorly-understood, that are related to new
7 technologies, new ways that we're doing
8 business, and possibly to some scary events
9 that might be coming down the pike. For
10 example, we're yet to unravel the mysteries of
11 nanotechnologies' adverse -- adverse effects to
12 human health. We're looking at the positive
13 effects and benefits, but we've yet to know
14 about adverse effects that workers may
15 experience.

16 We're dealing with emerging issues such as
17 multi-drug resistant bacterial in confined
18 animal feeding operations, CAFOs. You'll be
19 hearing more about that from one of our
20 presenters.

21 Health care workers who've long been concerned
22 about well-recognized hazards related to their
23 chemical, biological, physical and psycho-
24 social hazards in the workplace are now worried
25 about the fact that they may have to deal with

1 epidemics of newly-emerging infectious
2 diseases, like SARS, possibly avian flu. And
3 health care workers are also concerned that
4 they may be faced with dealing with biological
5 and chemical hazards if terrorists choose to
6 use them as weapons.

7 Now these types of issues are not necessarily
8 exclusive to our region, and some of the issues
9 related to worker health and safety cross all
10 different sectors. And certainly all issues
11 are not relevant to any one sector. For
12 example, stress and long hours -- long working
13 hours and violence actually span a number of
14 different sectors, although may be more
15 prevalent in some than in others.

16 The same holds true for issues that are
17 relevant to some of the vulnerable sub-groups
18 of our very diverse working population -- aging
19 workers, young workers, minorities, immigrant
20 workers, disabled workers and so on.

21 When NORA was in single digits, NIOSH very
22 successfully demonstrated the achievements that
23 can be brought about when partners get together
24 who have an interest in worker health and
25 safety. Resources have been leveraged. Other

1 funding agencies have been convinced of the
2 importance of joining forces to promote
3 research for worker health and safety. And
4 those teams produced some amazing results with
5 regard to the products and the programs and the
6 projects that came about as a result of these
7 partnerships. So the key here is partnering.
8 Wouldn't it be great if the organizations, the
9 workers and the representatives of those
10 workers that I mentioned above could actually
11 get together with NIOSH to partner to deal with
12 some of these issues for new NORA as she moves
13 -- she, we've personified NORA I think as a
14 female -- as she moves into the double digits.
15 So we all know that in order to bring research
16 to practice, it's going to take a host of
17 players. Hopefully everyone in this room will
18 be willing to be such a player. And to get the
19 process started, today we're going to try to
20 define the A in NORA. So we're here to talk
21 about the priorities and to get on the top of
22 the list the points and the issues and the
23 research topics that you feel are of greatest
24 importance in this region and throughout the
25 country.

1 The topics look incredibly interesting today.
2 I'm anxious to hear the expansion by each of
3 the presenters. And we know, finally, that
4 these town halls work. We can point to issues
5 that were included on the 21 top priority list
6 of the single-digit NORA, and some of those
7 came out of the town hall meetings that were
8 held in preparation for that.

9 So with that, I think I would like to turn this
10 mike over to Dr. Jack Dennerlein, who is my
11 neighbor from the north, from Harvard School of
12 Public Health. We have a lot of
13 Harvard/Hopkins jokes that I'll skip here, but
14 I have to say that this is in the spirit of
15 partnership that we're doing this. Thanks.

16 **JACK DENNERLEIN, HARVARD**

17 **DR. DENNERLEIN:** Good morning. I'd like to
18 reiterate the honor that it is to be here and
19 to host the first town hall meeting. The --
20 when I think about occupational health at
21 Harvard, and I'll show you a picture of Alice
22 Hamilton in a few moments, really thinking
23 about a lot of the pioneering research in this
24 area was started over a decade -- a century ago
25 by Dr. Hamilton, who was the first woman

1 faculty at the -- at Harvard University about a
2 century ago. And so I'd like to pay tribute to
3 that honor and that recognition and that
4 history that we have at Harvard in terms -- in
5 terms of being -- being a leader in
6 occupational health and safety research in the
7 country.

8 Why is NORA important? That's the topic that
9 I'm here to introduce this morning. And I
10 actually decided to put this up against -- the
11 question up against a blue sky, because for me
12 NORA has been around ever since I've been doing
13 research in occupational safety and health,
14 which has been about ten years, and so I've
15 never really known life without NORA. And --
16 and so I thought about it because it's like why
17 is the sky blue? It's the same sort of
18 question in terms of my mind because it's
19 always been here.

20 But the fact is, it hasn't. And it plays a
21 really important role, so I had to sit down and
22 think about it. And you know, I'm probably
23 preaching to the choir here, but the data
24 speaks for itself. I mean every day there are
25 16 people who go to work and don't come home.

1 And I think that really pays tribute to -- to
2 what we're talking about here. But that's only
3 the tip of the iceberg. You know, for every
4 major -- major incident, there's many, many
5 minor injuries or incidents that -- that are
6 below the tip of the iceberg. So I think this
7 is where -- you know, where we teach people to
8 be doing our prevention, that's where really
9 one of the ideas around NORA.

10 But the other thing I want to talk about is the
11 cost. These are old numbers from 1992, but
12 this is from a paper from Dr. Lee out on the
13 west coast in the Bay area that looked at the
14 cost of occupational injury and illness in the
15 United States. And he came up with, if you
16 just look at medical care, the cost is around
17 \$65 billion per year in 1992. But when you
18 start looking at loss of productivity, loss --
19 you know, the cost of replacing workers and all
20 those indirect costs, the estimate is that that
21 -- is almost twice that, about \$106 billion per
22 year. And that's low numbers because there's
23 other things that we're not talking about here
24 -- pain and suffering inflicted on the family,
25 other family members who have to take time off

1 from work to help an injured worker or sick
2 worker recover from their illness and stuff.
3 So these are low, conservative numbers. But
4 it's approximately \$171 billion dollars in
5 1992. And when you compare that to other
6 illnesses in the United States at that time, it
7 actually is at the top of the list with cancer
8 and, you know, it outpasses AIDS and
9 Alzheimer's Disease in terms of annual cost to
10 the United States economy.
11 But unfortunately, the amount of resources that
12 go into this type of research is much less than
13 that. It's a disproportionate amount less than
14 -- than the amount of money we spend on cancer
15 and other types of research in the United
16 States. And this is what Dr. Lee concluded.
17 He said the cost of occupational injuries and
18 illnesses are high, in sharp contrast to the
19 limited public attention and societal resources
20 devoted to their prevention and amelioration.
21 Occupational injuries and illnesses are an
22 insufficiently-appreciated contributor to the
23 total burden of health care costs in the United
24 States.
25 So that's the ans-- one of the answers I have

1 to why is NORA important, why is the sky blue,
2 and I think it's -- it's -- it pays really good
3 tribute to -- to why NORA is so important, when
4 the problem is so huge, how do we set
5 priorities. And I think that's the key thing
6 in terms of this is what is our agenda, because
7 there's so much work to be done, so much work
8 that needs to get done, and so many problems to
9 solve.

10 So I just wanted to sum up a little bit about
11 how NORA has helped us in New England. I'm
12 from Harvard, represents the New England states
13 -- Maine, New Hampshire, Vermont,
14 Massachusetts, Rhode Island and Connecticut.
15 Here's a picture of Alice Hamilton and a bunch
16 of our students this year, a little summary of
17 what we are at Harvard in terms of the
18 partnership that we have between researchers,
19 and also with -- with corporations in the area.
20 And some projects that have been supported by
21 NORA in the past decade include exposure
22 assessment measurements of musculoskeletal
23 disorders in the office work -- work --
24 workplace looking at hearing loss and -- and
25 effects of solvents on farm use in Vermont;

1 looking at injury prevention in lobstermen --
2 there was a whole CDC/NIOSH document that came
3 out about tricks of the trade to help reduce
4 lobstermen from getting tang-- entangled with
5 their lines as they throw them overboard;
6 looking at asphalt workers, again in
7 partnership that Dr. Agnew talked about in
8 terms of the exposures. These pictures really
9 highlight the exposures of these workers to --
10 to fumes in asphalt products. Injuries in bike
11 messengers, one of my pet projects where I got
12 to ride around Boston on my bike for a few days
13 and really get out inside -- into the -- into
14 the culture and understand what are the risks,
15 and these are just basically working people.
16 You know, often -- I think our jobs are often
17 to -- to also bridge the gap between the
18 workers and the public in terms of what the
19 worker is like in these populations. And
20 finally, a project that's looking at -- that --
21 that really kicks off sort of today's --
22 today's sector in terms of transportation
23 warehouse sector, and that is looking at
24 combustion products associated with the
25 transport business. This is mainly diesel

1 products where we're looking at the -- the
2 particles and the air -- air quality that these
3 workers are exposed to and developing methods
4 to really understand this. And this is a nice
5 project with partnerships between a land-owner,
6 the -- the -- the trucking facilities, the
7 truckers themselves and the environment and the
8 communities around the trucker plants --
9 trucker things.

10 And so with that, I want to welcome you guys to
11 our next decade of a nice blue sky. So -- and
12 -- let me turn it over to you.

13 **INTRODUCTION TO RESEARCH AGENDA PROCESS**

14 **SID SODERHOLM, NIOSH**

15 **DR. SODERHOLM:** Okay. Well, my name is Sid
16 Soderholm. And just for a little change of
17 pace I'll wander around a little bit instead of
18 standing at the podium.

19 I'm going to deal a little more with the nuts
20 and bolts. My role in NIOSH is to be NORA
21 coordinator, so I will be the person on the
22 other end of that mailbox. If you have a
23 question, want to follow up on your comments,
24 wonder what's happening with them or want to --
25 want to add some pictures or something, if you

1 send information to the NORA coordinator
2 mailbox, then I'll be there. And if -- I have
3 cards on the back table. Feel free to pick one
4 up and contact me directly if -- if you have
5 any -- any issues that you want to follow up on
6 or may in the future.

7 So some of the nuts and bolts, we -- some of
8 our partners did invite us -- the Honorable Mr.
9 Hoyer today and -- but he wasn't able to make
10 it, busy working on the business of government,
11 I'm sure, so we'll just move forward with our
12 program and try to get started -- get going
13 early here this morning because we have a lot
14 of people that we want to -- want to hear from.
15 In case you haven't found them, the restrooms
16 are just to the left and across the hall in an
17 alcove over there. And if it isn't obvious, we
18 are preparing a transcript, so this session is
19 being recorded. Photos are being taken and as
20 you signed in, the -- you agreed to both of
21 those, so if that's a problem please talk to
22 people out at the front table and -- and we'll
23 see if anything can be done to -- to make a
24 win/win situation out of that.

25 So let me -- we -- we've mentioned a couple of

1 times now that this -- today we're focusing on
2 the transportation and warehousing and
3 utilities sector. That's specifically this
4 afternoon's session and we hope you'll all be
5 able to stay and brave the snow, if it really
6 gets here, and -- and participate in that.
7 This morning we're open to all kinds of issues
8 and so there are no -- no, you know, requests
9 to -- to limit to any particular topics.
10 This has already been covered quite well by
11 people, so let me kind of move through this
12 quickly. We've heard a lot about partnerships
13 and setting priorities, and that's what NORA's
14 about. The original NORA vision -- stakeholder
15 input, identify priorities, work together, try
16 to increase the funds that are available for
17 this -- for this important work, and that
18 hasn't changed. The second decade of NORA
19 still has that same vision.
20 What is an additional focus of the second
21 decade of NORA is the -- how do we move
22 research to practice? And in talking to
23 stakeholders early on, the answer seems to --
24 the best answer we could come up with is to
25 move more toward sector-based partnerships.

1 And the idea is to look at the most important
2 issues that come up in -- in -- by sector, and
3 have a research strategy. Not just an agenda
4 that's very general, but an actual strategy of
5 what are the critical steps to making a
6 difference in that -- in each of those
7 problems.

8 And as Dr. Agnew already pointed out, the
9 cross-sector issues are still there. The
10 issues -- most issues go across sectors, so
11 we're not losing track of that, but the --
12 we're approaching the research that needs to be
13 done, trying to pull in the sector partners
14 even more by -- by focusing on their issues.
15 And the research -- the work that needs to be
16 done is going to go across many sectors. And
17 in fact there will be opportunities, we
18 suspect, for highlighting particular high
19 priority cross-sector issues that cross so many
20 sectors they will take on an importance of
21 their own.

22 So why sector-based? Well, the bottom line is,
23 bring in the partners. Workplaces organize by
24 sectors. The research needs are often
25 different by sectors. It gives us focus and we

1 think this is going to be an efficient way to -
2 - to set our priorities, work on our priorities
3 and make a difference in the nation.
4 So the structure that's being set up has to do
5 -- will involve eight NORA research councils.
6 So we keep talking about sectors. If you go to
7 the web site, these are actually defined in
8 terms of the North American Industry
9 Classification System, the system the Census
10 Bureau has put together, and is -- is actually
11 the same in Canada and Mexico. So you see
12 briefly the eight sectors. Today we're
13 focusing on -- this afternoon --
14 transportation, warehousing and utilities. And
15 there will be a cross-- so there will be a
16 research council in each of these sectors where
17 -- the research councils will consist of
18 occupational safety and health specialists in
19 that sector, researchers, academics, government
20 people, some NIOSH people -- so these -- and
21 like -- if you're familiar with the 21 NORA
22 teams that were set up ten years ago, each of
23 these councils will be co-led by someone inside
24 NIOSH and by a stakeholder representative --
25 will be someone from outside of NIOSH. So the

1 partnership idea permeates all of -- all of
2 NORA.

3 So we'll have the eight sector research
4 councils. They will each come up with -- by
5 taking -- by taking your input, by using their
6 own expertise, and of course being driven by
7 the data, they will go -- they will each go
8 through a priority-setting process and come up
9 with a draft research strategy that will be put
10 on the internet, will be open for comment, and
11 then will be renewed periodically over the
12 decade. And besides just setting up a
13 strategy, their charge is going to be to engage
14 the partners to actually bring people together
15 to work on these high priority issues. Some
16 things NIOSH may be in the best position to do
17 the research. In many other situations NIOSH
18 will need to partner with others or research
19 will be done and the best people to do it will
20 -- won't include NIOSH at all. That's all part
21 of NORA.

22 So this is a broad outline of what's going to
23 happen, of -- of why the stakeholder input is
24 important. The stakeholder input can come in
25 through the web site, and if you have

1 additional comments or want to modify your
2 comments or anything like that, feel free to --
3 to go to the NORA web site. I'll highlight
4 that in a minute. It's on the back of my card
5 if you want to pick one up. And so the
6 stakeholder input will come in through the NORA
7 web site. If you want to include pictures and
8 tables and other things, then you can't put it
9 in through the web site. You can e-mail it to
10 the NORA docket directly. Everything that is
11 said today and is caught -- will be caught in
12 the transcript and will be then parsed and put
13 onto the web site so other people can see it.
14 If you've gone to the web site you see there's
15 a place to view comments by others, so you can
16 see what others have been saying. And within
17 two or three weeks you should see a version of
18 your comments up there. And they'll also be
19 given to the -- directly to the docket.
20 Now our intention is, and if you have any, you
21 know, particular strong feelings about this,
22 you know, leave a note at the front desk and
23 we'll try to take care of it. Our intention is
24 not to put attribution -- names and
25 affiliations -- with the comments that go on

1 the web site. I don't know about you, but
2 every time my name gets on the web site I get
3 another -- get on a whole bunch of new lists.
4 But -- and some of them are quite interesting.
5 But when -- when the information is submitted
6 to the docket, we will put your name and your
7 affiliation.

8 Now if you -- if you want your -- your
9 information to go to the docket, you know,
10 anonymously as far as that written version,
11 then either say so in -- as you stand up and
12 speak, or leave a note at the front desk and --
13 and we'll -- we'll try to do that. So NORA
14 accepts anonymous input as well as attributed
15 input.

16 So I just went over through most -- went
17 through most of that. The purpose of the
18 docket, the individual comments will be given
19 to the research councils. We will organize it
20 somewhat. We will -- will try to categorize it
21 so they can be looking at comments relating to
22 MSDs in their sector and not have it all mixed
23 in with, you know, stress-related comments, for
24 example. But they will see your individual
25 comments. They're not going to just see a

1 summary. And part of their charge is going to
2 be to -- to look through that information and
3 to take that into account as they move forward.
4 And the input in the docket will also be
5 outlined -- this obviously will be in a summary
6 form -- will be outlined for the NORA
7 symposium. And please consider attending the
8 symposium. Again, that's on the web site.
9 I'll give you that. Let's see, the main NORA
10 web site is listed here where you can put in
11 comments. Also you can get to the symposium.
12 And if -- and there's information there about
13 our plans for the second decade of NORA.
14 So with that, let me make a couple of more
15 comments. Ah, let me go into this. When --
16 when we say we're looking for information on
17 the top problems, we're -- that's -- we're
18 trying to take a very broad view of that --
19 might be diseases and injuries or exposures or
20 populations at risk, or -- or failures of the
21 occupational safety and health systems. So
22 whatever issue you feel is important issue is -
23 - is what we want to hear about.
24 If you have information about who the key
25 partners will be, what kinds of research or new

1 information will make a difference, then please
2 -- please include that information, too. We're
3 looking for brief presentations, and we're not
4 interested in debates. We're here to hear
5 everybody. So please, if you hear something
6 that -- that sparks a response, hopefully we'll
7 have time and we can -- we can, you know, open
8 the floor, come up and give your opinion. It
9 may be similar, it may support what someone
10 else has said, it may be different, but you
11 know, let's hear it as our opinions as opposed
12 to, you know, criticizing what somebody else
13 said. That's what we're here for because our
14 intention is to put everything on -- into the
15 docket as someone's input, someone's opinion.
16 So criticism doesn't quite fit that.
17 So some final thoughts. To keep track of
18 what's going on in NORA, a really good way to
19 do that is to subscribe to the NIOSH e-news, to
20 -- e-mail that comes to your mailbox once a
21 month with headlines. You can easily scan it
22 and see what's of interest, just read a -- you
23 know, a couple of hundred words about what's
24 happening in NIOSH in each of these -- each of
25 these areas. And we'll have information about

1 NORA each month in there.
2 You can provide additional input on the web
3 site, and if you have any questions you can
4 contact me either directly -- my e-mail address
5 is on the card -- or through the NORA
6 coordinator mailbox.

7 So with that, I will ask if there are any
8 questions about what we're going to be doing,
9 and then I'll turn it over to Dr. Agnew to
10 moderate our first session, and I think we're
11 getting started a little early, which is what
12 we wanted to do. So are there any questions
13 about how this is going to work today and what
14 we're after?

15 (No responses)

16 Okay. Well, thank you -- and we didn't
17 schedule it on paper, but Dr. Agnew does have
18 in mind that we're going to need a break
19 sometime between now and 12:15, so I'll assure
20 you of that.

21 **REGIONAL AND LOCAL STAKEHOLDER PRESENTATIONS**

22 **MODERATOR: JACKIE AGNEW**

23 **DR. AGNEW:** Okay. I thought it would be
24 reasonable to provide one break this morning.
25 As you can see, we're off to what they call a

1 high speed/low drag pace this morning, and
2 we've got quite a few people with a few more
3 sneaked in at the last minute, so I'm not going
4 to belabor things.

5 Our first presenter is going to be Dr.
6 Dennerlein, who will deliver some comments
7 about a very intriguing comment -- topic of an
8 unexpected source of PCB exposure, so I can't
9 wait to hear what that is.

10 **DR. DENNERLEIN:** So good morning again.
11 Actually now I'm representing another faculty
12 member at the School of Public Health at
13 Harvard, that's Robert Herrick, and he's asked
14 me to present to you and present to NORA in
15 terms of -- in terms of the town hall meeting
16 today an unrecognized source of PCB exposure in
17 the workplace.

18 We know PCBs are a set of persistent organic
19 chemicals, and there's clear evidence that PCBs
20 cause cancer in animals and they're considered
21 a probable human carcinogen (sic), according to
22 the United States Environmental Protection Act.
23 The human and animal data provides evidence
24 that PCBs have significant toxic effects on
25 immune system, the reproductive system, the

1 nervous system and the endocrine system. So --
2 so it -- we know of -- about its health effects
3 for a long, long time.

4 But the four points I want to make today is
5 construction materials to this day contain PCBs
6 in substantial quantities. These PCBs can
7 contaminate buildings and the surrounding soil.
8 And occupants of these buildings can have
9 elevated serum PCB levels. Removal of these
10 materials in construction can -- can cause
11 widespread contamination and worker exposure.
12 This is based on a couple of studies that have
13 taken place in Europe, primarily in German,
14 Sweden and Finland. And they've demonstrated
15 relationships between PCBs in sealants, mainly
16 caulking, and levels of indoor air and settled
17 dust, as well as in the soil around the
18 foundation of buildings containing these
19 materials.

20 Now one source that's really hidden and it's
21 probably in -- even in our own homes. I have
22 an old 19th century home that I've been
23 rehabbing and every time that you're peeling
24 off the caulking, that caulking actually
25 contains PCBs, and often it just drops into the

1 soil next to it. And this caulking is used
2 mainly when there's dissimilar materials, like
3 brick next to concrete, or metal window
4 framings and the like, and it often after time
5 wears off and just falls into -- to the soil.
6 And often there's workers that need to remove
7 these materials -- or homeowners -- so there's
8 tons of exposure to -- to workers involved in
9 the removal of these sealants and the Finnish -
10 - there was a Finnish study that looked at
11 this. Mainly the grinding of old seams of --
12 of buildings, we've seen that a lot, exposes
13 workers to high concentrations of PCB-
14 containing -- contained in the dust of the --
15 of the grind material from -- from these
16 sealants.
17 So they've done some bio-mark-- they've looked
18 at serum levels of PCBs in these workers and
19 find that they're about four times larger than
20 a reference group and way above the recommended
21 levels for PCBs.
22 This plays also a role in our schools and in
23 our communities. One thing is -- is, you know,
24 often in schools the -- the ground around the
25 buildings are contaminated, and what we do know

1 is there's also been measurements in these --
2 in these Finnish studies about the PCB levels
3 next to the building. And you can see sort of
4 an exponential decay as you move away from the
5 building, and what we see is that you almost
6 have to be almost two meters away, almost six
7 feet away from the building before the PCBs in
8 the soil are -- are below the federal
9 guidelines for PCB materials.

10 So -- and this has been demonstrated in the
11 United States, as well. There was 13 buildings
12 out of 24 where the caulking had detectable
13 levels of PCBs. Of these, eight buildings
14 contained caulking that exceeded the 50 parts
15 per million EPA criteria, in some cases by a
16 factor of nearly 1,000 times the recommended
17 level. And so these levels of PCBs in these
18 materials are quite high.

19 I want to conclude with a story of a school in
20 Westchester County, New York -- which is in
21 between our two districts. And this was
22 published in the *New York Times*. There was a
23 school in Yorktown Heights. In what state
24 health officials can call the first clean-up of
25 its kind in the state, a school district in

1 Westchester County is planning to remove soil
2 next to the elementary school in Yorktown
3 Heights because the soil is contaminated by
4 PCBs from caulking in the school's windows.
5 Dr. Daniel Lefkowicz* requested tests on scraps
6 of caulk left after maintenance at French Hill
7 Elementary School where his son Evan is a
8 student. Tests found that PCBs at 350 times
9 above the federal limit. So this is definitely
10 an unrecognized source.

11 So let me in conclusion say that while EP
12 regulations specify procedures by which PCB-
13 containing materials must be handled and
14 disposed, there is no requirement that material
15 such as caulking must be analyzed for PCB
16 content.

17 And finally, workers are removing PCBs with no
18 precautions taken to protect themselves or to
19 prevent environmental contamination.

20 And so with that, I want to thank you.

21 **DR. AGNEW:** Thanks, Jack. Good example of an
22 upcoming issue to deal with in terms of
23 research.

24 I failed to say, to those of you who are going
25 to present, what one of our routines will be

1 here, and that is that we have, sitting towards
2 the front, Ann of NIOSH who is going to give
3 the four-minute warning -- the one-minute
4 warning actually; four minutes will be gone at
5 that point -- and then she'll be doing this
6 (indicating) for the five-minute -- you've hit
7 your limit sign. And then I guess it'll be up
8 to me to enforce it.

9 So let us see, if we don't have presenters here
10 now, we will go back to them on the list. I
11 don't know if Kenneth Meade is here, and I
12 don't see Kenneth Meade jumping up, so I can
13 pretty well be certain that our University of
14 Maryland colleagues are not here, which brings
15 us to Dave Madaras -- yes, from Chesapeake
16 Regional Safety Council. Dave, the floor is
17 yours.

18 **MR. MADARAS:** It's always fun being first.

19 **DR. AGNEW:** Especially when you don't know
20 you're going to be first.

21 **UNIDENTIFIED:** (Off microphone)

22 (Unintelligible)

23 **DR. AGNEW:** You're next.

24 **MR. MADARAS:** My name's Dave Madaras. I'm the
25 President of the Chesapeake Region Safety

1 Council, which is a local chapter of the
2 National Safety Council. I'm a certified
3 safety professional. I've spent most of my
4 professional career in the construction
5 industry. I've worked as a field laborer,
6 carpenter, estimator, assistant project
7 manager, corporate safety director and risk
8 management specialist. My safety concerns
9 result from more than 20 years of involvement
10 in the industry. The construction industry
11 employs approximately five percent of the
12 working population, and it's consistently
13 responsible for about 20 percent of the
14 workplace fatalities.

15 On February 6th, 1995 OSHA's fall protection
16 standard became effective. The Agency
17 estimated the rule would prevent about 79
18 fatalities, 56,400 injuries annually. In 1992
19 the construction industry accounted for 275
20 deaths from falls. In 1997 falls accounted for
21 380 deaths. In 2001 over 400 deaths. Why is
22 the number increasing? Is the standard flawed?
23 Why do accidents occur? Some of the common
24 contributing causes as to why accidents happen
25 are mistakes, absent-minded, risk-taking,

1 fatigue, lack of concentration, didn't follow
2 procedure, misjudged, over-exertion, shortcut,
3 jury-rigged, careless attitude, et cetera.
4 Now the following is a list of the -- following
5 is a list of effects of marijuana: Impaired
6 brain function, relaxed inhibitions, confusion,
7 fantasizing, memory loss, dulled attention,
8 altered senses, exhaustion, disorientation,
9 recklessness, poor judgment, loss of depth
10 perception, lowered motivation and impaired
11 coordination.
12 The Substance Abuse and Mental Health Services
13 Administration conducted a survey of
14 construction workers from the ages of 18 to 49.
15 Twelve percent admitted illicit drug use in the
16 last 30 days; 21 percent in the last year; 13
17 percent admitted to heavy alcohol use.
18 Construction industry has the highest combined
19 total of drug and heavy alcohol use, 15.6
20 percent for drugs, 17.6 percent for heavy
21 alcohol. Most construction companies are small
22 businesses. Small and medium businesses are
23 where most substance abusers work.
24 Why have falls from elevations increased after
25 the adoption of a new standard? Is there a

1 strong correlation between substance abuse in
2 construction and the industry's high fatality
3 rate? Are falls from elevations the number one
4 hazard in construction, or is it substance
5 abuse? What's the best way to deal with the
6 problem of substance abuse in the construction
7 industry? What have private companies done to
8 address the problem? What are some best
9 practices? And is there hard data to support
10 the best practice? What is organized labor
11 doing about substance abuse with construction
12 trades? How are the workers responding? Do
13 they have best practices supported by data
14 showing that they were successful with some of
15 their -- their activities?

16 Just one brief comment. As a working -- during
17 my period of time as a corporate safety
18 director, sometimes one of the biggest
19 challenges that I was faced with was conveying
20 information to people, having them think it
21 through and then apply it into the field. And
22 a lot of times you look at what they do and you
23 think why in the heck are they doing it that
24 way? Would a logical person think through this
25 and come up with the same conclusion? I can

1 tell you from my experience, the substance
2 abuse problem is enormous in the industry.
3 I heard a doctor one time talk about the
4 workers who perform heavy labor, and he
5 described them as industrial athletes.
6 Industrial athletes that stay involved in an
7 activity for a lengthy period of time, if they
8 abuse their bodies with substances, will
9 eventually break down.

10 So those are my comments. I appreciate your
11 time, and thank you.

12 **DR. AGNEW:** Thanks, Dave. All right. Well,
13 we'll move along to Kathy Kirkland of the
14 Association of Occupational and Environmental
15 Clinics, AOEC.

16 **MS. KIRKLAND:** Good morning. My name's
17 Katherine Kirkland. I'm with the Association
18 of Occupational and Environmental Clinics. We
19 deal a lot with health professional education,
20 outreach, education to primary care physicians.
21 And so one of the primary concerns that I am
22 involved with is training of occupational
23 safety and health professionals. And what has
24 happened -- you know, we've got a couple of
25 different models. We're -- we're still sort of

1 looking at the traditional model of training.
2 People are making some innovations, but right
3 now I'm the executive secretary of another
4 NIOSH group. It's a working group looking at
5 the current NIOSH training programs and how
6 they're functioning, what changes need to be
7 done. I can't tell you what the conclusions
8 are because we've had two meetings and haven't
9 come up with a whole lot of answers yet, but a
10 lot of questions.

11 One of the things that I think we need to do is
12 to look at some new and innovative ideas and to
13 get input from everyone who's currently working
14 in the field. There's on-line case studies.
15 There's some really great work being done in
16 Europe by the University of Munich and the
17 European Union looking at on-line training and
18 how it can work with lower income developing
19 nations who don't have the resources to put
20 together a training program like our education
21 and research training. Looking at distance*
22 learning, we've all been looking at that. I
23 don't think there's a single group of educators
24 in the country, regardless of what their
25 training program is, that aren't looking at

1 distance learning.

2 But we need more. We need each sector that is
3 part of this NORA training group to kind of
4 look at what they're looking at and say okay,
5 what are our training needs? What -- what sort
6 of occupational safety and health professionals
7 do we need to carry out the work that we are
8 doing? We're looking at all these different
9 fatalities, we're looking at injuries, we're
10 looking at prevention. What are our training
11 needs? What sort of people do we need coming
12 through? And I'm looking at -- you know,
13 what's working? You know, we've got a lot of
14 people coming through at various professions,
15 but are they trained the way they need to be
16 trained when they hit our field, when they hit
17 your particular group? You know, are you
18 getting what you need to out of the training
19 that's currently existing?

20 And I'm talking about all the training needs.
21 I'm talking about the occupational physicians,
22 the nurses, the industrial hygienists, the
23 safety professionals, the psychologists,
24 everybody. Are there fields that we should be
25 training that we're not training?

1 So I'm not up here to give you any answers.
2 I'm up here to ask questions. And I think that
3 in order to do this we need input from all the
4 NIOSH stakeholders. We need all of you to be
5 thinking about, you know, what are your needs,
6 and give them both to the NORA -- and at this
7 point, you know, I'm perfectly willing to take
8 questions and comments about what -- what you
9 think are needed so I can take it back to the
10 occupational working group.

11 And I'm real simple to reach if you have any
12 ideas for me, as well as for NORA. My e-mail
13 is kkirkland@aoec.org, or just send them to the
14 NIOSH -- you know, to John Howard's e-mail
15 address. I'm sure he'll send them on to me.
16 Thank you.

17 **DR. AGNEW:** Thank you, Kathy. Jeff, I don't
18 see your co-presenters. Am I right?

19 **UNIDENTIFIED:** (Off microphone) We're still
20 waiting for (unintelligible).

21 **DR. AGNEW:** Why don't we wait then. Okay?
22 Martina? I'd like to introduce Martina
23 Lavrisha, who is a nurse and mental health
24 professional. Martina's going to address
25 mental health issues at work.

1 **MS. LAVRISHA:** Thank you. Good morning. I
2 appreciate this opportunity to describe the
3 need for ongoing research regarding mental
4 health issues in the workplace. As a mental
5 health professional I've heard numerous
6 complaints from individuals about the impact of
7 stress on their ability to function and
8 aggravating their underlying disease.
9 In preparing for today I spoke with a number of
10 colleagues in the northern Virginia area
11 regarding what job stress or complaints their
12 patients were experiencing, and the following
13 were the responses I received: A lack of
14 flexibility by management, especially in the
15 service industry, regarding child care and
16 transportation issues; perceived lack of
17 empathy by management regarding the effects of
18 mental illness on job performance by government
19 service workers; under-utilization of their
20 skills and being bored as having chosen a less
21 stressful occupation due to the severity and
22 reoccurrence of their illness; an increase in
23 workload without due compensation and the
24 unvoiced expectation by management that this is
25 acceptable; difficulty navigating the insurance

1 and short-term disability system, and not
2 knowing how much to disclose to the employer
3 and peers upon returning to work; ineffective
4 interpersonal communication with management,
5 especially when receiving a punitive attitude
6 to mistakes; and not obtaining treatment due to
7 concern for job loss when working in the
8 corrections field, but especially in this area,
9 for fear of jeopardizing one's security
10 clearance.

11 Mental illness is on the rise worldwide, and
12 one of the leading causes of disability in
13 North America. The global burden of disease
14 study unveiled that mental illness, including
15 suicide, accounts for 15 percent of the burden
16 of disease in the United States, which is more
17 than the disease burden caused by all cancers.
18 Mental disorders are common in the United
19 States and internationally. An estimated 22
20 percent of Americans ages 18 and older, which
21 is about one in five adults, or 44 million
22 people, suffer from a diagnosable mental
23 disorder in a given year, with less than a
24 third receiving treatment.

25 The cost of mental illness in both the private

1 and public sector is -- is -- in the United
2 States is \$205 billion; \$92 billion is for
3 direct treatment costs, \$105 billion is due to
4 low productivity, and additional \$8 billion
5 results from crime and welfare costs. It costs
6 another \$113 billion annually for untreated and
7 mistreated mental illness to American
8 businesses, the government and families.
9 Despite these statistics, there are some U.S.
10 employers who have been cutting back on mental
11 health services as a means of cutting costs,
12 with an eight percent reduction of employers
13 offering mental health benefits from 1998 to
14 2002. This results in an increased cost for
15 the organization or society as a whole.
16 For example, there was a Connecticut
17 corporation that made a 30 percent cost
18 reduction in mental health services, which
19 triggered a 37 percent increase in their
20 medical care use and sick leave by the
21 employees who used those mental health
22 services. Health plans with the highest
23 financial barriers to mental health services
24 have higher rates of psychiatric long-term
25 disability claims compared to companies with

1 easier access.

2 And lack of access to care results in increased
3 substance use and incarceration rates.

4 Correctional facilities which now house a large
5 proportion of the severely mentally ill who
6 don't have a place to stay -- the cost of
7 correctional facilities is four to five times
8 higher than community-based treatment of mental
9 illness.

10 There continues to be stigma and discrimination
11 regarding mental illness despite scientific
12 research supporting the biologic nature of
13 these illnesses. There is a substantial
14 proportion of Americans who view mental illness
15 as a self-induced weakness, thus not seeking
16 treatment. At times the person does not even
17 have the awareness that they are ill, and this
18 is part of the neurochemical changes that
19 happen in the brain from the illness.

20 If mental health treatment is delayed, there is
21 decreased productivity, greater absences and
22 longer durations of disability. It impacts not
23 only the individual, but their coworkers around
24 them who have to compensate for the uncompleted
25 work. When individuals with mental illness

1 return to work, an additional five to nine
2 hours of time is needed from supervisors and
3 coworkers to help them return to their previous
4 level of functioning.

5 Current concern in occupational health is the
6 effect of downsizing on the mental and physical
7 health of employees. In the past decade there
8 have been hundreds of U.S. businesses that have
9 downsized in order to reduce costs and improve
10 efficiency. A number of studies have looked at
11 the effects of downsizing on those who remain -
12 - a survivor syndrome, as they put it. Those
13 survivors, especially those who were more
14 directly involved with the downsizing process,
15 either giving notices or losing a job and then
16 being rehired, have been found to experience
17 worsening mental and physical health, increased
18 stress, increase in job insecurity or an
19 increase in alcohol use.

20 Organizational factors that have been
21 identified as negatively impacting employees'
22 mental health are increase in role ambiguity,
23 role conflict and lack of effective
24 communication from management. Employee
25 attributes have been negative affect, an

1 external locus of control or perceptions that
2 management is not being supportive or
3 interested in them. These individuals tend to
4 be less likely to accept organizational
5 changes.

6 In conclusion, focus of ongoing research should
7 include evaluation of effective ways of
8 disseminating current findings, especially to
9 management and policy-makers, to improve the
10 mental health of all U.S. workers in all
11 sectors. Ongoing scientific research is needed
12 in the cause and effective treatments of mental
13 illness, collaboration between occupational
14 health, mental health, public health, advocacy
15 groups, the insurance industry, labor industry
16 is encouraged to educate the public about
17 mental illness and encourage a business culture
18 that promotes mental health. Of particular
19 interest is the effect of the organizational
20 restructuring and the mental health of aging
21 American workers, who are more at risk for
22 depression and the onset of chronic medical
23 conditions.

24 I thank you for your time.

25 **DR. AGNEW:** Thank you for your presentation.

1 Now it's time to confirm whether or not I
2 understand sign language adequately. Did I
3 understand you to tell me Kate is not going to
4 be here and you're going to present her
5 materials?

6 **UNIDENTIFIED:** (Off microphone) Kate is coming.

7 **DR. AGNEW:** She is coming.

8 **UNIDENTIFIED:** (Off microphone) But I'm going
9 to (unintelligible).

10 **DR. AGNEW:** Okay.

11 **UNIDENTIFIED:** (Off microphone) Is that
12 (unintelligible)?

13 **DR. AGNEW:** Dr. Jane Lipscomb -- yeah, that's
14 fine.

15 **DR. LIPSCOMB:** Good morning. I'm here -- my
16 name is Jane Lipscomb from the University of
17 Maryland Center for Occupational and
18 Environmental Health and Justice. I'm here to
19 support NIOSH's approach to the second phase of
20 NORA by focusing on sector-specific research.
21 I'm strongly in support of the focus on health
22 care and social assistance sector. University
23 of Maryland Center for Occupational and
24 Environmental Health and Justice has been
25 conducting research in these sectors over the

1 past six years, and I've personally been
2 focusing on health care worker health and
3 safety research for the past 25 years.
4 As many of you know, more than ten percent of
5 workers in the United States are health care
6 workers, characterized as people committed to
7 promoting health through treatment of the sick
8 and injured. Health care workers ironically
9 confront perhaps a greater range of significant
10 workplace hazards than workers in any other
11 sector. Hazards facing health care workers
12 include biological hazards, chemical hazards --
13 especially those found in hospitals, which
14 include anesthetic waste gases, sterilant*
15 gases, hazardous drugs, industrial strength
16 disinfectants and cleaning compounds; physical
17 hazards such as radiation and ergonomic
18 hazards; violence, psychosocial and
19 organizational factors.
20 Of great concern are the many health
21 consequences associated with changes in the
22 organization and financing of health care. The
23 social service work force, although much more
24 poorly characterized, is a source of exposure
25 to many of these same psychosocial and

1 organizational factors that impact health care
2 worker health and safety. Research is
3 desperately needed to begin to understand the
4 risk factors and control strategies for
5 preventing injuries among the large and diffuse
6 social assistance work force.

7 In the limited time allotted here I will
8 provide a brief overview of hazards and
9 research needs associated with the health care
10 and social assistance sector, while my
11 colleagues, Dr. Johnson and McPhaul, will focus
12 on the hazards of occupational stress and
13 workplace violence, respectively. We will all
14 speak to the need for support for intervention
15 effectiveness research within these sectors.

16 In 2004 the BLS injury and illness rate among
17 hospital workers was nearly double that for the
18 overall private sector, and higher than rates
19 for workers employed in mining, manufacturing
20 and construction. Although injury and illness
21 rates have been declining among all private
22 sector workers, the ratio of hospital worker
23 injuries to the overall private sector rate has
24 increased over the past eight years.

25 The home health care industry, the fastest-

1 growing segment of the health care, has rarely
2 been the subject of occupational health and
3 safety research. Risk for injury and illness
4 found in the home care work environment are
5 poorly understood. Hazard controls widely used
6 in other health care work environments are
7 often unavailable or infeasible in the home.
8 It should be noted that in health care, workers
9 as well as patients are affected when
10 occupational safety and health threats are not
11 adequately identified and addressed. There is
12 an inextricable link between staff safety and
13 the quality and safety of client care.
14 Physical or psychological injuries to direct
15 care staff directly impact the quality of
16 client care and client safety. Optimal
17 staffing levels and staff performance are
18 essential to providing high quality care. The
19 quality of health care is severely compromised
20 when staff become injured, and supervisors and
21 administrators are required to replace
22 experienced staff with new hires or staff
23 assigned from other units and therefore
24 unfamiliar with the clients' highly individual
25 needs and behaviors.

1 Despite this, the health care industry is
2 decades or more behind other high risk
3 industries in its attention to assuring basic
4 safety. And I think this link between health
5 care worker health and safety and patient
6 quality of care really requires NIOSH to
7 continue to and enhance a collaboration between
8 NIOSH and other agencies within Health and
9 Human Services, and also with regulatory
10 agencies.

11 Musculoskeletal disorders rank second among all
12 work-related injuries, and the highest
13 proportion of these disorders occur in health
14 care. Among all occupations, hospital and
15 nursing home workers experience the highest
16 number of occupational injuries and illnesses
17 involving lost work days due to back injuries.
18 In a recent survey of nearly 1,200 registered
19 nurses employed across health care practice
20 settings conducted by Trinkoff et al at the
21 University of Maryland, nurses reported --
22 reporting highly physical demanding jobs were
23 five to six times more likely than those with
24 lower demands to report a neck, shoulder or
25 back MSD. Our team has also reported that the

1 risk of MSDs increased when nurses worked
2 greater than 12-hour shifts and on weekends and
3 non-day shifts.

4 The health care industry spends billions of
5 dollars each year in Workers Compensation
6 premiums, even though there is strong evidence
7 that reducing back -- low back load by
8 implementing engineering and administrative
9 controls such as safe staffing levels, lifting
10 teams and the use of newer mechanical patient-
11 handling devices reduces the risk of injury to
12 both patients and workers.

13 The most prevalent and least reported and
14 largely preventable serious risk health care
15 workers face comes from the continuing use of
16 inherently dangerous conventional needles.
17 Such unsafe needles transmit bloodborne
18 infections to health care workers employed in a
19 wide variety of infections (sic). Eliminating
20 unnecessary sharps and the use of safer needles
21 can dramatically reduce needle-stick injuries.
22 Use of conventional needles in the health care
23 environment today has been compared to the use
24 of unguarded machinery decades ago in the
25 industrial sector.

1 Is that -- do I have a minute left? Let me
2 just -- by saying the health care sector also
3 leads other industry sectors in incidents of
4 non-fatal assaults. Most research to date has
5 focused on the high risk injury of -- high risk
6 setting of psychiatric facilities, but we've
7 done research and we really recognize the need
8 for more study of this hazard in social service
9 workplaces.

10 Dr. Johnson's going to provide testimony on the
11 importance of occupational stress, but as a
12 segue to his comments, and in conclusion I want
13 to point out that many of the hazards that I've
14 discussed can only be prevented by strategies
15 which address the organization of modern health
16 care work across practice settings. Support
17 for rigorous intervention research targeting
18 the impact of changes in the work organization
19 on health care and social service work is
20 desperately needed. Our experience in
21 conducting intervention effectiveness research
22 over the past six years has taught us that it
23 must be done within the framework of community-
24 based participatory research if the
25 intervention is to be accepted and sustained.

1 I also urge NIOSH to recognize that the time
2 involved in conducting rigorous intervention
3 effectiveness research and to provide a
4 mechanism for longer periods of research
5 support to allow for this critical type of
6 research.

7 Thank you for the opportunity to have a voice
8 in the development of NORA 2.

9 **DR. AGNEW:** Thanks, Jane. I think as a follow-
10 on to Jane's testimony will be Dr. Jeff
11 Johnson.

12 **DR. JOHNSON:** My comments are directed at
13 multi-sectors, and I'm going to be talking
14 about occupational stress and new forms of work
15 organization.

16 Work stress is one of the most widely-reported
17 occupational health problems in the United
18 States, Canada and Europe, second only to low
19 back problems. Large population surveys of the
20 working population in these countries indicate
21 that from one-quarter to one-third of all
22 working people are experiencing serious levels
23 of occupational stress. These surveys also
24 suggest that self-reported stress is
25 increasing, nearly doubling in the last decade.

1 Stress has been shown to have an enormous
2 impact on health and wellbeing of workers
3 across all industrial sectors. Recent studies
4 indicate that from 50 to 60 percent of all lost
5 work days are due to stress, and that stress-
6 related disability claims are frequently the
7 longest-lasting and most expensive. Although
8 detrimental in and of itself, work-related
9 stress also contributes to the risk of
10 premature death and disability from serious
11 chronic diseases, such as hypertension and
12 coronary heart disease.

13 The United States continues to lag behind the
14 rest of the advanced industrial world in terms
15 of research and intervention efforts that
16 target work-related stress. Most notably, we
17 have failed to implement earlier calls to
18 investigate the serious occupational health
19 problem by undertaking the kind of nationally
20 representative longitudinal cohort studies that
21 have been instrumental in developing scientific
22 knowledge on the causes and consequences of
23 work stress in Europe, Canada, Japan and other
24 countries, now including Korea and China.
25 Today there is an even more pressing reason to

1 advance our knowledge in this area, for
2 evidence acquired in other countries strongly
3 indicates that the fundamental employment
4 relationship, the social contract between
5 employees and employers that has governed much
6 of what occurs at work, has undergone a
7 transformation in the past decade or more.
8 According to many scientists, the emergence of
9 an increasingly global economy is changing not
10 only the workplace but the very life course of
11 workers themselves.

12 The demands of firms for maximum flexibility
13 has resulted in widespread precariousness for
14 many employees. While the threat of job
15 insecurity as an episodic stress is well known,
16 the impact of chronic, even permanent,
17 precariousness may be much more stressful.

18 European research suggests that precariousness
19 threatens the basic notion of career
20 development, and has profound implications
21 concerning significant life course decisions,
22 including marriage, and even the decision to
23 have children, which are increasingly delayed
24 among those with precarious employment.

25 Precariousness as work organization exposure

1 represents a fundamental loss of occupational
2 self-determination and work control. Employees
3 in precarious employment may be faced with
4 overriding pressures to work longer, faster and
5 harder, even under conditions of seemingly high
6 levels of micro or task level control.
7 Precariousness can mean a fundamental loss of
8 control over many of the most essential
9 components of the employment relationship.
10 Loss of access to a job, control over future
11 earnings, control over work schedule, location,
12 use of skills, et cetera.
13 And even more importantly, precariousness may
14 have significant impact on the stress
15 experienced by all workers, not just those in
16 the contingent work force. Researchers suggest
17 that when temporary workers are desperate to
18 achieve targets that will secure their future
19 work, they may violate protective practices,
20 and even erode the solidarity of the community
21 among permanent employees.
22 Perhaps one of the most fundamental questions
23 we need to address now and in the future
24 concerns how precariousness and other forms of
25 work organization restrict or limit the

1 possibilities for employees to have a genuine
2 voice in the work organizations of the future.
3 Many research studies over the past 50 years
4 have underscored the critical importance of
5 worker control and genuine employee
6 participation in occupational and
7 organizational decision-making. But what is
8 happening today? New forms of lean, high-
9 performance, continuous-improvement
10 organizations are being presented as the
11 solution to the routinized, tailorized and
12 stressful work organizations of the era of mass
13 production. These new forms of work
14 organization involve practices such as teamwork
15 that, while eliciting greater employee
16 involvement, also involve an intensification of
17 work performance.

18 Organizational restructuring in many
19 industries, including the health care sector,
20 has applied the Japanese production management
21 design. This has involved increased
22 responsibility and accountability for
23 production management, increased problem-
24 solving demands, increased peer monitoring, and
25 increased role demands including a blurring of

1 manager and worker roles. Is this management
2 by stress, or simply the freedom to do an
3 impossible job, as some observers have
4 suggested? Or rather do these changes reflect
5 a need for a flexible, high-skilled worker who
6 will ultimately benefit from greater
7 responsibility? We simply don't know.

8 Although there have been calls to investigate
9 these new forms of work organization for the
10 past decade or more, there continues to be
11 enormous uncertainty and debate concerning the
12 impact of these new forms of work on employee
13 health and wellbeing.

14 To conclude, stress is one of the most
15 important occupational health problems in all
16 industries. We need much better scientific
17 knowledge about the relationship between new
18 forms of work organization and stress. Future
19 research should specifically focus on two
20 areas: The impact of precarious employment on
21 worker health; and the impact of lean or high-
22 performance work systems on stress health and
23 the possibility of genuine worker voice. Thank
24 you.

25 **DR. AGNEW:** Thank you, Jeff. I do not think

1 that Dr. McPhaul's here yet, so perhaps I can
2 check out whether Kenneth Meade has come --
3 arrived? No? David Goldsmith? All right.
4 Nancy Hughes from ANA? That brings us to Lance
5 Price, whom I know is here, from Johns Hopkins.
6 Lance, where are you? Okay.

7 Lance is -- Lance is a well-known friend of
8 mine because he's a doctoral student at
9 Hopkins.

10 **MR. PRICE:** I'm going to talk about microbial
11 hazards so I wanted to borrow somebody's glass
12 of water. So my name is Lance Price. I'm from
13 Johns Hopkins School of Public Health, and the
14 faculty in my department, Environmental Health
15 Sciences -- which also has the division
16 Occupational Health -- asked me to come speak
17 about the microbial hazards that people
18 employed in the industrial animal sector are
19 exposed to, and to make a plea for more
20 research in this area.

21 So industrial animal production, you probably
22 know it as, you know, thinking of CAFOs and
23 AFOs -- concentrated animal feeding operations,
24 animal feeding operations. In the U.S. we
25 produce over nine billion animals every year

1 for human consumption, and there are a large
2 number of people employed in this sector. And
3 some of the methods used to produce these
4 animals put these employees at risk.
5 And so if you think about a normal poultry
6 CAFO, that's a -- this giant barn that holds
7 25,000 birds, and during that bird's life, that
8 chicken's life, they're fed antibiotics to
9 promote growth, to control infections, but
10 throughout their life they're given these
11 antibiotics. That selects for this large
12 population of antibiotic-resistant bacteria in
13 these birds.
14 It happens in swine, and also in cattle, as
15 well. And so it -- the union of concerned
16 scientists estimates that between 60 and 80
17 percent of the antibiotics used in the U.S. are
18 used for animal production. And a large
19 proportion of those are used for non-
20 therapeutic uses. So this is not to treat sick
21 animals; this is to make them grow faster. And
22 so that leads to a rapid selection of
23 antibiotic-resistant bacteria.
24 Now if you look at the problem of emerging
25 infectious diseases in the U.S., we see that

1 last year over 20,000 people died of drug-
2 resistant infections in the U.S. We have --
3 and the excess cost of treating these
4 infections are estimated to be between \$5
5 billion and \$30 billion. And now we have these
6 drug-resistant infections -- drug-resistant
7 bacteria that we're running out of -- we're
8 running out of antibiotics to treat these
9 things, so they're resistant to seven or eight
10 antibiotics sometimes.

11 And so we're concerned about the people that
12 are going in and being exposed to these animals
13 on a daily basis. And when we go in and we do
14 some monitoring inside a house, we find, not
15 surprisingly, antibiotic-resistant bacteria
16 everywhere. So when we look in the litter, we
17 find antibiotic-resistant bacteria. There's
18 published papers on this.

19 But recently Kellogg Schwab* and Amy Chapin*
20 from our school started monitoring the air in
21 these facilities -- in a swine facility -- and
22 they found in every sample that there were
23 drug-resistant enterococci, staphylococci. So
24 you've heard of VRE, vancomycin-resistant
25 enterococci. These are important medical -- or

1 important pathogens.

2 And so we're concerned about the people that
3 are going in and, you know, I don't know if you
4 know how chickens are -- are brought to the
5 slaughterhouse, but somebody goes in and
6 actually catches these birds. And so these
7 people are going in and catching thousands --
8 literally thousands of birds a day. And so
9 besides the repetitive stress injuries that
10 these people are facing, they're also facing
11 risks due to the antimicrobial-resistant
12 bacteria.

13 And some of our own studies -- we've started
14 some studies on the eastern shore where 860
15 million chickens are produced on the Delmarva
16 Peninsula, and we -- we are starting to see
17 evidence that these -- that these chicken
18 workers are actually -- have an excess risk of
19 carrying drug-resistant bacteria.

20 So I want to talk a little bit about the
21 different potential outcomes, so there is the
22 obvious -- there is the obvious outcome of
23 somebody could have a drug-resistant infection,
24 say a respiratory infection, a GI infection,
25 but also infected cuts, wounds, so you could

1 imagine that you could get scratched a bit when
2 you're out there catching these birds. But
3 there -- we're also concerned about a carrier
4 state, so some of these aren't frank pathogens,
5 but these are bacteria that are part of our
6 normal flora, and so we could be carrying
7 around drug-resistant bacteria that then are
8 just sitting in their resident -- residence in
9 our -- in our normal flora. And then when we
10 come -- when we go to a hospital and we're
11 treated with antibiotics, they could become a
12 big problem. And they could also be -- so --
13 so the employees of these -- or the people
14 working in these facilities could be part of --
15 you know, become part of a -- the carriers that
16 we're seeing in the community.

17 And just a bit of evidence, Dr. Myers* from the
18 University of Iowa found that farmers -- swine
19 farmers had a 35 times the risk of carrying
20 swine influenza, so when we talk about avian
21 influenza, that's a -- it's an important thing.
22 So what do we need? We think we need -- we
23 need to know what's in the feed. What are the
24 antibiotics? We don't know. The industry says
25 that they don't have to tell us. We need

1 active monitoring. We need to -- I mean these
2 people -- not only their own health, but our
3 health as a society, we need to know whether
4 these antibiotic-resistant bacteria and -- and
5 flus are moving from the animals to the people
6 and at what rates? Do they become long-term
7 carriers or are they short-term carriers?
8 I'm supposed to stop very soon. And so we need
9 cohort studies, and we need to know what kind
10 of protective devices to recommend to these
11 people. Thank you.

12 **DR. AGNEW:** Thanks, Lance. It's an interesting
13 new problem.

14 I am going to move ahead on the schedule a
15 little bit to ask Kelly Castellan to come
16 forward from Georgetown Business School. And
17 Kelly has some time constraints so we're going
18 to move you up in the agenda a bit.

19 **MS. CASTELLAN:** I appreciate that. Good
20 morning. My name is Kelly Castellan, and first
21 I would like to say thank you for allowing the
22 Center for Business and Public Policy to
23 participate in this forum. On behalf of our
24 Executive Director, John Mayo, I am very happy
25 to be here today.

1 The Center was started as part of the McDonough
2 School of Business at Georgetown University,
3 with the hope of fostering dialogue and debate
4 in several key areas including workplace safety
5 and health. Over the past four years of our
6 existence we have posted and participated in
7 numerous events, and have been fortunate to get
8 to know some of the true experts in this field.
9 I would like to share with you today some of
10 the research needs that we have found in the
11 course of those interactions, and I will share
12 three research needs.

13 As a business school our initial approach to
14 looking at workplace safety and health has been
15 through an economic lens. While a great deal
16 has been done to create an academically
17 vigorous account of the business case for
18 safety, more research needs to be done to
19 establish this link. We here can all agree
20 that work-- caring about workplace safety and
21 health is the right thing to do. However, the
22 truth of the matter is, that message is much
23 more powerful to CEOs and companies when it's
24 attached to saving hard dollars.

25 Enough research has shown that there is a

1 positive link between spending on workplace
2 safety and health and saving money on health
3 care, lawsuits and many, many other areas to
4 know that we need to find the exact extent to
5 which these linkages exist, and the research
6 needs to be done to do that. Also this
7 research needs to be boiled into easily-
8 digestible formats for CEOs and stockholders,
9 whether their business is small, medium or
10 large, so that they can use it to protect their
11 workers in the best way.

12 Another area that deserves more research
13 attention is looking at the relationship
14 between workplace safety and health protection
15 and promotion. Preliminary data suggests that
16 companies that take care of their employees'
17 health, anything from having a smoking
18 cessation or weigh loss program to simply
19 ensuring that their employees have access to
20 high quality health care, those companies also
21 have employees who are more likely to be safer
22 on the job. While powerful in and of itself,
23 the preliminary data in this area needs to be
24 expanded upon. Not only do we need to look at
25 more companies in this area, but we also need

1 to see the extent to which this linkage exists.
2 And we need to include research topics such as
3 employee turnover rates, absenteeism and many
4 others.

5 We also believe this data will tie closely back
6 to the business case for safety that I have
7 already mentioned. If we can prove that a
8 healthier cafeteria program can help employees
9 not only stay safer on the job, but also save a
10 company money in long-term health care
11 benefits, we will have a powerful tool to go to
12 CEOs with.

13 The last research area I will mention today is
14 that of the organization's behavioral decisions
15 that impact the safety and health arena. This
16 is a wide area, and one that's somewhat
17 difficult to get a good grasp on. It could
18 include anything from scenarios such as
19 examining a manager who pushes her employees to
20 get a job done quickly, and thereby might
21 necessitate that a few safety corners are cut.
22 Is that manager more likely to get promoted for
23 consistently coming in ahead of schedule, or
24 reprimanded for sacrificing safety, even if no
25 incidences occur?

1 Another example of a research topic in this
2 area has to do with near misses. Georgetown
3 University researchers have done work showing
4 that many organizations, including NASA, can
5 easily suffer from a near-miss bias.
6 Essentially that means that it's easy for
7 people and organizations to look at past
8 experience as paramount to what they know to be
9 factually true. For example, you might be late
10 for a meeting while driving across town. You
11 come to a very, very orange light. If you --
12 now if you've run through that light even just
13 once or twice before and made it without
14 getting hit or a ticket, you're much more
15 likely to try it again. You can see how this
16 bias would play out in the work force.
17 Organizations do, however, have the power to
18 counter this tendency in their employees, to
19 make them not run the orange light. But in
20 order to do that, we need to know how, why and
21 where the bias depends at all -- or where it
22 develops, excuse me. By looking closely at how
23 an organization's behavior impacts their safety
24 culture, whether that culture is negative or
25 positive, we will be able to uncover the best

1 practices a company can use to ensure that
2 valuing safety is imbedded in their
3 organization.

4 I have just a couple of seconds left, and I'd
5 like to -- I have one more quick point. There
6 have been a lot of good attempts in the last
7 ten years to get at good safety and health
8 practices, and I think we can see a lot of
9 progress made. We've used a lot of different
10 ways to get at those safety and health
11 practices. I think it's important to -- to
12 note that a business perspective offers a
13 unique way at getting at good safety and
14 health. By allowing a business perspective to
15 tackle this problem, we can show CEOs not only
16 that safety -- the safety of their workers is
17 the right thing to do, but it's also the
18 smartest thing to do for their company's
19 wellbeing. Thank you very much.

20 **DR. AGNEW:** Thank you, Kelly. Thank you. Now
21 I see that our third University of Maryland
22 colleague, Dr. Kate McPhaul, has come, so Kate,
23 I know you've just entered the room, but I'd
24 like to give you the podium.

25 **DR. MCPHAUL:** I just have to learn the left

1 from the right, as far as the directions go.

2 **DR. AGNEW:** It can be challenging to be here.

3 **DR. MCPHAUL:** Yeah. Hi, I'm Kate McPhaul from
4 the University of Maryland, as Jackie
5 indicated. And as a researcher and also
6 practicing occupational health nurse, I wanted
7 to talk a little bit about workplace violence,
8 which -- according to the format -- is really a
9 cross-sector issue, and is going to involve not
10 only health care and social services, which is
11 my primary focus and research interest, but
12 would also cross into transportation, retail --
13 especially retail and service sectors.

14 I have quite a bit of data, and the issue of
15 the epidemiology of workplace violence is
16 fairly well established. The standard
17 statistic that -- most recently that we have
18 been using is that each year from 1993 to '99
19 there have been 1.7 million incidents of
20 workplace violence or violence in the
21 workplace, and many of these involve physical
22 injuries.

23 But what I wanted to focus on today is the fact
24 that now that workplace violence is no longer
25 an emerging occupational hazard and much more

1 established, unfortunately, we really need to
2 focus on the barriers and challenges to
3 implementing workplace violence prevention
4 efforts, and to understand more what it takes
5 at the level of individual workplaces to both
6 implement and sustain this. So the lack of
7 effective workplace violence prevention,
8 intervention effectiveness data, and the
9 overall culture of violence within our society
10 presents sort of a formidable challenge to the
11 prevention of this hazard in the workplace.
12 Generally, unless there's a tragedy, most
13 employers are willing to allow the competing
14 demands to take precedence over workplace
15 violence. And in many industry sub-sectors
16 such as health care, violence is imbedded in
17 the workplace culture and considered part of
18 the job. Regulatory solutions such as a
19 standard, an OSHA standard that would require
20 workplaces to institute effective workplace
21 violence programming, would depend on solid
22 cost and effectiveness data.

23 The workplace violence evidence base has
24 broadened considerably in the last decade. But
25 the basic information about situational

1 environmental triggers, the characteristics of
2 the perpetrators and the victims, and most
3 importantly that conclusive data on effective
4 prevention strategies, that's what's really
5 lacking. For example, the true frequency of
6 workplace violence, especially verbal violence,
7 is just not known. We can't estimate the true
8 incidence of violence directed towards staff by
9 job title, by service setting, by client type,
10 by time of day, that kind of thing.
11 Motivating employers, workers and policy makers
12 to devote time and resources is made more
13 difficult without these prevalence figures,
14 especially those at the verbal threat end of
15 the violence continuum. So there's a need to
16 identify and describe successful management
17 systems for tracking workplace violence and
18 related follow-up actions. The systems really
19 should be in place in all private workplaces,
20 and may even be in place in many private
21 workplaces. But because the information is
22 considered proprietary, we don't actually have
23 access to that on a national level, and that
24 information is not shared. So we feel like
25 NIOSH could include the development and testing

1 of such tracking systems in its research grant
2 programs.

3 All of the information -- not all of the
4 information gaps represent gaps in basic
5 research. Many elements of workplace violence
6 prevention evidence base are available, but not
7 widely or appropriately disseminated. For
8 example, the definition of workplace violence
9 is not universally understood by employers and
10 workers, even though it's been published. And
11 specifically, there's widespread
12 misunderstanding of the nature of the type of
13 violence we call Type II violence that we see
14 mostly in hospitals, schools and social
15 services. So employer and worker communities
16 appear to focus more on worker-on-worker
17 violence.

18 Strategies for the time-- so we feel like
19 strategies for the timely translation of
20 workplace violence research into occupational
21 health practice must be better understood.

22 But unlike regulating other hazards, workplace
23 violence in health care and human services has
24 to require the involvement of probably the
25 patient care quality community, such as the

1 Joint Commission for Accreditation on Health
2 Care Organizations, or JACO, and health care
3 regulatory bodies within the Department of
4 Health and Human Services. The patient safety
5 and worker communities must also work together.
6 Crucial agencies include the National Institute
7 of Mental Health -- this would be for research
8 partnering -- Centers for Medicaid and
9 Medicare; American Psychological Association,
10 American Hospital Association, JACO -- as I
11 already said.

12 So in summary I'm just going to ask the
13 questions that I think really need to guide the
14 research agenda for workplace violence. How
15 prevalent is the full continuum of workplace
16 violence, including verbal abuse, verbal
17 threats and non-fatal assaults? What are the
18 organizational attributes that contribute to
19 successful workplace violence prevention? What
20 training content, methodologies and intervals
21 result in optimal staff and management
22 knowledge and behaviors to prevent workplace
23 violence? What are the direct and indirect
24 costs of not implementing workplace violence
25 strategy? And how can basic workplace violence

1 research be translated in a timely and
2 effective manner to occupational health
3 practitioners, employers and workers? Thank
4 you.

5 **DR. AGNEW:** Thank you, Kate, very much. We are
6 at a place that would be appropriate for a
7 break, but I would like to give anyone in the
8 audience the opportunity to make a comment or
9 clarify anything here -- not a question and
10 answer session, but if anyone would like to
11 make a comment, please feel welcome now. We've
12 talked about several sectors and several cross-
13 cutting -- cross-sector issues, as well, in the
14 presentations we've had thus far, and I can --
15 yes. Maybe we can arrange a mike for you.

16 **MS. ABRAMS:** Adele Abrams, I represent the
17 American Society of Safety Engineers, and this
18 was just more of a follow-up comment to Dave
19 Madaras's statement concerning substance abuse
20 in construction, as well as the people who have
21 identified mental health, which can be related
22 to substance abuse as well. And because many
23 of the sectors that are addressed here are
24 OSHA-regulated, it may be of interest to know
25 that the Mine Safety and Health Administration

1 within the U.S. Department of Labor is
2 currently engaged in a rule-making to address
3 substance abuse in the mining industry. And
4 the comment period just closed on November
5 27th. There is a great deal of research data
6 posted on the MSHA web site, as well as
7 testimony from I believe it was five public
8 hearings that were held in October and November
9 on this subject. So those who are interested
10 may want to take a look. There are a lot of
11 programs for management of substance abuse that
12 were submitted to the record by some of the
13 companies within the mining industry. And ASSE
14 also submitted testimony on this, but we agree
15 that this is a subject of concern and would
16 suggest that perhaps NIOSH also look at some of
17 the research that's posted there for
18 suggestions on where that could be taken to the
19 next level by the governmental research
20 programs. Thank you.

21 **DR. AGNEW:** Thanks for bringing that to our
22 attention. That's a great opportunity, it
23 sounds like, for partnering, to approach one of
24 the NORA topics. Kathy?

25 **MS. KIRKLAND:** The comment about the MSHA

1 comment period being closed reminded me that --
2 I'm not sure how many of you follow the CDC
3 comment periods and so forth, but there's
4 currently a open comment period on the new CDC
5 research agenda, and some of us get narrowly
6 focused on NIOSH. And CDC's research agenda is
7 also sort of looking at occupational and
8 environmental issues, and you might want to go
9 out and look at what the CDC overall research
10 plan is and make your comments based on what
11 you feel CDC should be looking at from an
12 occupational standpoint, because it's not very
13 good, as far as I can see, on either
14 occupational or environmental issues.

15 **DR. AGNEW:** Thank you for both those comments
16 because it reminds us not to solely focus on
17 NIOSH.

18 **DR. LUM:** Just a quick --

19 **DR. AGNEW:** Max.

20 **DR. LUM:** -- note, even though we have a very
21 skilled transcriber, if you have notes and you
22 would like to leave your notes -- I know that's
23 asking a lot -- that would be very helpful as
24 we transcribe the material. Thank you.

25 **DR. AGNEW:** All right. Let's adjourn

1 temporarily for a break and come back at 10:45,
2 please.

3 (Whereupon, a recess was taken from 10:35 a.m.
4 to 10:45 a.m.)

5 **DR. AGNEW:** We're going to ask you all to take
6 your seats.

7 **DR. SODERHOLM:** I have a quick announcement,
8 too.

9 **DR. AGNEW:** All right.

10 **DR. SODERHOLM:** That'll help get people back
11 in.

12 **DR. AGNEW:** You need to give Sid a chance here
13 to have the floor for a second. Thanks, Mike.

14 **DR. LUM:** Can we take our seats, please.

15 **DR. AGNEW:** All right.

16 **DR. SODERHOLM:** I'd like to make a brief
17 announcement. It's traditional in the
18 transcript to use the proper title for people -
19 - Mr., Ms., Dr. -- so we haven't captured that.
20 If -- if our transcriptionist will make the
21 obvious assumption or the -- the apparent
22 assumption of Mr. or Ms., if you'd like to make
23 sure your title, Dr. or whatever, is properly
24 affixed to your name, please make a notation of
25 your title on the sign-in sheet and then we can

1 -- we can do that properly. So if you -- if
2 you want to be known as something besides Mr.
3 or Ms., please note on the sign-in sheet.
4 Jackie --

5 **DR. AGNEW:** Okay, thank you.

6 **DR. SODERHOLM:** -- thank you for keeping us on
7 schedule so well.

8 **DR. AGNEW:** Yeah, I think we're doing pretty
9 well. I also do not have that information, so
10 if I do not use your proper title, please --
11 please be understanding.

12 We made a few juggles in the schedule to
13 accommodate some time constraints that folks
14 here have. I'd like to start out this next
15 part of our morning session by calling upon Dr.
16 Michael Feuerstein, the Uniformed Services
17 University of Health Sciences, and Mike is
18 going to talk about cancer survivors and work.
19 And he'll be followed then by another colleague
20 at the same university.

21 **DR. FEUERSTEIN:** Thank you, Jackie. I usually
22 don't read things, but I -- is this on?

23 **DR. AGNEW:** Yeah.

24 **DR. FEUERSTEIN:** But because we're under these
25 time constraints, I will read this.

1 I am here today to propose that problems faced
2 by cancer survivors in the workplace be added
3 to the NORA research agenda. The problems that
4 cancer survivors experience at work represent a
5 national burden in the American workplace. As
6 the number of cancer survivors increase, a
7 result of earlier detection and improved
8 interventions, the number of cancer survivors
9 who desire or need to return to productive work
10 will increase. Currently there are
11 approximately 3.8 million working-aged adults
12 with cancer in the United States -- 3.8
13 million. This workplace public health problem
14 will escalate over the next decade as treatment
15 becomes more successful and the work force
16 ages.

17 So what are some of the data on cancer
18 survivors in the American workplace that signal
19 a problem? One out of five cancer survivors
20 who are one to five years post-diagnosis report
21 cancer-related limitations in their ability to
22 work. Nine percent were actually unable to
23 work. Research indicates that labor force
24 participation declines 12 percent immediately
25 following diagnosis to follow-up.

1 Using another national database, the National
2 Health Interview Survey between 1998 and 2000
3 research indicates that 17 percent of approxim-
4 - or approximately one in six -- workers with a
5 history of cancer report they are unable to
6 work. These employees attributed this work
7 disability to physical, cognitive or emotional
8 challenges. Probably sounds a little familiar.
9 An additional seven percent indicated that they
10 were limited in the amount and type of work
11 they could perform.

12 This burden does not rest solely on the cancer
13 survivor or his or her family. As with any
14 health problem that impacts work productivity,
15 there is a cost to employers. Of course there
16 are medical costs, of which a large portion are
17 often covered by the employer. But there are
18 also real costs related to lost productivity,
19 turnover, family medical leave, and potential
20 effects on coworkers.

21 Our culture continues to perpetuate the view
22 that an individual with cancer is somehow now
23 defective. While at this point limitations in
24 function often represent the sequelae of cancer
25 and its treatment -- and hopefully that won't

1 be the case in the future, but at this point it
2 is -- the question we need to be asking is not
3 can he or she do the work, but rather can the
4 cancer survivor perform the essential tasks of
5 his or her job; and if not, can he or she be
6 reasonably accommodated to minimize the impact
7 of the illness on work productivity? Yet
8 employers and supervisors continue to perceive
9 cancer survivors as poor risks for advancement,
10 and cancer survivors are at high risk for job
11 loss. These outcomes can regrettably lead to a
12 cascade of problems for the survivor, the
13 workplace and society.

14 Accommodating workers with other medical
15 conditions have been on the rise. However, a
16 study completed by my research group using
17 litigation data from 1990 to '96 indicated that
18 cancer accounted for seven percent of all
19 impairments involved in EEOC litigation related
20 to failure to accommodate.

21 I am a 55-year-old full professor. I was
22 brought to the Uniformed Services University to
23 develop and direct the first and only Ph.D.
24 program in the military in clinical psychology.
25 This thing was proposed by the U.S. Congress

1 and I followed through and developed it.
2 In the summer of 2002 I was diagnosed with a
3 small -- with a -- not a small, with a
4 malignant brain tumor. I had surgery to biopsy
5 the tumor, maximum radiation and 12 months of
6 chemotherapy, and I receive MRIs every four
7 months. I am a cancer survivor.
8 I returned to work two weeks after brain
9 surgery and worked throughout my radiation and
10 chemotherapy. I myself experienced problems
11 re-integrating into the workplace. The
12 unexpected problem was my supervisor's reaction
13 to me, not my health.
14 I returned to work to find out from a secretary
15 that some research space and a part-time
16 research assistant were no longer available. I
17 went into my supervisor's office and asked why.
18 He told me I didn't need these anymore because
19 I was not normal. Fortunately I was able to
20 resolve the matter through frank discussion and
21 support of colleagues.
22 I also experienced a number of other workplace
23 challenges following my diagnosis, including
24 the denial of my request for an accommodation
25 that I sincerely believe was reasonable.

1 Given the challenges that I and other cancer
2 survivors experience at work, I recommend NORA
3 add cancer survivorship and work to its agenda
4 over the next decade. Specifically, research
5 in the following areas should be seriously
6 considered: Epidemiological studies of this
7 burden at a population health level;
8 identification of modifiable risk factors;
9 detection and long-term surveillance of
10 problems in affected workers; evidence-based
11 cost effective approaches that address the
12 problems cancer survivors experience in
13 returning to work, work retention and work
14 productivity; and lastly, national and state
15 policy on more effective ways to address this
16 problem at a systems level.

17 Thank you.

18 **DR. AGNEW:** Thank you very much, Mike. Thank
19 you for entering that issue into the docket.
20 And with you I believe is Cherise Baldwin
21 Harrington, who will also present some
22 testimony.

23 **MS. HARRINGTON:** Good morning. My name is
24 Cherise Baldwin Harrington. I'm speaking on
25 behalf of Dr. Michael Feuerstein from the

1 Uniformed Services University in Bethesda,
2 Maryland. I'm a graduate student and member of
3 his research group, here to discuss areas of
4 importance to work disability.

5 Work disability is a source of significant cost
6 to the worker, workplace and society. As a
7 result of these problems, a worker can find it
8 hard to cope with persistent pain and changes
9 in function that accompany these disorders,
10 while attempting to return to work or remain at
11 work. This change in function and productivity
12 can also exert a substantial financial burden.
13 Costs to society derive from long-time wage
14 replacement, disability settlements and health
15 care. In addition there are indirect costs
16 associated with training of replacement workers
17 and lost tax revenues.

18 Also it is interesting to note that when Dr.
19 Feuerstein developed the Journal for
20 Occupational Rehabilitation over 15 years ago,
21 he thought that perhaps the Journal would
22 gradually lose its popularity as the problem of
23 work disability was solved. Yet almost two
24 decades later it is still stronger than ever,
25 with citations of research at its highest

1 levels and submissions from around the world
2 continuing to increase. Clearly work
3 disability continues to be an important public
4 health concern.

5 A major source of work disability is
6 musculoskeletal disorders of the back and upper
7 limb. While most workers return to work within
8 a month from a claim musculoskeletal disorder,
9 many who actually return to work continue to
10 experience pain and disability. It is well
11 known at this point that a small percent of
12 these workers transition into prolonged
13 disability, and account for a disproportionate
14 share of the health care burden. Also in some
15 cases back and upper limb pain can be
16 recurrent, and those returning to work with
17 pain are at increased risk for future problems.
18 Research from our group and groups from around
19 the world indicate that recurrent and prolonged
20 work disability are influenced by a number of
21 factors including the medical status of the
22 individual, their physical condition in
23 relation to their work demands, various
24 workplace and individual psychosocial factors
25 and systems level variables.

1 Data also suggests that by identifying workers
2 at high risk for disability and intervening
3 within a few months from the time of the first
4 report of the pain or injury, disability can be
5 prevented. Our groups has also investigated
6 such outcomes as function, patient
7 satisfaction, perceived health and costs
8 related to health care in acute low back pain,
9 and have also identified a possible pathway for
10 this prolonged pain and disability.
11 We first observed in over 10,000 cases that
12 provider adherence to clinical practice
13 guidelines suggested that workplace ergonomic
14 evaluation and intervention, as well as
15 psychosocial intervention, were associated with
16 better outcomes and lower costs. In a
17 prospective study on 368 participants to be
18 published soon, we found that workers exposed
19 to ergonomic risk reported greater job stress,
20 which in turn was related to higher levels of
21 emotional distress and increased likelihood of
22 returning to the clinic with persistent back
23 pain.
24 Future efforts need to investigate these
25 relationships more closely and develop

1 innovative approaches at the workplace to
2 address these areas realistically and head-on.
3 Currently this pathway is either ignored or
4 held out as a possible explanation only months
5 after persistent pain leads to prolonged
6 disability, and a series of other problems for
7 the worker and workplace emerge. It is time
8 the integrative role of these factors is
9 studied more seriously and cost-effective
10 approaches are developed to mitigate them.
11 Another important concern is the risk of
12 recurrent disability following return to work.
13 In preventing reinjury, accommodations are
14 often helpful. Work disability is further
15 impacted by the complexities often involved in
16 truly implementing these accommodations over
17 the long run and assessing their impact.
18 Research done by our group some years ago
19 indicated that musculoskeletal disorders
20 account for 23 of all impairments involved in
21 litigation for failure to accommodate under the
22 Americans With Disabilities Act. Have things
23 changed?
24 The concerns associated with work disability do
25 not discriminate in job type or setting. The

1 prevalence of these problems emphasize that
2 more attention be placed on identifying the
3 relevant risk factors for onset, progression,
4 maintenance, and the effects of innovative
5 interventions. Also it is important to note
6 that BLS data indicate that more workers return
7 to work with pain than ever before. Is that
8 the solution? Probably not.

9 It is recommended that NORA reconsider what
10 needs to be done about work-related
11 musculoskeletal problems and work disability in
12 the following areas: First, well-controlled
13 epidemiological studies on the interactions and
14 pathways among multiple risk factors and their
15 relationship to work disability. Second,
16 randomized controlled trials based on work from
17 recommendation number one to identify effective
18 long-term interventions to work disability.
19 And third, research on policy that helps
20 facilitate the recognition and need for
21 approaches that address the multiple factors
22 involved in work disability that maximize the
23 application of evidence-based policy. There
24 needs to be a greater awareness that by
25 focusing on multiple factors we are not blaming

1 the worker or labeling the worker with
2 psychological problems. Workers experience
3 natural reactions to injury, pain and workplace
4 stress that combine to create a situation that
5 is often fueled by the way we look at the
6 process and manage it. Armed with new data, it
7 is time to seriously tackle the problem from a
8 broader perspective. Thank you.

9 **DR. AGNEW:** Thank you, Cherise. Good luck in
10 your graduate program.

11 All right, I would like to next call on Dr.
12 Hung Cheung, give you a chance to present.

13 **DR. CHEUNG:** Thank you. Good morning. I'm
14 speaking on behalf of the American College of
15 Occupational and Environmental Medicine, or
16 MCOEM. We're pleased to submit these comments
17 to NIOSH's National Occupational Research
18 Agenda. MCOEM is a volunteer, non-profit
19 association of over 100 physicians and allied
20 health providers in the state of Maryland. Our
21 members practice occupational medicine in
22 factories, clinics, hospitals, military bases,
23 academic centers, from shores to mountains. We
24 collectively care for tens of thousands of
25 workers who directly benefit from our

1 professional efforts, and the efforts at NIOSH
2 to produce quality occupational research.
3 We applaud NIOSH's solicitation of comments on
4 such a significant pathway for guiding the
5 agency for the next decade and beyond. We
6 recognize the accomplishments from the first
7 decade of NORA. And like aspiring athletes, we
8 encourage NIOSH to excel further.

9 We fully ascribe to the proposition that NORA
10 is setting an agenda, not only for NIOSH but
11 for occupational and environmental evidence-
12 based medicine. While there are many issues
13 that deserve attention from researchers given
14 the ongoing changes that we see in the
15 workplace and the field of occupational and
16 environmental health, we have identified
17 several areas that we feel should be priority
18 for national occupational health research in
19 the coming years: Mental health and the
20 organizational psychology; indoor environments;
21 emerging diseases; emergency preparedness;
22 delivery of occupational health services to
23 small and medium-sized employers; cost
24 effectiveness of occupational health services;
25 vulnerable populations; and effects of chronic

1 disease on work and working populations.
2 The issue of mental health in organizations is
3 large. We know the combination of effective
4 and other disorders in the workplace have
5 imposed a huge direct and indirect cost on many
6 employers. In addition, the role of mental
7 health and productivity is only just beginning
8 to be appreciated. NIOSH should seek the
9 opportunity to partner with other federal and
10 private research institutions to foster
11 research in this area.
12 Similarly, we know that workers spend a
13 sizeable amount of time indoors, yet the
14 science of indoor environment is still fairly
15 young, and at times chaotic. Much work is
16 needed to understand the complex interactions
17 between the indoor environments, work, physical
18 and mental health, quality of life, and
19 productivity. We applaud NIOSH's efforts in
20 this area to date, but would still regard it as
21 a need for further emphasis. As demonstrated
22 so sadly following 9/11 and the anthrax
23 exposures, the nation looked long and hard for
24 expertise in safe remediation procedures. This
25 is an area where NIOSH has particular expertise

1 and could identify and demonstrate appropriate
2 remediation techniques, including worker
3 protection. MCOEM urges NIOSH to consider that
4 the threat of emerging infectious diseases
5 require a reserve of resources and
6 preparedness, while the nation's improvement in
7 (unintelligible) conservation warrants applause
8 more than further basic science research.
9 Likewise, finding effective personal protective
10 equipment such as respirators and gloves
11 warrant more investigation than association of
12 cigarette smoking and chronic obstructive
13 disease.
14 The delivery of occupational health services to
15 small and medium-sized employers is a critical
16 issue, and NIOSH has an opportunity to
17 demonstrate through research the effectiveness
18 of different models of occupational safety and
19 health care delivery.
20 Finally there are two additional issues we feel
21 should be priority for the coming year. That's
22 the issue of the vulnerable populations. There
23 have been tremendous changes in the work force,
24 which continue today. These include the aging
25 of the work force and increase of women in the

1 work force, increasing number of migrant and
2 non-English-speaking workers and dual working
3 parents, workers with chronic diseases or
4 permanent impairment. These shifts are
5 important and NIOSH should promote research to
6 understand these shifts, what they portend for
7 the health and safety of the workers.
8 The other issue concerns the effects of chronic
9 diseases -- asthma, diabetes, HIV, heart
10 disease and cancer, for instance -- and their
11 effects on safety, health, productivity in the
12 workplace. As more and more workers with
13 disability are staying in the work force, the
14 effect of these disorders on safety, health and
15 issues of management of illness in the
16 workplace are more complex and deserving of
17 special attention.

18 And I will close by saying that MCOEM
19 appreciates this opportunity to comment on
20 NORA, and we remind NIOSH that our patients and
21 our nation's public health benefits from
22 NIOSH's research, and we steadfastly support
23 the quality improvement in NIOSH and believe
24 that NIOSH should be provided with the
25 resources necessary to carry out this vital

1 public health research agenda. Thank you.

2 **DR. AGNEW:** (Off microphone) And next I'd like
3 to call on Celia Booth from McCaffery &
4 Associates. Celia, if I'm not mistaken, will
5 discuss the treatment (unintelligible) safety
6 and health information.

7 **MS. BOOTH:** Good morning. It's a pleasure to
8 be here to provide some input to NORA.
9 McCaffery & Associates, by way of background,
10 is a historical document research firm. A
11 large part of our research is in the field of
12 toxic substance exposure. We regularly review
13 the U.S. Navy Bureau of Ships files, which is
14 Research Group 19, at the National Archives and
15 Records Administration, NARA. After the
16 Kennedy and Nixon files, the files that we
17 review are the most often requested documents
18 at NARA.

19 Our topic is the preservation of historical
20 documents that contribute to the body of
21 knowledge for occupational health and safety.
22 And I have three issues to present this
23 morning.

24 Issue one, although the National Archives and
25 Records Administration exists to collect and

1 maintain information from activities of the
2 federal government, both in its headquarters in
3 Washington, D.C. and at regional NARA sites, we
4 have found instances of federal agencies
5 holding archival data in-house long after the
6 records were inactive, such as World War II,
7 Korean War and Vietnam War eras.
8 Specific examples for the work we do in
9 researching toxic substance exposure are the
10 U.S. Navy and the U.S. Maritime Administration.
11 The problems with federal agencies holding such
12 information in house include: One, the lack of
13 adequate data management, especially tracking
14 and inventory control; two, the lack of
15 security to protect the records from theft,
16 from -- from autograph-seekers, primarily, and
17 damage by other researchers; and three, the
18 lack of open access to the public, especially
19 researchers who might benefit from the
20 historical perspectives and progress in
21 occupational health and safety that was made by
22 such agencies as the U.S. Navy and the U.S.
23 Maritime Administration, going back to the
24 1930s. Freedom of Information Act requests are
25 frequently required to access records that are

1 held by the agencies.

2 Where NARA has obtained these records, it does

3 a good job cataloging, safeguarding and

4 maintaining the collection of information.

5 And our recommendation here is simply that we

6 should ensure that federal agencies provide

7 their records to NARA when these records are no

8 longer in active use by the agency.

9 Our second issue is maintaining technology that

10 supports reviewing and reproduction of archived

11 documents. We have found instances of film

12 archive materials being unusable due to the

13 lack of technology to review and reproduce the

14 documents to paper copies. Specific examples

15 include 105 mm. and microfiche film records.

16 The manufacturers of the viewing, scanning and

17 conversion equipment stopped making and

18 servicing this equipment, and by the time NARA

19 gets these records, the creating agency's

20 equipment is also either long-gone or

21 unsupportable. Therefore one must find a

22 contractor who has developed a work-around

23 technology. In addition to the expense of

24 conversion from film to paper, there is a chain

25 of custody that, if broken, could result in a

1 loss of records.

2 While we may not be able to resurrect the
3 obsolete technology, we strongly encourage any
4 federal agency that will generate archival
5 records to not fall victim to assuming that
6 today's technology for conversion from CD-ROM
7 disks, thumb drives, et cetera, will always be
8 available. Think eight-track tapes.

9 Recommendation two is to keep paper copies of
10 records. While this is generally looked upon
11 with disfavor, we find that it is the most
12 reliable means of preserving documents. The
13 other form of storage that has endured with
14 adequate scanning and conversion technology is
15 35 mm. film.

16 Our third and final issue is that some offices
17 in federal agencies fail to maintain records
18 filed with a filing system that can be easily
19 researched. The U.S. Navy did use a subject-
20 coded filing system until the 1960s, which made
21 its records very useful for researching and
22 finding valuable history on its occupational
23 safety and health activities. However, when it
24 converted to a chronological filing system in
25 1962, the trail to the occupational safety and

1 health system became much more difficult to
2 follow if the chronological file index was not
3 kept with the records.

4 And our specific recommendation here is that
5 whatever system a federal agency uses to
6 maintain its files, the subject, cross-index or
7 correspondence logs must be kept with the files
8 when they're turned over to NARA, the Federal
9 Records Center, or any other archival facility.
10 Thank you very much for the opportunity to
11 provide input to National Occupational Research
12 Agenda.

13 **DR. AGNEW:** Thank you, Celia. I now better
14 understand some of the points to be made when
15 NARA meets NORA.

16 Next, to help someone with a time constraint,
17 Adele Abrams from ASSE. I'd like to give you
18 the -- the floor.

19 **MS. ABRAMS:** Thank you. My name is Adele
20 Abrams and I am the national representative for
21 the American Society for Safety Engineers in
22 Des Plaines, Illinois. I'm also a professional
23 member and certified mine safety professional.
24 ASSE appreciates the opportunity to be here
25 today to join in this effort to shape the

1 future of occupational safety and health
2 research. On behalf of ASSE's 30,000 members -
3 - as well as the 13 practice specialties that
4 ASSE has that include construction,
5 transportation, mining, health care, et cetera
6 -- we want to commend NIOSH and those involved
7 in leading the National Occupational Research
8 Agenda for taking a proactive approach in
9 engaging those with a stake in helping NORA
10 determine direction for occupational safety and
11 health research in the coming decade.
12 The unprecedented openness and willingness to
13 listen to those whose work and lives are
14 affected by our nation's investment in
15 occupational safety and health research marks
16 what ASSE hopes can be a fully cooperative
17 endeavor that lasts throughout this next decade
18 and beyond.
19 The day-to-day work of ASSE members in helping
20 employers and employees work safer and
21 healthier is intimately connected with the
22 decisions made by NIOSH in establishing the
23 NORA for the next decade. ASSE's members
24 recognize that without a vibrant, aggressive
25 research agenda that addresses the risks

1 workers face in a quickly-changing work force
2 and workplace, their responsibilities would be
3 difficult to fulfill. Our members know that
4 many of the tools they use to address or head
5 off workplace hazards come from the research
6 efforts that the NORA effort spurs on. They
7 also know that their -- many of their tools
8 come from the practical need to deal with risks
9 in their day-to-day experience on the job
10 floor, from talking to workers whose wellbeing
11 our members strive to protect, from the
12 exchanges they have with their fellow safety
13 and health professionals, from applying
14 strategies learned in one situation to a
15 situation for which there may be no book-
16 determined answer. Our members are masters of
17 the practical. Ways to save lives, prevent
18 injuries, keep workers healthy come from many
19 sources.

20 That is why ASSE is pleased to be a partner
21 with NIOSH in its Research to Practice, or R2P,
22 initiative to close the gap between the job
23 floor and the research that NIOSH so ably
24 accomplishes. ASSE appreciates the revitalized
25 recognition in recent years in NIOSH's

1 leadership that the good work of NIOSH needs to
2 be better known by the safety, health and
3 environmental professionals responsible for
4 applying the knowledge gained in safety and
5 health research. At the same time there has
6 been an appreciated recognition on NIOSH's part
7 that safety, health and environmental
8 professionals provide a wealth of knowledge and
9 experience that can help inform and help
10 provide direction to the occupational safety
11 and health research agenda.

12 The ASSE partnership with NIOSH is helping to
13 close this gap. NIOSH leaders and researchers
14 have greatly increased their involvement in
15 ASSE's professional development and educational
16 opportunities, as well as in its professional
17 publications. And while ASSE has long been an
18 active participant in NORA, now Dr. Hongwei
19 Hsiao, Chief of NIOSH's Protective Technology
20 Branch, has joined the Research Committee of
21 the ASSE Foundation to help bridge the efforts
22 of both ASSE and NIOSH to support research
23 activities. ASSE has increased greatly its
24 dissemination of information on NIOSH
25 publications and communications of its many

1 activities, thereby bringing our members closer
2 to NIOSH's work than ever before.

3 What we offer today is just the beginning of a
4 process that we intend that will engage each of
5 our 13 practice specialties, and also the
6 leaders of ASSE's Foundation, our volunteer
7 leaders in governmental affairs and the
8 Society's policy process, and our members at
9 large so that we can provide as much input into
10 this process as possible. Our members have
11 ideas that their knowledge and experience can
12 offer to this agenda. Our next follow-up in
13 this effort will be at the December 19th town
14 meeting in Chicago, which is where ASSE's
15 headquarters are located, and there a member of
16 our construction practice specialty will offer
17 specific ideas for NORA direction in the
18 construction sector.

19 Due to their own generosity and that of
20 corporations dedicated to safety and health,
21 the participants in the ASSE Foundation have
22 demonstrated a tangible commitment to
23 supporting occupational safety and health
24 research. And since 1998 the ASSE Foundation
25 has funded 14 different occupational safety and

1 health studies totaling \$95,000. Another
2 foundation research committee approval will
3 occur this week, and since 2000 the Foundation
4 has funded eight fellows to study at the
5 Liberty Mutual Safety Research Institute with
6 grants totaling over \$50,000. All of these
7 studies are published after peer review in
8 ASSE's *Professional Safety* magazine, as well as
9 being posted on our web site, and the link for
10 that is included in the copy of the comments
11 submitted.

12 So we appreciate the opportunity to bring this
13 process -- or to be involved in this process
14 and bring our members' views to you so that
15 they can be put on the front line of protecting
16 workers. And we are encouraged that, with the
17 involvement of all stakeholders in this
18 process, NORA's second decade will achieve even
19 better and more effective protections for the
20 nation's workers. Thank you.

21 **DR. AGNEW:** Thank you. Let me ask now, has
22 Kenneth Meade arrived? It looks like not, but
23 I think David Goldsmith has -- from George
24 Washington University. I guess he'll speak
25 about silica exposure?

1 **DR. GOLDSMITH:** Yes, I will. My name is David
2 Goldsmith. I'm a member of the faculty at
3 George Washington University in Washington,
4 D.C. I want to start by commending NIOSH as an
5 agency. They have provided support for me in
6 my career, and I have been able to bring to
7 greater focus something that's an old concern
8 in occupational health; namely the exposure to
9 crystalline silica.

10 I basically have four topics I would like to
11 generally share with you. The first is that
12 reliance on -- which is the standard procedure.
13 Reliance on regular chest X-rays is really not
14 sufficient for us to diagnose true cases of
15 silicosis. We know that that's true based on
16 some research done in South Africa which shows
17 that, comparing autopsies with chest X-rays,
18 only one out of three true cases are actually
19 diagnosed by the use of chest X-rays.

20 This suggests to me that NIOSH should provide
21 some leadership to focus greater attention on
22 PET scans and other kinds of new technologies
23 for chest imaging. This is something that the
24 agency can play a significant role in doing.

25 A second point I would like to share with you

1 is that the silica issue as we see it in the
2 United States today is much more focused on the
3 health of minority and African-American and
4 immigrant workers than it is on what used to be
5 considered a relatively well-paying area of
6 research for all groups in the society. That
7 being the case, there needs to be health
8 education research efforts directed to these
9 communities, specifically the immigrant
10 communities because of their lack of knowledge
11 in English. This means that the agency has to
12 find better ways of getting information that it
13 has about silica -- and for that matter, all
14 other hazards -- translated, particularly into
15 Spanish and other significant languages of some
16 immigrants.

17 The third thing I want to share with you is
18 concern that the silica issues related to
19 silicosis and silicotuberculosis and cor
20 pulmonale have changed radically in the last
21 ten to 15 years. We have a much greater
22 awareness that silica exposure, like asbestos,
23 produces multiple health effects, and we need
24 to expand our research effort to look at kidney
25 disease. We need to expand our research effort

1 to look at cancer. We need to expand our
2 research effort to focus on autoimmune
3 diseases. All of these three areas are drawing
4 much more research attention. That also means
5 that we need to take the findings from these
6 areas and translate them into expanded
7 educational efforts and to look at other data
8 that are relevant to these kinds of concerns.
9 In that last context, we need to expand the
10 evaluation of smoking and its relationship, for
11 example, to autoimmune disease and silica
12 exposure. We need to expand smoking and kidney
13 disease research, as well.

14 And lastly, I wanted to draw your attention to
15 two sort of interlinked areas. One is that
16 we've tended to have a good background on the
17 mining industry and the construction industry
18 and its exposure links to silica. That
19 emphasis needs to be expanded a great deal. We
20 need to recognize that silica exposure is a
21 significant factor when we're talking about
22 agriculture, and it's also true when we're
23 talking about maintenance of roadways, both on
24 the construction side as well as the railroad
25 side.

1 And there is a lot of silica dust exposure that
2 is not being studied, and in that context there
3 also needs to be technological developments
4 that allow for improved means for detecting
5 elevated silica levels. That is to say hand-
6 held devices that might allow for managers and
7 supervisors and workers in these industries and
8 the traditional industries to know when they're
9 faced with excess silica exposures so that
10 personal protective equipment can be put into
11 place and expanded health education can also be
12 moved into this context.

13 In all of these we see that there has been a
14 great deal of research exposure -- there has
15 been a great deal of research conducted in
16 these silica areas. But NIOSH is the one
17 agency, in my opinion, that can lead some of
18 these issues forward, and I would very much
19 like to see NIOSH, in collaboration with some
20 of its sister agencies, particularly the Mine
21 Safety and Health Administration and NIEHS and
22 the National Cancer Institute play a leading
23 role in looking at some of these other -- these
24 other new data.

25 Lastly, I just would like to say that the -- on

1 the research side, on the cancer research side,
2 there clearly is a desire to look at other
3 cancers than lung cancer. Nevertheless, that
4 does remain somewhat of a controversial area,
5 but there's new data on GI cancers, on kidney
6 cancers and skin cancers. And for those health
7 endpoints there needs to be a new focus on
8 these kinds of problems and a new set of
9 investigators to look at these things in a
10 novel way.

11 So let me end by thanking you all and I
12 appreciate the time that you've given me to
13 share with you my concerns about this area.
14 Thank you very much.

15 **DR. AGNEW:** Thank you, Dr. Goldsmith. I'd like
16 to ask, is Mark Riso present -- Mark? -- from
17 the National Safety Council.

18 **MR. RISO:** Good morning. My name is Mark Riso
19 and I'm here on behalf of the National Safety
20 Council's Washington, D.C. office. And we'd
21 first like to express our appreciation for the
22 opportunity to be here today, and of course our
23 appreciation to convey our support of NIOSH and
24 their execution of NORA, and from what we
25 believe will be a continued strong relationship

1 in each of our missions. The Council has been
2 very supportive of NORA since its inception,
3 and we look forward to our continued work.
4 By way of brief background, the National Safety
5 Council is a Congressionally-chartered national
6 safety and health organization with chapters in
7 almost every state. The Council is committed
8 to fulfillment of its mission and is always
9 mindful of the benefits of working with
10 agencies and other organizations to accomplish
11 its goals.
12 I'd also like to note that our President, Mr.
13 Allen McMillan*, will be present to speak at
14 the town hall meeting I believe December 19th
15 in Chicago, which is where the National Safety
16 Council is headquartered. The Council will
17 also seek further opportunities in the future
18 at other meetings on other topics.
19 The Council views partnerships with federal and
20 state agencies, other safety and health
21 organizations, companies and federal and state
22 legislatures as critical in its overall efforts
23 to accomplish its mission. Sharing ideas,
24 research, programs, initiatives and training is
25 critical to the Council, NIOSH and the work

1 conducted through.

2 As you all may well know, the Council has many
3 strategic partnerships, cooperative agreements
4 and working relationships with agencies and the
5 like, which serve as a basis for its work. The
6 Council understands that it cannot responsibly
7 and effectively perform its work alone. In the
8 Council's view, the work of NIOSH, through
9 NORA, is a living cooperative relationship
10 that, in essence, develops a collaborative
11 environment to work productively and share
12 ideas. The significance of our relationship is
13 crucial in that our mission is greatly enhanced
14 with the dynamics of the objectives of
15 cooperative relationships like these.

16 The benefits to the Council with regard to the
17 work of NIOSH through NORA can be summarized by
18 highlighting tangibles and intangibles.

19 Tangibles include the development of
20 initiatives, programs, information, research
21 data and information sharing. The intangibles
22 include a strong spirit of cooperation and
23 mutual respect.

24 Though cooperation is often seen as political,
25 the real truth is that a positive working

1 spirit that is often established between
2 organizations and agencies is the only way in
3 which productive results are accomplished in
4 the real world. Success cannot be responsibly
5 measured on paper. It must be measured in
6 concert with implementation.

7 Much of the work the National Safety Council
8 performs is conducted within the public policy
9 arena, which is what I do. The Council is
10 deeply engaged in public policy, and we
11 identify, develop and implement many
12 initiatives, which must be supported by
13 research and data. As such, the sharing of
14 research and data, as well as the access to
15 research, is of great value.

16 One of the greatest frustrations when working
17 with public policy is -- is -- it's not
18 necessarily that it's bad information that's
19 out there; it's that there's no information out
20 there. And it's not necessarily that the
21 information doesn't exist, but it's just not
22 visible.

23 Lawmakers and the public, though sympathetic to
24 many of the causes that we advocate, are not
25 informed or aware of the critical need for

1 action on many important issues. Stimulating
2 the need is greatly enhanced when research
3 supports initiatives. When educated, we see
4 dramatic results with the public, and even
5 lawmakers, in terms of action on issues.
6 The Council will always encourage that research
7 be conducted, be improved and updated, and be
8 made available always. We encourage NIOSH to
9 always be mindful of the value of the resources
10 you provide, and to help the Council by
11 supporting our public policy efforts by sharing
12 your valuable research.

13 Again I want to thank you for your time. Thank
14 you.

15 **DR. AGNEW:** Thank you for your presentation.
16 Deb Jones I know is here. Would you like the
17 podium, Deb -- representing Maryland Center for
18 Environmental Training.

19 **MS. JONES:** Good morning. I'm Debora Jones. I
20 work with the Maryland Center for Environmental
21 Training based at the College of Southern
22 Maryland. I want to thank you for the
23 opportunity to present some of the challenges
24 and research opportunities for addressing the
25 incidence of illness and injury in the health

1 care industry.

2 As a nurse who has worked in a hospital, home
3 care, nursing homes, and as a safety
4 professional, this is a topic of personal and
5 professional concern. For the purposes of my
6 comments, I focused on nursing in residential
7 care facilities and hospitals.

8 Employment in hospitals and nursing homes is
9 estimated to exceed 7 million workers. While
10 this number is impressive, it is far below the
11 number necessary to serve the needs of our
12 aging population. The U.S. Department of Labor
13 estimates that we have over 100,000 vacant
14 health care positions as we anticipate the
15 beginning of retirement for 78 million baby
16 boomers in the year 2010.

17 At the same time, our nurses are aging --
18 something I'm painfully aware of -- with an
19 average age approaching 50. Estimates of the
20 lack of availability of nursing care are
21 astounding. The Department of Health and Human
22 Services reported by 2020 we will need 2.8
23 million nurses, one million more than the
24 projected supply.

25 Our health care work force crisis is not

1 limited to nurses. The American Hospital
2 Association projects severe work force
3 shortages in both clinical and non-clinical
4 workers, to include, yes, nurses, but also
5 radiology techs, pharmacists, medical records
6 personnel, housekeepers and food service
7 personnel. It is most disturbing to recognize
8 that the joint commission on accreditation of
9 hospitals has identified thousands of hospital
10 deaths each year related to the nationwide
11 nursing shortage.

12 What does our health care work force crisis
13 have to do with ergonomics and injury
14 prevention, a question you might be asking at
15 this point. The connection becomes quite clear
16 when we acknowledge that health care workers
17 are leaving the profession at an alarming rate,
18 partly due to health and safety concerns, and
19 continue to be injured at rates that far exceed
20 our rate of injury in private industry.

21 A 2001 American Nurses Association survey
22 confirmed that nurses are concerned about their
23 health and safety at work. 88 percent of the
24 responding nurses reported that health and
25 safety concerns influenced their decision to

1 stay or to leave nursing. 60 percent
2 identified disabling back injury within their
3 top three health and safety concerns.
4 Bureau of Labor Statistics data support the
5 extent of our health care worker injury crisis.
6 The rate of non-fatal occupational injury and
7 illness in the private sector in 2004, as was
8 mentioned earlier, is 4.8 per 100 full-time
9 equivalent workers, while hospitals report a
10 rate of 9.7 and nursing homes 8.3. Of
11 particular note is the rate for what we call
12 "all other illness" cases where the OSHA
13 record-keeping standard directs us to record
14 our cumulative workplace injuries. The private
15 industry rate per 10,000 full time workers is
16 18, versus 54.3 in hospitals and 26.4 in
17 nursing homes.

18 The Maryland Center for Environmental Training
19 recently completed an ergonomics "train the
20 trainer" program funded by an OSHA Susan
21 Harwood grant, in cooperation with the Johns
22 Hopkins Bloomberg School of Public Health
23 Education and Research Center. Development and
24 delivery of the train the trainer curriculum
25 allowed us entrance into 13 Maryland-based

1 nursing homes. Delivery of the curriculum with
2 the support of Maryland Occupational Safety and
3 Health facilitated our interaction with
4 representatives of an additional 27 Maryland-
5 based health care facilities. Anecdotal data
6 collected through the delivery of the training
7 is indicative of how far we have to go to
8 improve the health and safety of this critical
9 working population.

10 Of the 195 attendees from our site program,
11 only one had read or reviewed OSHA's ergonomics
12 guideline for nursing homes. Pre-planning site
13 visits identified care givers working without
14 the benefits of electric beds and assisted
15 resident-handling devices while we are
16 preaching and teaching concepts of neutral body
17 postures and zero lifting policies. Ancillary
18 department staff, including laundry,
19 housekeeping and food service, are consistently
20 left out of injury prevention initiatives,
21 while being exposed to significant risk for
22 injury, especially in manual material handling.
23 Certified nurse assistants and nurses that
24 teach nursing assistants, when asked, admit
25 that prevention of work-related injury is not

1 currently included in their training.
2 Registered nurses describe working in a, quote,
3 patient-focused, unquote, environment with
4 little room for worker focus and the prevention
5 of worker injury.

6 The answer to our health care staffing crisis
7 is not recruitment and training alone, but
8 should incorporate strategies for keeping our
9 existing workers at work, and those entering
10 the health care work force safe and injury-free
11 in the future. We think some of these areas of
12 future research may include injury prevention
13 strategies for an aging work force; economic
14 models for justification of patient-handling
15 and material-handling equipment; exploration of
16 our educational system for certified and
17 licensed health care professionals, with
18 consideration of opportunities to incorporate
19 concepts of injury prevention and ergonomics;
20 methods for evaluation of current injury-
21 prevention training; and effective means for
22 dissemination of injury-prevention information
23 within the health care industry. Thank you.

24 **DR. AGNEW:** Thank you, Debora. And next I'd
25 like to ask my colleague, Sheila Fitzgerald, to

1 take the floor. Sheila's going to discuss
2 disabled workers. Sheila usually uses this
3 against me.

4 **MS. FITZGERALD:** Thank you very much. I'm
5 Sheila Fitzgerald from the Johns Hopkins
6 Education and Research Center, and I direct the
7 occupational health and environmental nursing
8 program. I'm pleased to present information at
9 this town hall meeting to describe the need to
10 -- for research regarding the employment of
11 individuals who are born with a disability or
12 who acquire a disability over the course of
13 their working life, a NORA vulnerable
14 population.

15 As a woman who was diagnosed with a chronic
16 disease in 1984, during the early stages of my
17 career, my work life did not end for the
18 following reasons: I have a slowly progressive
19 disease that has been managed well by me and my
20 health care providers; an employer who has made
21 accommodations for me, on request; and family,
22 friends and coworker support. Since 1984 I
23 have also benefited from a stimulating work
24 environment, a good salary and generous
25 benefits that have been -- allowed me to escape

1 the cycle of marginalization, poverty and
2 social exclusion that so many individuals with
3 disabilities experience. I happily have been a
4 contributing member of society and a taxpayer,
5 and not on the roles of Social Security
6 Disability.

7 The passage of the Americans with Disabilities
8 Act in 1990 provided that individuals with a
9 disability were legally entitled and not to be
10 discriminated against during any stage of the
11 employment process. However, selective
12 demographic, economic, occupational, physical,
13 psychosocial and environmental factors continue
14 to hamper the process to enable individuals
15 with disabilities to achieve employment. Data
16 from the National Health Interview Survey
17 conducted in -- between 1983 and 1985 found
18 that 79 percent of adults without disabilities
19 were working, and only 37 percent of those with
20 disabilities were employed. Those individuals
21 who reported work disability, defined as an
22 inability to perform work resulting from
23 physical, mental or other health conditions of
24 six months or more duration, included 12.8
25 million persons aged 16 to 64 years. About 12

1 percent of conditions identified in the NIHS
2 case activity limitations, the broadest
3 measures of disability. Of the conditions
4 reported by the NIHS that cause activity
5 limitations, heart disease ranks first,
6 followed by back disorders, arthritis,
7 orthopedic impairments to the lower
8 extremities, and asthma. I would also like to
9 add to this list of diseases and conditions a
10 major risk factor for multiple chronic
11 diseases, obesity, which has reached epidemic
12 proportions in the United States, and will have
13 implications for worker health and risk of
14 injuries. I would also like to emphasize the
15 frequent association between mental health
16 disorders -- namely depression, as discussed
17 earlier by Martina Lavrisha -- and chronic
18 disease.

19 The indirect and direct annual costs of
20 disability is estimated to be greater than \$170
21 billion. Of note are interesting Department of
22 Labor statistics that reported that the working
23 disabled have high productivity rates, better
24 safety records, that they do not escalate
25 insurance rates for companies, and have

1 comparable attendance records to the working
2 well.

3 As we age, our likelihood of having a
4 disability of some kind increases. With the
5 baby boom generation approaching later life,
6 there will be more individuals at risk for
7 disability, which will have implications for
8 employers and the workplace environment.
9 Studies conducted by Cornell University to
10 examine employer practices in response to the
11 employment provisions of Title 1 of the ADA
12 report these results. Topical areas identified
13 by those surveys included lack of related
14 experience with the hiring process, lack of
15 required skills/training, supervisor knowledge
16 of accommodation, attitudes/stereotypes, cost
17 of accommodation, cost of supervision, and
18 finally cost of training.

19 This brief overview highlights important areas
20 for researchers, policy makers and employers to
21 investigate in order to bring the unemployment
22 rate for persons with disabilities in line with
23 that of the general public, and to improve
24 integration of persons with disabilities into
25 the work force.

1 Thank you very much.

2 **DR. AGNEW:** Thanks, Sheila. The next person to
3 speak is Lisalyn Jacobs, who jumped at the
4 opportunity to present here when I proposed
5 that she might address domestic violence and
6 its relationship to the workplace, something
7 that's been in the news a bit around here
8 recently.

9 **MS. JACOBS:** Good morning, everyone. I am
10 Lisalyn Jacobs, vice president of government
11 relations for Legal Momentum. Legal Momentum
12 is the new name of the NOW Legal Defense and
13 Education Fund, and is a 35-year-old
14 organization with a history of advocating for
15 women's rights and promoting gender equality.
16 As I begin I'd like to thank NIOSH and both the
17 Johns Hopkins and Harvard Schools of Public
18 Health for holding this important forum and for
19 allowing us to appear here and speak today.
20 Legal Momentum chairs the National Task Force
21 to End Sexual and Domestic Violence Against
22 Women, a coalition of over 2,000 groups under
23 whose umbrella we are currently working on the
24 second reauthorization of the Violence Against
25 Women Act. From the Task Force's standpoint,

1 workplace safety and the economic independence
2 that goes along with it is a crucial necessity
3 for victims of sexual and domestic violence
4 seeking to escape abusive situations.
5 And in the interests of time, I just want to
6 say two things. One is that I will be making
7 numerous references to a number of attachments
8 which I have in my bag, most of which can be
9 found on our web site, legalmomentum.org. And
10 also, when I use the words "sexual and domestic
11 violence", those are a shorthand for the four
12 issues that we are working to eliminate when
13 we're working on the Violence Against Women
14 Act. And those would be domestic violence,
15 sexual assault, dating violence, and stalking.
16 But you will hear me, for the remainder of my
17 time, refer to them again in shorthand as
18 sexual and domestic violence.
19 So again, from the standpoint of the Task
20 Force, workplace safety and economic
21 independence are crucial linchpins for victims
22 of sexual and domestic violence seeking to
23 escape abusive situations.
24 Legal Momentum has worked to secure this goal
25 at the federal, state and local levels by

1 working with employers to create workplace
2 policies on domestic and sexual violence,
3 advocating for legislation that affords victims
4 of violence in the workplace the opportunity
5 for unpaid leave to attend to safety planning
6 or legal issues caused by the violence, and by
7 advocating that unemployment insurance be
8 available to victims and their family members
9 if they need to relocate in order to escape the
10 violence. Attached to my testimony are a
11 number of fact sheets that we produced in this
12 regard, as well as excerpts of our testimony in
13 support of the economic security provisions
14 that were included in the Senate version of the
15 reauthorization of the Violence Against Women
16 Act.

17 Next I think it will be helpful to talk about
18 sexual and domestic violence in the workplace
19 in the abstract, and also quite concretely. On
20 the abstract side of the equation, some
21 statistics will help illuminate the magnitude
22 of this issue.

23 Between one and three million Americans are
24 physically abused by a current or former
25 intimate partner each year.

1 Approximately ten million have been stalked at
2 some point in their lives, and 80 percent of
3 these victims are women.

4 The Bureau of National Affairs has estimated
5 that domestic violence costs employers between
6 \$3 billion and \$5 billion annually in lost time
7 and productivity, while other reports range
8 significantly higher, between the figures of \$6
9 billion and \$13 billion annually.

10 Studies indicate that between 35 and 56 percent
11 of employed battered women surveyed were
12 harassed at work by their abusive partners.

13 Such harassment can also include their
14 partner's interfering with their ability to
15 work, preventing them from going to work,
16 harassing them at work, limiting their access
17 to cash or transportation, and sabotaging their
18 child care arrangements.

19 Domestic violence also affects the
20 perpetrators' ability to work. Nearly 50
21 percent of abusers report having difficulty
22 concentrating at work, and 42 percent report
23 being late to work because of the abuse.

24 The General Accounting Office has found that
25 between one-quarter and one-half of domestic

1 violence report losing a job due to -- losing a
2 job, due at least in part to domestic violence.
3 More than 35 percent of stalking victims report
4 losing time from paid work due to stalking, and
5 seven percent never return to work.
6 Almost 50 percent of sexual assault survivors
7 lose their jobs or are forced to quit in the
8 aftermath of the sexual assault.
9 For additional documentation of this
10 phenomenon, again, I have attached some
11 materials which can be found on our web site.
12 I'd now like to take a moment to talk about
13 just one of the victims whose story is
14 inadequately captured by the statistics I just
15 provided. Those of us who live in the
16 Metropolitan Washington area may have heard or
17 read about the woman who sought and received a
18 protective order from the courts here in Prince
19 Georges County, only to have the judge
20 subsequently lift that order, over her
21 objections. Several weeks later the woman,
22 Yvette Cade, was critically injured when her
23 husband allegedly doused her with gasoline and
24 set her afire. Because the media's coverage --
25 as in the *Washington Post* article I've also

1 enclosed -- has been heavily focused on the
2 inappropriateness of the judge's actions, the
3 fact that Ms. Cade's husband committed this
4 grievous act in her workplace, a T-Mobile store
5 in Clinton, has gone largely overlooked. I am
6 here to ask that you not overlook the totality
7 of Ms. Cade's story, and of others like her, as
8 you shape the National Occupational Research
9 Agenda.

10 As we've worked on these issues in the context
11 of the Violence Against Women Act, we've been
12 privileged to work with and have the support of
13 some simply fabulous employers, both state and
14 private, including Harman International, Liz
15 Claiborne and Altria, and the governors of
16 Arizona and Wisconsin, among others. Again,
17 more information is attached to my remarks.
18 The statistics I've provided, the story of
19 Yvette Cade and the countless others that she
20 represents, and our work with employers paints
21 a vivid picture of the problem we face. What
22 we desperately need as we struggle to assure
23 that victims of domestic and sexual violence in
24 the workplace can maintain their economic
25 independence and thereby escape their abusive

1 situations is a more concrete notion of which
2 approaches work to improve their safety. It
3 will be key in the pursuit of such research to
4 focus on the hardly incidental consequences,
5 for both employers and employees, of supporting
6 victims of sexual and domestic violence in the
7 workplace, including decreased absenteeism,
8 improved employee satisfaction, and decreased
9 health care costs for both employers and
10 employees.

11 With all the foregoing in mind, I'm pleased to
12 present our suggestions for the type of
13 research we urge NIOSH to pursue in the context
14 of domestic and sexual violence in the
15 workplace.

16 We have about five suggestions, and I will sort
17 of encapsulate them in one big picture -- one,
18 since I realize I have gone over time.

19 Among the suggestions we have is that some
20 research be devoted to assessing the impact and
21 effectiveness of workplace domestic violence
22 and sexual assault programs, including how
23 helpful these programs are to victims and
24 employers; the effects of programs on batterers
25 or perpetrators; the effect on workplace

1 fatalities; and the effects on job retention
2 and employee safety and satisfaction, as well
3 as cost savings to employers.

4 This research is also needed in the area of
5 already-existing state and local legislation to
6 figure out whether or not those types of
7 legislation have had any appreciable impact in
8 reducing workplace violence and improving
9 safety from both the worker standpoint as well
10 as the employer standpoint.

11 Once again I'd like to thank NIOSH and the
12 Johns Hopkins and Harvard Schools of Public
13 Health for holding this important forum, and
14 for allowing us to appear here today. Thank
15 you.

16 **DR. AGNEW:** Thank you very much, Lisalyn.
17 Thank you for representing that topic.

18 I think we're doing well in terms of time. Now
19 I'll ask if Anna Gilmore Hall is here --
20 present? I don't have a heads-up about which
21 people on this list are actually here in the
22 room.

23 Ron Jester? Fine. Please, yes. The floor is
24 yours. You're going to talk about farm safety,
25 I understand?

1 **MR. JESTER:** Good morning, and thank you for
2 this opportunity. I'm Ron Jester with the
3 University of Delaware, and I've been asked to
4 make some comments on behalf of Farm Safety for
5 Just Kids -- the founder, Marilyn Adams, who
6 lost a son in 1989 in a farm accident. And
7 also I'm going to make a few comments as
8 Executive Director for the DelMarVa Safety
9 Association, started back in 1975 -- older than
10 some of you are -- and I've been involved in
11 safety in the workplace.
12 Incidentally, as a member of the University, I
13 work with ASSE and a lot of safety
14 organizations in promoting safety and health,
15 and I've got a keen concern in NIOSH taking the
16 research data and getting it into the
17 workplace.
18 Let's start with the agricultural safety. Most
19 of you probably know that farming is the most
20 hazardous industry in the United States. The
21 death rate is up above 31 per 100,000. It's
22 followed -- or preceding that is mining, where
23 the death rate is about 28; and preceding that
24 is construction, where the death rate is about
25 15 per 100,000. So farming is the most

1 hazardous industry in the U.S., and probably
2 the least regulated.

3 Just to put it in perspective, if you worked
4 for the DuPont Company, the death rate is about
5 one per 100,000. For any of you into
6 skydiving, the death rate is about 22. So it's
7 more dangerous to jump out of an airplane than
8 it is to jump on a tractor.

9 Now Farm Safety for Just Kids tries to address
10 the issues with adolescents and children in the
11 workplace. And farming is the only industry,
12 of course, that permits children in the
13 workplace. In some industries where you would
14 not be permitted to take a tour unless you're
15 18 or older, yet in farming children well under
16 ten are operating farm equipment. So it's a
17 serious issue. It's a culture that, unless you
18 are exposed to it or you come from that
19 culture, you don't really understand the risk
20 and issues that are involved.

21 At the same time, it's the most hazardous
22 industry in the United States, and yet USDA
23 recently has failed to provide financial
24 support to land grant institutions to promote
25 agricultural safety and health. So we

1 appreciate the effort that NIOSH has put into
2 ag safety and health research, and we at the
3 University have certainly benefited from that.
4 Farm Safety for Just Kids has provided some
5 comments. Number one, they are involved in
6 community involvement and feel that that's
7 where a lot of effort should be directed.
8 They've established a chapter network of
9 community people to deliver important farm
10 safety and health messages, consequently
11 they're able to reach tens of thousands of
12 people with injury prevention information.
13 They also seek youth representation, grass root
14 volunteers, community leaders and safety
15 specialists from North America in this effort,
16 and they will continue to foster relationships
17 that help spread the farm safety messages.
18 One example, at Delaware we had two farm safety
19 day camps. Farm Safety for Just Kids provides
20 the leadership. In one of the day camps it's a
21 school-based program and the other one we
22 actually targeted at-risk populations,
23 specifically migrant children. And in a lot of
24 these efforts you look at at-risk populations,
25 and that is certainly one of them.

1 Three of their concerns is, number one, ATV
2 safety, and they give some statistics relative
3 to the injuries and fatalities, but it's sort
4 of the vehicle of choice in agriculture. 95
5 percent of the injured drivers under the age of
6 16 were riding on adult-sized vehicles.
7 Tractor safety continues to be the leading
8 cause of fatality in agriculture. And of
9 course most of the children and adolescents
10 that die in agriculture, it's a result of
11 incidences with tractors.
12 And then the third issue is rural health, and
13 Farm Safety for Just Kids has put together a
14 health safety kit to talk about sun safety,
15 food safety, water safety and respiratory
16 health. So those are some of their concerns.
17 Relative to the DSA, some of the things that we
18 see, number one, the aging population; number
19 two, safety in a multi-cultural work
20 environment; and number three, small employees
21 -- employers and the challenge that they are
22 facing. Thank you very much.

23 **DR. AGNEW:** Thank you, Ron. Now let me take
24 one last check here to see if Ken -- Kenneth
25 Meade has joined us, or Anna Gilmore Hall. It

1 looks like that is a no for both of those.
2 Have I missed giving anyone the opportunity to
3 present here?

4 (No responses)

5 Then let us go back to our earlier opportunity
6 to ask you if anyone would like to make
7 comments or reflect on anything they heard
8 today, bring up any new issues.

9 **UNIDENTIFIED:** (Off microphone)

10 (Unintelligible)

11 **DR. AGNEW:** Okay. I actually had the easy job
12 this morning -- sorry?

13 **UNIDENTIFIED:** (Off microphone) Yes, comments
14 (unintelligible)?

15 **DR. AGNEW:** Yes.

16 **UNIDENTIFIED:** (Off microphone) Comments
17 regarding the agenda?

18 **DR. AGNEW:** And clarifications or statements.
19 We don't want to have any question/answer
20 debates or such exchanges, but if you'd like to
21 make a comment on what you heard, absolutely.
22 It's fine, we just want to add information.

23 **MR. LEGRANDE:** I'm Dave LeGrande, director of
24 occupational safety and health for the
25 Communications Workers of America. I want to

1 congratulate NIOSH for having the -- you might
2 say the guts to develop this agenda and move
3 forward, along with the School of Public Health
4 at Johns Hopkins.

5 As a -- an original member of the first NORA
6 work team back in the days of Dr. Donald
7 Millar*, if those of you in the audience
8 remember those days, I want to bring back the
9 focus for just a moment in -- in more of a
10 general sense to a topic that's been raised by
11 a number of you, but particularly focused upon
12 the health care industry. And I want to
13 broaden that focus to include all workers in
14 the U.S., and that is the issue of holistic
15 ergonomics, or as we might refer to it in the
16 United States, we still have this hang-up about
17 thinking of ergonomics as it's defined in
18 Europe to include both physical and
19 psychosocial issues. So I would call it
20 holistic ergonomics in the spirit of looking
21 at, in an interactive sense, both physical and
22 psychosocial issues related to ergonomic
23 hazards in the workplace.

24 I would encourage the agency to move again on
25 focusing on those issues. I just looked at the

1 most recent BLS data and I was thoroughly
2 amazed that OSHA has, in its unique way, pretty
3 much eliminated musculoskeletal disorders as an
4 issue of concern in the American workplace.
5 Indeed, we see every day musculoskeletal
6 disorders occurring, as well as very high
7 stress rates in the telecommunications
8 industry. Those of you who are familiar with
9 customer service work know how stressful that
10 work is and the very high rate of MSDs and
11 stress-related health problems in those work
12 environments.

13 I also want to point out a study that was
14 recently conducted in North Carolina among
15 poultry workers that found MSDs occurring at
16 catastrophic rates. In addition, some of the
17 work that we have done, as well as work that
18 the Telecommunications International has done
19 in a study just recently published conducted in
20 Europe, which also find catastrophic rates of
21 MSDs and stress disorders among
22 telecommunications and customer service workers
23 within that group.

24 So again I want to look at an issue that really
25 affects the largest number of American workers,

1 and that is a holistic ergonomics and would
2 encourage NIOSH to revisit that issue. NIOSH,
3 again to its credit, has stood on both feet and
4 -- and has tackled these issues in a somewhat
5 precarious position. That is, they've put
6 themselves in somewhat of a precarious
7 position. Unfortunately, the folks at OSHA
8 have moved into the Department of Commerce and
9 have jumped in bed with all the employer
10 communities and have pretty much given up their
11 concern about workers' rights. Their concern
12 now is employer rights.

13 Another issue that I would suggest focusing on,
14 many of us work on a daily basis with a set of
15 guidelines. They're standards developed in
16 1989, guidelines developed by the American
17 Society of Heating Professional -- Heating,
18 Refrigeration and Air Conditioning Engineers,
19 ASHRE. OSHA tried, somewhat haphazardly, to
20 initiate an indoor air quality standard-setting
21 process. Did that, and unfortunately tried to
22 include environmental tobacco smoke and the
23 Tobacco Institute came through the wall in
24 opposition to that.

25 I would again encourage the agency to look at

1 IAQ-related issues and health problems.
2 Indeed, the majority of U.S. workplaces --
3 indoor workplaces are not in conformance with
4 those 1989 ASHRE guidelines. Every study
5 that's been done by engineers in that field
6 have shown widespread violations of the ASHRE
7 guidelines, again an issue that affects very
8 large numbers of people.
9 Again I want to congratulate Jackie and all of
10 you for attending, but also NIOSH for stepping
11 forward and moving forward with this very
12 important agenda.

13 **DR. AGNEW:** Thanks, Dave. Thanks for adding
14 those comments. Now we're going to ask you to
15 write them up and submit them to the docket.
16 I think with that I'm going to turn this back
17 over to Jack, who has the onerous task of
18 trying to sum this up, where all I had to do
19 was stand up here and be the conductor.

20 **DR. DENNERLEIN:** We can compete for the hardest
21 task. I actually think keeping time is the
22 hardest task.

23 **DR. AGNEW:** Well, that was up to Ann, actually.

24 **DR. DENNERLEIN:** Because actually I have the
25 fun task of listening, and that's what we're

1 here for today, and so I actually really
2 enjoyed this morning. I thought all comments
3 were excellent. And as a mentor of mine once
4 said, the teacher always learns, and I
5 definitely learned a lot this morning.
6 One thing that -- one major theme that was very
7 clear across most of the speakers this morning
8 is the work environment has changed in the
9 first ten years of NORA, and the second decade
10 really needs to think about how to adapt to
11 those changes and move forward with those
12 changes.

13 A lot of issues around the working force is
14 also changing, thinking about mental health as
15 a huge issue that we need to address in a
16 holistic way. That came across several --
17 several different talks.

18 Disability, we had lots of -- several speakers
19 talk about making sure that the job fits to
20 disabled workers as well as to the productive
21 workers so that everyone's productive in an
22 equal way, and I think that's a clear -- clear
23 message, as well.

24 A challenge that -- to the health community is
25 dissemination of our information. I think that

1 was another research priority that many folks
2 discussed today, and that's -- especially for
3 the small and medium-sized industries, how do
4 we get out to -- to the smaller folks and how
5 do we get this information to them in a way to
6 -- to (unintelligible), so a lot of research in
7 terms of dissemination.

8 Also, one last thing is partnerships, thinking
9 about new partnerships for the next decade and
10 thinking about creative ways. Another issue
11 that came up today was a lot about productivity
12 and how to measure productivity of workers and
13 thinking about that, and so I think
14 partnerships in terms of safety and -- and a
15 business model came up in one speaker today I
16 thought was also challenging, thinking beyond
17 just the -- the health and safety community,
18 but thinking about relationships with -- with
19 policy experts as well as business experts. I
20 think that came across.

21 So those were the themes that I heard this
22 morning. There was a lot of different
23 industries and a lot of different specific
24 issues, but those were the general themes and
25 highlights that I heard from you this morning.

1 And I'm sure the docket will represent other
2 ones that I missed, so I apologize if I've
3 missed other themes that you've heard and that
4 you feel are just as important as the ones I've
5 mentioned this morning.

6 (Off microphone) So with that, I want to thank
7 all the speakers and I'm going to turn it over
8 to Sid, who's going to tell us more about
9 (unintelligible) for the rest of today.

10 **DR. SODERHOLM:** Thank you. Well, I -- I'm sure
11 we'd all like to thank Dr. Agnew and Dr.
12 Dennerlein and Dr. Berry, who's been holding
13 the watch here -- and hasn't suffered any
14 violence yet so she must be doing a good job --
15 so -- so we thank you very much and we
16 appreciate everyone's coming.

17 There's a -- you may have noticed, there's a
18 director today, and he hasn't been named and
19 his staff has been hardworking. Dr. Max Lum is
20 in the back keeping everything moving, and he's
21 been really the person who's made this all
22 happen so this series of meetings is getting
23 kicked off the ground. And his staff has been
24 working very hard, so we'd like to -- I -- I
25 think because of the pending weather forecast,

1 we want to get started as quickly as possible.
2 And going along with the theme of stress, we're
3 all at work today, let's try to get back at
4 1:00 o'clock instead of 1:15 if you're going to
5 -- or we hope you all will be able to join us
6 for the afternoon session, and we'll try to
7 start at 1:00 o'clock. Thank you very much.
8 (Whereupon, a recess was taken from 11:50 a.m.
9 until 1:00 p.m.)

INTRODUCTION TO THE SECTOR APPROACH

NANCY STOUT, NIOSH; STEPHANIE PRATT, NIOSH

10 **MS. STOUT:** Well, good afternoon. Is it on?
11 Hello? Hello? Oh, yeah, it is. You just have
12 to get really intimate with it.
13 My name is Nancy Stout. I'm the Director of
14 the Division of Safety Research for NIOSH, and
15 I'm also the program manager for the
16 transportation, warehousing and utilities
17 sector research program. And thank you all for
18 coming back. It's great to see you this
19 afternoon, and we're looking forward to hearing
20 comments this afternoon, particularly specific
21 to the transportation, warehousing and
22 utilities sector.
23 But before we start, I'd like to introduce
24 Stephanie Pratt. Stephanie's an epidemiologist

1 with NIOSH and she's also the program
2 coordinator for the transportation, warehousing
3 and utilities research program. And to sort of
4 set the stage, she's going to make a few
5 remarks and tell us a little bit about this
6 industry sector and some of the safety and
7 health issues. Stephanie Pratt.

8 **MS. PRATT:** Thanks, Nancy. I'm Stephanie
9 Pratt. I'm in the NIOSH Division of Safety
10 Research in Morgantown, West Virginia. As
11 Nancy said, I'm the NIOSH coordinator for the
12 transportation, warehousing and utilities
13 sector, which essentially means that I work
14 with Nancy, who is the manager, to promote
15 occupational safety and health research that
16 would benefit workers in these industries.
17 Since many of you were here this morning and
18 heard the overview of NORA, I'm going to very
19 quickly run through this material. The
20 National Occupational Research Agenda, or NORA,
21 started in 1996. We are now entering the
22 second decade. We'll also -- I'll tell you a
23 little bit more about the NORA research
24 councils and how you can participate, and then
25 give you some specifics on the transportation,

1 warehousing and utilities sector and how we're
2 thinking in terms of addressing the top
3 problems in those industries.

4 As we said this morning, NORA -- as originally
5 envisioned -- dealt with 21 different priority
6 areas, and it was a national partnership effort
7 to define and conduct priority research for
8 occupational safety and health. We looked at
9 the seriousness of the hazard. We looked at
10 the number of workers exposed, the magnitude of
11 risk, and how much research was already out
12 there and how much additional research was
13 needed when we were defining those priority
14 areas and also creating the research agendas
15 within those priority areas.

16 NORA was, and it still will be in the second
17 decade of NORA, based on working with
18 stakeholders to identify occupational safety
19 and health research areas that are not just
20 applicable to NIOSH, but also to the nation.
21 We have been working together to address
22 priority areas and have successfully leveraged
23 many of the resources that are available so
24 that we can support high priority research, and
25 we certainly intend that to be the hallmark of

1 the second decade of NORA, as well.
2 As has been said earlier, one of the keys will
3 be to move research to practice in workplaces
4 by organizing our partnerships by industry
5 sector, which is probably the single most
6 important change from the original NORA. This
7 new emphasis has its rationale in that if you
8 implement an intervention or a program by
9 industry, that that will increase the chances
10 that the intervention will succeed because the
11 people who are the stakeholders in the industry
12 are in the best position to identify the top
13 problems in the industry and then also to
14 recognize the opportunities to do something
15 about those problems and to also recognize the
16 barriers to solving those problems.
17 The new industry-based approach is going to
18 emphasize top problems first. We might define
19 a top problem in any number of ways. It could
20 be defined in terms of risk, magnitude,
21 exposure, a type of injury, a type of disease,
22 or an occupational safety and health system
23 failure. We will be developing separate
24 research strategies for each of the eight
25 different industry sector groupings, one of

1 which is transportation, warehousing and
2 utilities.

3 Clearly there will also be a number of research
4 needs that cut across many industry sectors,
5 and these will be addressed by a group that's
6 charged with identifying these common needs and
7 then coordinating among the affected industry
8 sectors. Examples here are injuries -- MSDs
9 and the needs of special populations. One
10 specific thing that comes to mind for me is
11 motor vehicle crashes, which is my particular
12 interest. And while we have about 40 percent
13 of the workers -- worker deaths from motor
14 vehicle crashes occurring in the transportation
15 industry, we need to be aware that the other 60
16 percent occur across a range of other
17 industries and that that will be something
18 that's important for the cross-sector group to
19 address.

20 The idea of the sector research councils is to
21 have representation from inside and outside
22 NIOSH, with diverse members so that we have
23 everybody who's in place and needed to promote
24 those kinds of partnerships represented on the
25 councils. These research councils are going to

1 be the successors to the 21 teams that were in
2 place for the original NORA research agendas,
3 the difference being that they will focus on an
4 industry sector.

5 This just shows you some examples of the
6 different groups we expect to see involved in
7 sector research councils.

8 In general, what we're envisioning is that the
9 sector research councils are going to look at
10 research needs, research gaps and barriers to
11 implementation. And then based on these
12 analyses, they're going to develop over-arching
13 strategicals to help eliminate the worst
14 problems in the industry sector or in specific
15 high-risk subsectors within the industry. The
16 research councils are also going to develop
17 intermediate goals and measures that would help
18 us to track the progress towards achieving the
19 strategicals. They'll foster partnerships to
20 help secure and leverage funding and to get the
21 needed research conducted, and to also help
22 facilitate the implementation of research
23 results in the workplace.

24 NIOSH is here to promote the process, to also
25 provide in-house research and surveillance to

1 advance each sector's research agenda, support
2 the needs of the research councils, and to
3 support some of the research and training that
4 takes place outside NIOSH. I can't stress
5 enough that NIOSH isn't the owner of NORA.
6 NIOSH rather sees itself as the steward of the
7 process. NORA is the occupational safety and
8 health research agenda for the nation.
9 There are a number of ways you can participate
10 and stay informed. By being here today you've
11 certainly demonstrated your interest in
12 providing input on the most pressing problems
13 in transportation, warehousing and utilities.
14 You can also volunteer to be a member of a
15 sector research council, and these sector
16 research councils are still being formed. Or
17 you could also have a role as a future reviewer
18 for a research agenda or for other documents.
19 I will put up the same list of web addresses
20 that you saw earlier in case you didn't get a
21 chance to copy those down. If you're
22 interested specifically in the sector research
23 council for transportation, warehousing and
24 utilities, please speak with me or with Nancy
25 because we'll be certainly heavily involved

1 with those groups.

2 I just want to take a few minutes to review the
3 industries that make up transportation,
4 warehousing and utilities so that we're all
5 clear on how we're defining that, and to also
6 quickly run through some of the major injury
7 and illness problems that we see in the sector,
8 as shown by national data.

9 This is one of the eight industry groupings
10 that are being used to frame the development
11 and implementation for the second decade of
12 NORA. We based the sector groupings on the
13 North American Industry Classification System,
14 or NAICS, which has recently supplanted the
15 SIC, the Standard Industrial Classification.
16 For this sector we are using NAICS codes 48, 49
17 and 22 to make up this industry sector.

18 Transportation, which you see here, has the
19 greatest number of workers within this sector,
20 with an estimated 5.6 million workers in 2004.
21 These are data from the current population
22 survey, which is a household-based survey of
23 employment. Transportation consists of all of
24 NAICS codes 48 and part of 49. In addition to
25 the standard modes of transportation -- air,

1 rail, water, truck, transit and pipeline --
2 this group also includes transportation
3 specifically for sightseeing. It has the U.S.
4 Postal Service and it also has couriers and
5 messengers. Finally, it has support activities
6 for all transportation modes, and this would
7 range from air traffic control to marine cargo
8 handling to tow trucks.

9 Warehousing and storage, which makes up the
10 remainder of NAICS codes 49, and then
11 utilities, which is NAICS code 22, employ
12 considerably fewer workers than the NAICS
13 groups that make up transportation.

14 Warehousing had an estimated 233,000 workers in
15 2004; utilities, slightly less than 1.2
16 million. I should say that although the
17 warehousing employment looks comparatively low,
18 we have to remember that there are many, many
19 other people who are in other industries,
20 including transportation, retail, wholesale,
21 who are clearly doing the same kinds of work
22 that we would find in establishments that were
23 classified strictly as warehousing
24 establishments, so that this -- we shouldn't
25 construe that this means that this group

1 shouldn't receive attention, that their risks
2 aren't -- don't carry over into many other
3 industries.

4 Warehousing and storage has more detailed codes
5 that cover general warehousing and also
6 warehousing of refrigerated products and farm
7 products, as well. Utilities covers
8 electricity, natural gas, water and sewage.
9 This is a bit different than the old SIC codes.
10 At that point we had communications industry,
11 such as phone and TV cable, included in
12 transportation and utilities. Now with the
13 NAICS codes, communications is within
14 information, which is one of the services
15 industries.

16 This slide shows fatality data from 2004 for
17 the different subsectors within transportation,
18 warehousing and utilities that had the most
19 fatalities in 2004. There were 880 fatalities
20 in the sector, which would be about 15 percent
21 of the U.S. total for 2004. As you can see,
22 truck transport dominates, with over 500
23 fatalities from all causes. Support activities
24 for transportation was next with 80 fatalities.
25 Transit and ground passenger operations had 75

1 fatalities, 57 of which were in taxi
2 operations.
3 Utilities had 51 fatalities in 2004. This was
4 compared to only 32 in 2003, and I haven't had
5 an opportunity to look closely at this to see
6 to what we might attribute that. What comes to
7 mind is hurricane cleanup possibly, but I
8 haven't looked at the data.
9 Rail transport, sightseeing transport and the
10 U.S. Postal Service aren't shown here. They
11 each had fewer than 20 fatalities in 2004.
12 This will give you a good idea of the fatal
13 injury problems across the entire sector. In
14 2004 we had transportation incidents accounting
15 for 641 of the 880 fatalities in the sector, or
16 about 73 percent. We had another 86 deaths,
17 about ten percent, due to contact with objects
18 or equipment. Assaults and other violent acts
19 accounted for 59 deaths, or about seven
20 percent, and that was down from about ten
21 percent in the previous year. Most of the
22 workers in the sector who were victims of fatal
23 assault were either taxi drivers -- the great
24 majority -- truck drivers or tow truck
25 operators. Fatality numbers for falls and for

1 exposure to harmful substances, which would
2 include electric -- electrical energy, were low
3 compared to other causes, but these numbers
4 that you see here actually represent large
5 increases from 2003.

6 Here's a little bit of data on non-fatal
7 occupational injuries and illnesses reported by
8 the Bureau of Labor Statistics. This shows
9 days away from work, occupational injuries and
10 illnesses, and we use those as a proxy for
11 being the more serious cases. As with
12 fatalities, the truck transportation subsector
13 had the highest number of cases, over 46,000 in
14 2003. And air transportation and couriers each
15 had 20,000 to 25,000 cases that resulted in
16 days away from work.

17 Incidence rates per 100 full-time equivalent
18 workers were higher for many transportation
19 subsectors than for all private industry, which
20 had a rate of 1.5 per 100 in 2003. Air
21 transportation, couriers and truck
22 transportation, which had the highest
23 frequencies, also have the highest rates.
24 Incidence rates for air transportation and
25 couriers both approached four times the rate

1 for all private industry. Truck transportation
2 and warehousing both had incidence rates at 3
3 or above.

4 I'm going to give you three slides that
5 highlight the leading non-fatal injury events
6 for the three subsectors that have the highest
7 frequencies and rates of non-fatal injuries.
8 For truck transportation, the top five in 2003
9 were over-exertion, falls on the same level,
10 transportation incidents, struck by object, and
11 falls to a lower level. For air transportation
12 the leading causes were over-exertion in
13 lifting, other kinds of over-exertion, being
14 struck by an object, falls on the same level,
15 and transportation incidents. For the couriers
16 and messengers subsector, over-exertion to
17 lifting was again the leading cause of non-
18 fatal injury that resulted in days away from
19 work, followed by other kinds of over-exertion,
20 falls on the same level, being struck by an
21 object, and being struck against an object.
22 We also have some information from BLS on
23 occupational illnesses. Here is some
24 information on the subsectors in
25 transportation, warehousing and utilities that

1 have high rates of occupational illnesses. For
2 comparison, the rate for all private industry
3 was 30.7 illnesses per 10,000 full-time
4 workers. Scheduled air transportation,
5 couriers, urban transit systems and utilities,
6 particularly water and sewage, all had rates
7 that were well above the overall rate.
8 For occupational skin disease or disorders,
9 four subsectors had 2003 rates that were well
10 above the private industry rate of 4.9 --
11 water, sewage and other systems; support
12 activities for water transportation; long
13 distance trucking of specialized freight; and
14 electric power transmission. For respiratory
15 conditions there were four subsectors in 2003
16 that had rates above the private industry rate
17 of 2.2 per 10,000 FTE. Inter-urban and rural
18 bus transportation, with a rate of 28.3, is
19 particularly striking. And it's also
20 interesting to note that across these slides
21 that water, sewage and other systems had high
22 rates for total cases, for skin disease, and
23 for respiratory conditions.
24 Again here's some information on how you can
25 continue to stay informed about the progress of

1 the new NORA, and how you can continue to
2 provide input. You can subscribe to NIOSH e-
3 news, provide input through the web page, or
4 you can also volunteer to be involved in the
5 process as a member of the sector research
6 council or as a reviewer through that web page,
7 or you may e-mail Dr. Sid Soderholm through the
8 NORA coordinator mailbox.

9 I just want to remind you to put the dates
10 April 18 through 20th, 2006 on your calendar.
11 That will be the NORA symposium that will be a
12 celebration of the highlights of the first NORA
13 and the achievements of the first NORA, and it
14 will be an opportunity to kick off the second
15 NORA.

16 Also, for your -- those of you who are
17 interested specifically in motor vehicle
18 safety, we are continuing to expand the motor
19 vehicle topic page on the NIOSH web site. This
20 has all the publications related to vehicle
21 safety. It has fatality investigations
22 reports, as well as a number of other useful
23 external links. In the very near future we're
24 going to be putting up a new home page for the
25 transportation, warehousing and utilities

1 sector, and that will be the entry point that
2 will take you down to this -- this motor
3 vehicle page.

4 Here is my contact information if you have any
5 questions, and please talk to me at the break
6 or afterwards, or get in touch with me if you
7 have interest in being involved in the future
8 in the transportation sector.

9 I'd like to turn it over to Dr. Soderholm,
10 who's going to give us some ground rules for
11 this afternoon's presentations.

SECTOR STAKEHOLDER PRESENTATIONS

MODERATOR: STEPHANIE PRATT

SUMMARY: NANCY STOUT

12 **DR. SODERHOLM:** It looks as though many people
13 were here this morning, so I'll keep this very
14 short. Just a reminder, we are doing sound
15 recordings and will be having photos, so if you
16 didn't realize you were agreeing to that when
17 you signed in, then talk to them at the back
18 desk in case there's anything that we can do to
19 help.

20 The comments that are received will go into the
21 docket. They will be visible on the web site
22 and they will be considered by the
23 transportation, warehousing and utilities
24 research council, and certainly comments that

1 were -- where you indicate are dealing with
2 cross-sector issues or was issues that fall
3 into other sectors, too, will -- we'll try to
4 categorize them in those other sectors, but
5 certainly within the transportation,
6 warehousing and utilities.

7 And again sort of the "play nice" rules for
8 today are that we're here to hear everyone, and
9 so if you hear something you disagree with,
10 feel free to, as time is allotted, to stand up
11 and offer a differing opinion. But we're not
12 really here to criticize others; we're here to
13 listen, to react and to offer our opinions.
14 So if there aren't -- if there are any
15 questions, we can handle those. If not, we'll
16 move into the session. I think we're all
17 interested in moving it along and we'll keep
18 making sure hopefully we won't be snowed in.

19 **MS. PRATT:** The first presenter we have
20 scheduled for this afternoon is Nancy Hughes
21 from the American Nurses Association. Is Nancy
22 here?

23 **MS. HUGHES:** I would like to talk about what
24 American Nurses Association would like NIOSH to
25 -- to look at in their research agenda, and

1 that is safe patient handling to improve the
2 safety of the workplaces for nurses and other
3 health care workers, and also possibility there
4 of improving also patient care (unintelligible)
5 which I think we partner up with some of the
6 health care quality centers, but that would be
7 a great partnership and it's a (unintelligible)
8 for patient safety and quality and also for the
9 health care workers because the safe patient
10 handling research that has been done so far has
11 shown there's just such a great need to reduce
12 the lifting and the lifting program, so we're
13 very interested in safe patient handling and
14 motion.

15 Also the nurses are exposed to many chemicals
16 in the workplace and we're starting to see some
17 of the results of this, some of the problems
18 that are developing, health problems, due to
19 the chemicals and I believe that there's a
20 great deal of research that needs to be done in
21 this area of chemical exposure for nurses.

22 Fatigue is impacting on the job safety in
23 health care. The impact may be due to the work
24 hours, mandating work hours. I know there's
25 been some work done on that, but the

1 (unintelligible) shifts that nurses work in the
2 24 hour, just the way the health care industry
3 does its work, I think that's important to
4 continue research on fatigue.

5 And workplace violence in health care is
6 escalating and there is opportunity there to
7 include this area in the research.

8 We do see a need for the sharp safety
9 initiatives to continue. We have -- had such
10 legislation on the engineered safety devices
11 and things along that line. I'd like to see
12 things continue there, but as well in the
13 workplace practices because some -- that seems
14 to be one of the areas that's shaking out and
15 how do we make changes there in the work
16 practices -- the human factors that are
17 involved.

18 Many of -- and another area that is emerging,
19 too, that we're very -- getting more and more
20 concerned as the national pandemic plan and
21 some of the influenza concerns that we have and
22 other new health problems that have been
23 arising really globally. We have concerns
24 about respirator use, that the health care
25 workers are protected with various respirators

1 and the N-95, the fit testing, and I think
2 everything that's impacting in that area. I
3 think we need to offer as many options as we
4 can in the fit testing, be sure that the fit is
5 -- is protecting the nurses and other health
6 care workers, so I think there's some
7 opportunity there in -- in light of the recent
8 developments that are going on with respiratory
9 protection for health care workers.

10 And as I said earlier, many of the nursing
11 safety initiatives and interventions impact the
12 quality and safety of patient care as well.

13 For example, like our handle with care campaign
14 that has shown differences in reduction in the
15 lifting injuries and the short staffing
16 concerns with the -- like there -- two times
17 the number of needle stick injuries where there
18 was short staffing involved. There's some
19 research along that line, but I think we can't
20 stress enough about the link and I guess the
21 synergy that can be developed when you look at
22 the patient quality of care issues and the
23 health care safety issues. Thank you.

24 **MS. PRATT:** Thank you. The next scheduled
25 presenter is Robert Clarke from the Truck

1 Manufacturers Association.

2 **MR. CLARKE:** Good afternoon. Thank you very
3 much. My name is Robert Clarke. I'm the
4 President of the Truck Manufacturers
5 Association. We represent the major
6 manufacturers of medium and heavy duty trucks
7 manufactured here in North America. These are
8 trucks that weigh 19,500 pounds and above.
9 Before I begin, if you all will allow me just a
10 personal note, I would like to thank NIOSH
11 because more than 30 years ago I had the
12 opportunity to take an engineering short course
13 at the University of Michigan and was
14 introduced to some folks who were involved in
15 the then-very early NIOSH trainingship program.
16 And they offered me an opportunity to go to
17 graduate school that I don't think I would have
18 had otherwise, and so I went to graduate school
19 at Michigan on a NIOSH trainingship. And I've
20 always been very thankful for that and it had a
21 big impact on my life, so thank you.
22 With that in mind, let me -- there's just three
23 quick points I want to make. It's obvious --
24 you've seen from these statistics that in the
25 transportation arena, in the truck

1 transportation arena, the single largest
2 fatality risk that truck drivers face is of
3 course highway crashes. Those statistics that
4 you're seeing up there are a direct reflection
5 of crashes involving trucks. And
6 notwithstanding what the causes of those
7 crashes may be or the precipitating factors,
8 the fact remains that in certain kinds of truck
9 accidents, certainly single vehicle accidents
10 involving rollovers particularly, truck drivers
11 are extremely vulnerable. People don't think
12 of truck drivers as being vulnerable in these
13 big vehicles, and -- and typically think of the
14 risk to other road users, but as an occupation,
15 driving a truck unfortunately can be relatively
16 hazardous. And the biggest hazard they face is
17 crashes.

18 It's -- this is old news, but something that we
19 need to continue to focus on, and that is the
20 single biggest and best thing we could do to
21 help truck drivers survive crashes is to get
22 seat belt use rates up. This is old news, but
23 it's still relevant today. Unfortunately,
24 among truck drivers, despite the fact that car
25 driving population is up I believe in the 80

1 percent range of seat belt use, truck drivers
2 are still down below 50 percent. And thus --
3 and the proportion of drivers who die in
4 crashes is way out of proportion to those who
5 are not belted. I forget what the statistic
6 is, it's like 70 percent or something. It's
7 way, way up there. So seat belt use clearly is
8 the -- one of the keys to surviving a crash,
9 and ways to get drivers to wear them I think is
10 a challenge that we continue to face.
11 For our part, we continue to do work on
12 restraint system design with our suppliers to
13 try and make the systems as comfortable and
14 usable as possible. And additional research
15 support in that area from NIOSH or DOT would be
16 helpful, in addition to the age-old problem of
17 behavioral programs to convince drivers that,
18 unlike old-time steam locomotive, jumping out
19 of the cab is not the best thing to do when
20 faced with a imminent crash situation.
21 Along those same lines I'd like to encourage
22 NIOSH to fund something that they did years and
23 years ago and has been extremely helpful to our
24 industry, and that's anthropometric data, basic
25 anthropometric data. It's used in all our cab

1 habitability studies. It hasn't been brought
2 up here today, but we use that information, and
3 the truck driving population long ago -- I
4 think the last time this was done was 25 or 30
5 years ago -- was shown then and I'm sure is
6 still the case now -- is not the typical
7 population as a whole. So -- and now it's even
8 more so I think with more females and others
9 coming into the arena.

10 Last but not least, I'd like to focus on the
11 issue of diesel emissions. There's a lot of
12 interest in health-related issues associated
13 with diesel emissions. I would remind and ask
14 folks to keep in mind that the industry has
15 been on a continuing -- increasing -- severity
16 -- severity, that's not the right word --
17 stringency of emissions standards from EPA, and
18 diesel engines in the 2004 and now again in
19 2007 and 2010 time period are going to be
20 extremely clean mode of power equipment. So
21 issues arising from research studies pointing
22 out that older vehicles that -- I'll call them
23 legacy vehicles and/or poorly maintained
24 vehicles represent health hazards of one way or
25 another are probably not as useful in terms of

1 making decisions going forward about -- about
2 those same kinds of effects on the newer
3 vehicles. So I would ask that you keep that in
4 mind as you frame studies, that studying
5 yesterday's technology in many cases is not a
6 good road map to what the future may hold.
7 Thank you very much.

8 **MS. PRATT:** Thank you, Mr. Clarke. We have a
9 slight change in our schedule because of travel
10 constraints. We'd like to ask Brenda Cantrell
11 and Ruth Rutenberg from the National Labor
12 College, Rail Hazmat Training Program to -- to
13 come up. I'm not sure who's presenting, I'm
14 sorry.

15 **MS. RUTENBERG:** I'm not Brenda Cantrell, I'm
16 Ruth Rutenberg. Brenda has the misfortune of
17 being on vacation in Cancun and missing all our
18 snow, so I'm stepping in for her. I'm also
19 from the National Labor College, and Brenda is
20 the Director of the Railway Workers Hazardous
21 Materials Training Program. I've been
22 associated with it along with her for the last
23 15 years.

24 I just want to thank NIOSH for the opportunity
25 to share some views today about the

1 occupational safety and health needs of rail
2 workers, and it is railroad workers that is my
3 focus. And over the next decade we hope that
4 NIOSH will continue its intervention-oriented
5 research because that research really truly
6 does save lives and the health of workers.
7 The research that might be associated with rail
8 worker safety and health we believe is sorely
9 needed, and I'll give you some examples as I go
10 through.

11 The railway workers hazardous materials
12 training program is 15 years old. It has
13 formally trained approximately 20,000 railroad
14 workers in every state of the country, and it
15 also has an active peer training program so
16 that, beyond the 20,000 very formal students
17 that have been through the program, there are
18 hundreds if not thousands of other contacts a
19 year because when the peer trainers go back
20 onto the work site, we've documented how often
21 they -- they teach their fellow workers, either
22 formally or informally, about how to use
23 resource guides like the NIOSH pocket guide or
24 the ERG. Also how to -- how to get upwind and
25 what first response ought to be and how

1 important personal protective or chemical
2 protective equipment is so that the spread has
3 -- has been tremendous. In the last year alone
4 our peer trainers were working in 33 states of
5 the country. So it's a fairly broad network.
6 The program is funded by the National Institute
7 of Environmental Health Sciences. It's run by
8 the National Labor College, but it's also
9 associated with a number of other groups.
10 These include the AFL/CIO Department of
11 Occupational Safety and Health, the AFL/CIO
12 Department of Transportation and Trades, North
13 American Railway Foundation, and seven rail
14 unions -- the Brotherhood of Locomotive
15 Engineers, the Brotherhood of Maintenance of
16 Way Employees, the Brotherhood of Railroad
17 Signalmen, the International Brotherhood of
18 Boilermakers, the National Conference of
19 Firemen and Oilers, the Brotherhood of Railway
20 Carmen, and the Transport Workers Union. You
21 can see from this one of the side benefits of
22 this program has been that government funding
23 has brought these seven unions together.
24 They're seven different crafts and they've --
25 they've found that they have clearly common

1 interests.

2 The program also works in conjunction with the
3 ARC faculty from Johns Hopkins University to do
4 medical testing before trainees don their self-
5 contained breathing apparatus, chemical
6 protective equipment, and also to teach a
7 module on toxicology to all the students. Our
8 trainees work on major railroads and also on
9 commuter and short-line railroads.

10 And I just want to give you a quick overview of
11 sort of the size of the rail industry in terms
12 of its potential impact on health and safety.
13 There are approximately 160,000 railroad
14 workers. Freight revenue alone in 2004 was \$40
15 billion. There are approximately 500,000 rail
16 freight cars, with about 30 million carloads
17 annually. Each car weighs about 60 tons, with
18 the average train carrying well over 3,000
19 tons. And in terms of hazmat danger, that's
20 pretty powerful, what a 3,000 ton explosive
21 speed down the track can -- can do. In 2004
22 railroads carried 1.8 billion tons of freight,
23 and that totaled about 1.7 trillion ton miles.
24 So we're talking about a lot of activity.
25 And I'd like to first address the health risks

1 that face worker-- rail workers, and then
2 something about the injury.

3 Our workers -- our trainees alone have listed
4 over 200 hazardous materials that they're
5 exposed to, many of them on a very frequent
6 basis. The one that probably folks are the
7 most familiar with in the health and safety
8 area is chlorine, because the railroads carry
9 85 percent of the country's chlorine, and it's
10 one of the most dangerous chemicals and I'll --
11 remember chlorine, because I'm going to come
12 back to it in a minute with some examples.

13 But other highly dangerous materials that are
14 regularly transported include anhydrous
15 ammonia, sulfuric acid, nitric acid, methanol,
16 phenol -- the list is -- is very long. The
17 railroad workers like to talk about the "dirty
18 dirt" that they transport, which -- they can't
19 tell you what's in it, but they know it's bad.
20 Sometimes it glows green and yellow, so that --
21 there's radioactivity in it, but it's usually
22 stuff from hazardous waste sites that are full
23 of a huge soup of chemicals.

24 During the course of the training sessions,
25 trainees share information with the class about

1 work colleagues who have become ill and who've
2 sometimes died from diseases that they assume
3 are work-related. Sometimes it's only when
4 they hear the health risks of some of the
5 materials that they work with, like silica and
6 benzene, that they begin to make the links
7 between exposure and possible illnesses. Here
8 are just a few of the illnesses that have been
9 documented to be related to exposures rail
10 workers face: Asbestos-related diseases,
11 asthma, brain damage, brain cancer, chest pain
12 and tightness, colon cancer, dermatitis,
13 dizziness and other equilibrium disabilities,
14 headaches, kidney cancer, leukemia, liver
15 diseases, lung cancer and other severe lung
16 diseases, lymphoma, multiple myeloma,
17 pancreatic cancer, silicosis, stomach cancer,
18 skin cancer, testicular cancer, and throat
19 cancer.

20 Now -- I mean that's pretty horrible when these
21 folks first learn how really serious some of
22 their exposures are, and one -- one example
23 here are the folks who work in the shops and on
24 the train gang have gotten cancers at very
25 early ages. It's one of the things we wish

1 NIOSH would look at, actually. Many of these
2 people dying in their 30's and 40's or being on
3 kidney dialysis in their 30's and 40's, and the
4 fear that folks live with of getting cancer
5 almost any time.

6 The track workers, for example, come in contact
7 with every hazardous material that drips on the
8 track. And there's a very complex soup of
9 chemicals that that involves. The BMW, the
10 track workers, have actually very few retirees
11 because most of them die, actually, before they
12 reach that age.

13 The injury risks are also huge, and in 2004 in
14 Ohio alone there were over 100 accidents, more
15 than a quarter including hazardous cargo. With
16 all due respect to BLS survey data, I could
17 list by name over 100 rail workers who died
18 last year alone, and that's only from partial
19 lists, so the under 20 is just totally flawed
20 and I -- new data would be -- would be better.
21 There were two accidents in 2005 that I think
22 are really critical to mention quickly, one was
23 -- that both involve chlorine. In January of
24 this year a puncture in a rail car in
25 Spartanville, South Carolina killed an engineer

1 and eight other people. In June a train
2 accident in Bexar County, Texas left three dead
3 from chlorine, a conductor and two local
4 people. The transportation industry is a
5 sector where accidents and diseases are really
6 just very strong.

7 The railway workers program has consistently
8 used their evaluation research to intervention
9 strategies and improving worker safety and
10 health. And just real quickly, some of the
11 examples of that. When the Bexar County, Texas
12 disaster happened, it turned out that the
13 dispatchers, both in the Sheriff's Office and
14 in the Fire Department, really didn't know how
15 dangerous what they were facing was. And so
16 the railway workers program provided their on-
17 line training course to the dispatchers in the
18 San Antonio area, and in fact all of the
19 dispatchers were required to do this -- this
20 training.

21 Another is the Navaho workers who we train who
22 asks -- asked for joint work between -- between
23 rail workers and the community emergency
24 response people, so courses were held in
25 Chinle, Arizona. And also in New Jersey

1 emergency responders and rail workers have come
2 together in classes to help -- to help
3 coordinate the -- and I'm really almost done.
4 The third example that I'd like to just mention
5 is in this whole new area of security and
6 potential terrorism, the rail training program
7 has taken on a whole new focus on that. And
8 besides doing a simulation for like Level A
9 dress-out, they also do a full simulation on
10 incident command, teaching folks how to be
11 skilled support people in an emergency.
12 So just in closing, NIOSH research findings are
13 widely disseminated. We use them in training
14 all the time. They pave the way for safer and
15 more healthful workplaces, and we hope you'll
16 continue it.

17 **MS. PRATT:** Our next presenter is Judith
18 Murawski, representing the Association of
19 Flight Attendants.

20 **MS. STOUT:** (Off microphone) I should just
21 mention that Ann Berry is -- is keeping time
22 for us and she -- she makes hand signals, and
23 she's the designated (unintelligible) --

24 **MS. MURAWSKI:** I was here this morning.

25 **MS. STOUT:** -- (unintelligible).

1 **MS. MURAWSKI:** I'm sorry? Yeah, I got it.

2 Thanks.

3 Good afternoon, everybody. I'm Judith
4 Murawski. I'm an industrial hygienist with the
5 Association of Flight Attendants labor union,
6 and thank you very much, NIOSH, for inviting
7 this input. I must admit that, representing
8 workers who are covered by the Federal Aviation
9 Administration, we're not used to being asked
10 for input so this is very welcome.

11 In the past ten years NIOSH has funded a series
12 of flight attendant health studies, but for the
13 most part this is a research area that's
14 largely been ignored, perhaps partly because
15 flight attendants aren't covered by OSHA. And
16 perhaps partly, in my opinion, because in many
17 people's views, flight attendants are just
18 waitresses that fly -- right? -- so what could
19 possibly be hazardous about that.

20 There are so many research gaps in this
21 industry. I know I have less than five minutes
22 now so I will keep this as short as I can, but
23 the three that I want to describe all relate to
24 this hazard of exposure to partly-combusted and
25 aerosolized engine oil. And that may sound

1 like a hazard that's specific to maintenance
2 workers. It's not. We know that engine oil
3 gets in the air supply system on commercial
4 aircraft because aircraft mechanical records
5 confirm it, and because the ventilation ducts
6 are coated with oil afterwards. We know that
7 these oils contain up to three percent of the
8 neurotoxic tricresylphosphates, or TCPs, and
9 that upon heating these oils, carbon monoxide
10 gas can also be generated. This is supplied to
11 the passenger cabin and cockpit, so we're clear
12 here.

13 We know that TCPs get distributed to the cabin
14 air because they're on the recirculation
15 filters, and we know significantly that crew
16 members around the world report significant
17 neurological damage that is consistent with
18 exposure to tricresylphosphates and carbon
19 monoxide gas. I wish that I had time to give
20 you a real world example of that. I'd be happy
21 to afterwards for anybody who's interested. We
22 also know that this happens about one in every
23 1,000 flights on more problematic aircraft
24 types.

25 But despite what we know and despite the hazard

1 being recognized by two National Research
2 Council committees, most recently in 2002,
3 there are three big unanswered questions, and
4 we're hoping that NIOSH research can help
5 answer these questions.

6 The first two questions are about exposure.
7 What level of TCP exposures are we talking
8 about during these events? And how can a crew
9 member -- or passenger, come to that -- prove
10 that they were exposed? The third question is
11 about health effects. What scientific,
12 systematic studies address the chronic central
13 nervous system effects of inhalation exposure
14 to aerosolized engine oil?

15 On the first question, biosensor research
16 that's intended to protect against bioterror
17 attacks has very exciting potential for
18 commercial airlines, and any other workplace.
19 Animal antibodies that only react to particular
20 chemical agents -- for example, in the case of
21 research that's already been done, this has
22 been done for ricin and anthrax -- these
23 antibodies have been identified and isolated.
24 They are housed in sensor equipment, and upon
25 exposure they bind to the specific chemical

1 agent at a rate that can be quantified and
2 converted into a concentration at ppb level in
3 real time monitoring. These units are
4 apparently the size of a child's lunch box and
5 they cost about \$25,000. TCP-specific animal
6 antibodies do exist, but they need to be
7 isolated and identified. Ambient TCP levels
8 could then be quantified on a real time basis
9 with this technology in the aircraft cabin and
10 cockpit, addressing the obvious research gap
11 for TCP exposure monitoring on commercial
12 aircraft that was recently recognized by an NRC
13 committee. Workers need proof of exposure.
14 To address the second gap for -- research gap
15 for TCP-specific blood tests for workers who
16 may have been exposed, TCP has already been
17 demonstrated to modify a commercially-available
18 pig liver enzyme in a way that's not only
19 detectable but, again, quantifiable. So
20 research funds are needed to apply this insight
21 to worker -- to develop a human blood test.
22 Workers need proof of exposure.
23 In terms of research partners, I'll submit that
24 information to the docket, given time
25 limitations.

1 And on the third research gap, health effects,
2 there are published studies that describe how
3 when test animals ingest these engine oils,
4 they show delayed effects to the peripheral
5 nervous system, problems with gait and balance.
6 But existing studies are inadequate for a
7 number of reasons, the main reason being that
8 workers are not ingesting these oils. They're
9 inhaling them, and there's evidence that
10 inhalation may have very different toxic
11 effects. Crew members need NIOSH to take the
12 lead in funding inhalation research with these
13 engine oils, with a focus on damage to parts of
14 the brain involved in cognition.

15 In closing, these three projects -- the
16 biosensor to detect TCPs in real time in the
17 cabin and cockpit, the blood tests, and the
18 inhalation research -- could each be funded
19 well within typical NIOSH grant levels, and are
20 estimated to take one to two years to complete,
21 depending on the available funds. NIOSH would
22 be filling major research gaps by answering
23 questions that have been left unanswered for
24 decades, with obvious benefits for workers in
25 the aviation sector and beyond.

1 Thank you for your time.

2 **MS. PRATT:** Thank you. Our next scheduled
3 presenter is David Covarrubias with the U.S.
4 Postal Service and postal workers union.

5 (No responses)

6 Okay, we'll move on and we will hope to hear
7 from him later. Our next presenter is Gerald
8 Donaldson for the Advocates for Highway and
9 Auto Safety.

10 **DR. DONALDSON:** It's a long one.

11 **MS. PRATT:** I know, I -- it didn't look right.

12 **DR. DONALDSON:** It's okay. I'll use Bob
13 Clarke's unused two minutes.

14 I'm Gary Donaldson. I'm the senior research
15 director for Advocates for Highway and Auto
16 Safety. What's the average life span of a
17 professional over-the-road truck driver? I
18 know a lot of people in here by name, including
19 Roger. What is it, Roger?

20 **UNIDENTIFIED:** (Off microphone) I don't know,
21 I'm going to guess --

22 **DR. DONALDSON:** Don't make it too good.

23 **UNIDENTIFIED:** -- (unintelligible) years old?

24 **DR. DONALDSON:** It's between 50 and 55, and
25 there are several people in the room here who

1 know that. If you're an over-the-road
2 professional truck driver, your health is at
3 risk. And the health of professional truck
4 drivers, specific health pathologies, are at
5 virtually epidemic proportions and have been
6 for many years -- cardiovascular disease,
7 insulin-dependent diabetes. Obesity is at
8 astronomical levels. Sleep apnea is probably
9 virtually -- or legitimately to be termed an
10 epidemic among professional truck drivers. And
11 we know now, with research that was done in the
12 last several weeks that was released, that it
13 probably has a causal relationship with the
14 onset of stroke and perhaps heart attacks, as
15 well.

16 I have to cover a lot of terrain in a very
17 short amount of time. You're talking about a
18 professional work force in the United States,
19 here in the beginnings of the 21st century,
20 that is essentially an early 20th century
21 professional labor force. Some of you in the
22 room may not know that this is the largest
23 labor pool in the United States that exempt
24 from the Fair Labor Standards Act. Because of
25 that exemption that was put on the record in

1 1938 and consummated in legislation in the
2 Roosevelt administration in 1939, truck drivers
3 are not subject to the 40-hour week for
4 overtime pay. As a result, hours of service
5 since 1939, with one major change in 1962, has
6 drivers, under the rule that was finally
7 superseded in the spring of 2003, working and
8 driving 60 hours in seven days or 70 hours in
9 eight days.

10 That rule, after rulemaking that was initiated
11 in 1997, was changed by the Federal Highway
12 Administration and then by the Federal Motor
13 Carrier Safety Administration, the new agency
14 of jurisdiction. In that final rule, despite
15 the protest of labor organizations and major
16 safety organizations and people concerned with
17 health and safety effects of shift work and
18 excessively long working hours, the agency made
19 the working hours much longer.

20 You now no longer have a fixed work week for
21 professional truck drivers. You have a
22 floating work week, and under that floating
23 work week you can now accrue 98 hours of work
24 in eight days and drive 88 hours in that eight-
25 day work day -- work week. And as a result,

1 you have driving hours which are now up to 28
2 percent longer than under the former rule, and
3 working hours that are now 40 percent longer
4 than under the old rule.

5 Think about the ordinary American workers, who
6 works about -- take away his two hours of vaca-
7 - two -- two weeks of vacation in a year, about
8 2,000 hours a year. Professional truck driver
9 can accrue up to 3,900 hours a year legally
10 under this rule. So we have a rule where the
11 context for adverse health insults for disease
12 pathologies is sitting there as a fermenting
13 brew, waiting for the kinds of diseases and
14 health problems which are, as I say, virtually
15 epidemic among truck drivers.

16 That rule was challenged. It was challenged
17 when it came out in April of 2003. My
18 organization and several others filed suit
19 against the Federal Motor Carrier Safety
20 Administration. We won. They threw the rule
21 out in its entirety in a scathing decision,
22 which said that the agency had not had adequate
23 evidence in the record for a single feature of
24 the final rule, and that they had also failed
25 to uphold their statutory obligation to protect

1 the health of truck drivers.
2 The agency came back and entered a new phase of
3 rulemaking after the adverse court decision in
4 which, in the final rule, they now made one
5 sector of the trucking industry work longer
6 hours than they did in the original rule. The
7 short-haul sector now can work under an eight-
8 day regime, which is not very common, 102 hours
9 in eight days. So we now have a condition out
10 in the trucking industry where, despite the
11 protestations of the Transportation Research
12 Board's oversight committee and excellent
13 comments that were filed with the docket by
14 NIOSH -- which made them very, very popular
15 with the Federal Motor Carrier Safety
16 Administration about truck driver health and
17 safety -- this agency denies that there is any
18 causal relationship with the excessively long
19 shift work and health outcomes -- adverse
20 health outcomes for truck drivers. And I would
21 hope that the NORA will have a exceedingly
22 stronger emphasis on worker health and safety,
23 particularly in the areas of truck driver
24 health and safety. The agency has denied that
25 any of the studies tell them what they need to

1 know, and as a result, having long-term
2 epidemiological studies and long-term studies
3 that have prospective and longitudinal design
4 with very large populations of truck drivers
5 are absolutely crucial. Thank you.

6 **MS. PRATT:** Thank you. The next -- next
7 presenter on our list is Joe Myers from the
8 U.S. Coast Guard.

9 **MR. MYERS:** Good afternoon. My name is Joe
10 Myers and I'm an engineer, a risk analyst in
11 the Office of Design and Engineering Standards
12 at U.S. Coast Guard headquarters. The
13 observations I'm going to share today are my
14 own, and are not yet official Coast Guard
15 input. It's in process.

16 That said, I think I will offer you some very
17 fertile ground in the water transport sector
18 for some areas for research.

19 Just a brief background. The Coast Guard is a
20 small, multi-mission organization with
21 regulatory authority across several of the NORA
22 research sectors. These include fishing,
23 mining -- in terms of oil and gas extraction in
24 the off-shore, construction and transportation.
25 While our primary focus has been on safety

1 related to preventing maritime casualties such
2 as sinkings, collisions, fires, groundings, we
3 also have authority for the workplace issues on
4 vessels which we inspect. There are two broad
5 classes of vessels, inspected and uninspected
6 vessels. Smaller vessels, vessels that may be
7 engaged in the inland marine transportation,
8 tugboats and those sorts of things are
9 currently -- are typically uninspected vessels.
10 These authorities are provided both through
11 legislation and court decision, as well as
12 cooperative agreements and memorandums of
13 understanding between the Coast Guard and OSHA.
14 For those vessels that are inspected, these
15 would include passenger vessels, maritime mass
16 transit such as Washington State and Staten
17 Island ferries, inland and coastal tugs and
18 barges, oil and gas off-shore production, and
19 marine cargo transportation ranging from
20 container ships to (unintelligible) -- to
21 tankers for both petroleum and chemical
22 products.

23 Some of the issues that we're wrestling with
24 are the numbers of workers at risk. We know
25 how many documented, licensed mariners there

1 are. We have some estimates as to the numbers
2 of unlicensed deck hands, but we don't have a
3 firm number on that. We're also lacking firm
4 numbers on the number of commercial fishermen,
5 people engaged in commercial fishing
6 industries. BLS statistics provide us a number
7 of fishermen that is actually less than the
8 number of documented fishing vessels that we
9 know about, so there's some real discrepancies
10 in those areas. We're looking at about 204,000
11 licensed mariners.

12 Other problems are the under-reporting of
13 injuries. We have a pretty good feel that
14 we're getting the fatalities when they occur,
15 but the occupational type injuries that occur
16 are supposed to be reported, but there is more
17 disincentive to report than there is incentives
18 to report.

19 Other issues concern the unique nature of the
20 maritime industry. It's a 24/7 operation. The
21 workers live where they work. There's a strong
22 tendency for a lot of extra hours, once you go
23 off your standard-duty watch, to turn to ship's
24 work -- scraping and painting and those sorts
25 of things, a very complex set of hazards. It's

1 a dynamic, moving environment. You're looking
2 at noise, chemical exposures, heat stress, very
3 strenuous activities. All of those things
4 combine, as well.

5 And it's a very compartmented industry sector.
6 As I mentioned, there are different aspects of
7 it, each with its own unique set of hazards.
8 There are diet/exercise/wellness issues, as
9 well. Shipboard cooking is probably not the
10 most nutritious and healthful. Everything is
11 fried 'cause that's quick and easy to do. Lots
12 of -- lots of caffeine abuse to -- to maint--
13 you know, in order to maintain vigilance and
14 alertness during these long work hours.
15 Some other issues would be the traumatic and --
16 versus repetitive injuries. A lot of the ship
17 work is very -- very strenuous, line handling
18 and those sorts of things. We suspect there's
19 a lot of musculoskeletal injuries that go
20 unreported.

21 Two other interesting aspects would be
22 infectious disease exposures. It's an
23 international industry, and not only are U.S.
24 workers exposed, but we have foreign workers
25 coming in -- foreign nationals coming in, so we

1 **MR. ALEXANDER:** Good afternoon. My name is Ray
2 Alexander. I'm with Liberty Mutual Insurance
3 Company, and Liberty Mutual is a very large
4 insurance company, the largest writer of
5 Workers Compensation insurance in the country,
6 and also I think the fifth largest writer of
7 auto liability insurance in the country.
8 We've been involved in transportation safety
9 for many, many years. Back in 1959 and 1961, I
10 believe it was, we built two safety cars with a
11 lot of the safety features which are on
12 automobiles today.
13 One of the areas that we're very much
14 interested in in transportation has to do with
15 driver training, particularly with tractor-
16 trailer drivers. As you know, or some of you
17 may know, we have 44,870 transportation-related
18 deaths in 2004, and of those, 5,190 fatalities
19 from large trucks. It's interesting that
20 number really hasn't changed much over the last
21 several years. The frequency, when you take
22 accidents per million miles driven, has come
23 down significantly. But the actual number of
24 fatalities really hasn't changed much. It's
25 stayed right around that 5,200 point, and that

1 hasn't changed a lot.

2 Liberty is very interested in driver training
3 and how we can train drivers to drive safely.
4 And we're not necessarily talking about new
5 drivers. We're talking about experienced
6 drivers who have been driving for five, ten, up
7 to 30 or 40 years. If you go back and look at
8 a lot of these drivers, where did they learn to
9 drive? Generally on a farm, from a brother or
10 father or someone who taught them, and their
11 driving habits may be good or bad -- who knows?
12 And a lot of these people need some type of
13 driver training.

14 A study that was done a number of years ago
15 showed that less than 20 percent of the
16 commercial motor vehicle drivers had had any
17 type of good, formal training. So a lot of
18 these drivers out there need some type of
19 training.

20 Now, there are four different types of training
21 that's being used today -- classroom training,
22 in-vehicle training, some computer-based
23 training now, and also simulators that are
24 being used to do driver training. The question
25 is, are any of these effective? When you go

1 back and look at a lot of the training that's
2 being done, it's very questionable. Nobody
3 really knows how effective this training is.
4 So Liberty Mutual would like NIOSH to do a
5 study on the effectiveness of driver training
6 programs. Does company-sponsored driver
7 training programs really work? Nobody really
8 knows.

9 How can the effectiveness of training be
10 measured? Is there a way to do that? How can
11 a trainer determine if the trainee really gets
12 it, does he really understand what he's doing?
13 Are there ways to do that? Can we empirically
14 measure changes in driver behavior after the
15 training is done? And finally, can we see a
16 change in driving habits by the driver, and how
17 long do those changes work?

18 We drive by habit. We have driving habits. We
19 all do, some good, some bad. This is where the
20 driver trainer comes in, and an experienced
21 driver trainer, one who's been trained -- and
22 this came out at the International Truck and
23 Bus Symposium which was held just about two
24 weeks ago. They were talking about what are
25 the qualifications of that driver trainer,

1 who's doing the training? Do they have any
2 qualifications? So -- but the driver trainer's
3 job is to look and observe that driver and see
4 what are his driving habits and how can they be
5 changed, and to make the driver aware of them
6 and try to teach him how to change those
7 driving habits. But we need to find some way
8 to be able to go back and measure those habits
9 and measure those changes and see did the
10 driver in fact change his driving habits.

11 So driver training is very important. Liberty
12 Mutual, like I say, has been involved in driver
13 training for years. We did our first driver
14 training class I think back in about 1960. We
15 have seen some very effective training programs
16 take place.

17 I'll give you one example. We had a -- one
18 company, we trained their driver trainers and
19 they in turn went back and trained all of their
20 drivers. And at the end of the first year
21 after the training took place, they had reduced
22 their accidents by 50 percent and their auto
23 liability loss by 62 percent, I believe it was.
24 So we -- we have seen some very effective
25 methods.

1 But that's only one case. We need a study to
2 go back and see what's really happening in the
3 industry and can we make changes to improve
4 driver training to reduce the accident
5 frequency and the number of fatalities.

6 **MS. PRATT:** Next we will hear from Scott Madar
7 from the International Brotherhood of
8 Teamsters.

9 **MR. MADAR:** Thank you. Good afternoon. My
10 name is Scott Madar and I'm the assistant
11 director of the Safety and Health Department of
12 the International Brotherhood of Teamsters.
13 Thank you for the opportunity to present today
14 on behalf of the hundreds of thousands of
15 teamster drivers who make their living driving
16 our nation's roads. The types of drivers that
17 we represent include long-haul, short-haul,
18 automobile transporters, tank haulers,
19 construction drivers, delivery drivers, waste
20 transport drivers, and utility drivers whose
21 driving is incidental to non-driving job tasks.
22 It is important to have a frame of reference
23 when looking at the hazards associated with the
24 transportation industry. Historically truck
25 drivers have had among the highest fatality

1 rates of all professions. According to the
2 Bureau of Labor Statistics, fatal highway
3 incidents increased -- increased to 1,374 in
4 2004, after decreasing for the previous two
5 years. This equates to one of every four fatal
6 work injuries in 2004 were the result of
7 highway incidents.

8 In addition, the injury and illness rates have
9 also been among the highest of all professions.
10 The incident rate of injuries and illnesses in
11 transportation and warehousing declined in 2004
12 from 7.8 to 7.3 cases per 100 full time
13 employees. This is in contrast to the 4.8
14 cases in all of the private industry. BLS
15 attributes the decline in truck transportation,
16 which is the NAICS code 484, from 6.8 in 2003
17 to 6.1 per 100 full time employees in 2004 to
18 decreases in the numbers and rates of both
19 cases involving days away from work, job
20 transfer or restriction in cases away from --
21 sorry -- cases involving days away from work.
22 The Teamsters Union is interested in any
23 research that can help reduce both the fatality
24 rate and the injury and illness rate among
25 drivers. We're committed to working with all

1 interested researchers on this endeavor. And
2 if we had more time, I would talk to you about
3 some of the research opportunities that we have
4 actually undertaken.

5 Besides the fatalities and the recordable
6 injuries and illnesses, the International
7 Brotherhood of Teamsters is concerned about
8 other, less immediately-obvious issues faced by
9 our driver members. They include the following
10 items.

11 The Teamsters urge NIOSH to continue to
12 research into diesel and combustion particulate
13 exposures and the impact that these exposures
14 have on the overall health of drivers.

15 General wellness issues are also of interest to
16 the Teamsters Union. Due to the general
17 sedentary lifestyle of a truck driver -- as
18 Jerry Donaldson mentioned, you're behind the
19 wheel anywhere from -- up to 11 hours a day,
20 theoretically -- there is a tendency for
21 drivers to become overweight, and the use of
22 tobacco products and caffeine is rampant. From
23 these lifestyle-related issues, drivers often
24 develop medical conditions such as
25 hypertension, weight-induced diabetes and heart

1 disease.

2 Work/rest cycles for transportation workers,
3 and all workers in general, are also
4 problematic. As forced overtime and work
5 stress become more predominant in our economy,
6 the adverse health effects of extended work
7 cycles and chronic fatigue should be examined
8 since more workers in all sectors of the
9 economy are faced with these stressors.

10 As the controls of the motor vehicle increase
11 in technical complexity, the driver is required
12 to process ever-increasing amounts of data.
13 This information overload can significantly
14 increase driver distraction and may create a
15 more stressful work environment.

16 One issue that NIOSH has looked at is the
17 distraction that drivers face -- are faced with
18 from cell phones. Now imagine a multitude of
19 other devices in the cab, all beeping and
20 blinking at you while you're trying to drive
21 and navigate the roads with a lot of people who
22 don't know how to drive.

23 The drivers are also faced with constant
24 monitoring, using technology such as global
25 positioning systems, which is an enormous

1 change from the historical autonomy that
2 drivers have enjoyed. NIOSH should examine the
3 stress and other psychological effects of
4 electronic monitoring in this industry.
5 Noise exposures of truck drivers and dock
6 workers also needs to be examined further.
7 Whole body vibration is a problem faced by
8 nearly all drivers of commercial motor
9 vehicles.

10 Chemical exposures are still prevalent,
11 although not all drivers are faced with these.
12 And lastly, musculoskeletal disorders --
13 predominantly back injuries and carpal tunnel -
14 - we believe are very common among drivers.
15 The Teamsters Union appreciates the opportunity
16 to share our concerns with NIOSH, and looks
17 forward to working with NIOSH in any capacity
18 to address these issues. Thank you.

19 **MS. PRATT:** Thank you. Our next presenter is
20 Robert Clinton of American Waterways Operators.

21 (No responses)

22 No? I'll go to the next one on the list. I
23 don't see Thomas Walsh. Okay, we have one more
24 presenter. I'm going to go back to some of the
25 ones who weren't with us earlier and just

1 double-check to make sure they haven't arrived.
2 David Covarrubias from the U.S. Postal Service?

3 (No responses)

4 Michael McCann from Center to Protect Workers
5 Rights, I don't see him. Darrel Drobnich from
6 the National Sleep Foundation?

7 (No responses)

8 Okay, we have one presenter, John Siebert, who
9 represents the Owner/Operator Independent
10 Driver Association.

11 **MR. SIEBERT:** Hot-dang, Leroy, it's open pulpit
12 time.

13 **UNIDENTIFIED:** (Off microphone)

14 (Unintelligible)

15 **MR. SIEBERT:** No. I would like to thank NIOSH
16 and NORA for providing this opportunity. I am
17 a recipient -- active recipient of NIOSH
18 activity at the present time. Our association
19 represents 350,000 people who own and operate
20 their own trucks on America's highways, and
21 we're in the midst of doing a retroactive
22 mortality study on about 130,000 names in our
23 membership base who are inactive. That means
24 that we haven't heard from them for three
25 years. It is my suspicion that some of them

1 are very inactive, as in laid out flat and
2 about six feet lower than everybody else.
3 In looking back at mortality studies, the --
4 there was a California study done -- oh, gosh,
5 what was it; it was in '82 on 1965 data -- for
6 all the occupations in California. But of the
7 groups, truck driving was the largest sample.
8 It had 3,000 people in it, and the average age
9 was 54.
10 I didn't know that at the time, but five years
11 ago Dr. (Unintelligible) came out -- the sleep
12 doctor -- and said oh, well, it's 61. So I
13 called him and said where'd you get that? He
14 said I got it from a friend of mine, so I
15 called him and said where'd you get it? He
16 said well, I got it from a conference I went to
17 and I wrote it down. It came from a Teamster.
18 I said great, who was it? I don't know. What
19 was the name of the conference? I don't
20 remember. So I called Scott and said Scott,
21 back this up, and he says I can't do it. But
22 what the man said was that the Teamsters
23 average getting out 18 months of checks.
24 Thinking that they retire at 60, that makes it
25 61 and a half, so 62 was the age

1 (unintelligible) came out with.

2 So I started looking at the obituaries in our
3 magazine. Our magazine goes out nine times a
4 year. It has obituaries every -- every other
5 one, and I started adding those up and -- and
6 the average was 56.

7 And so I told my boss, and my boss says well,
8 that doesn't count all the ones that retired.
9 And I said name a retired trucker. And he said
10 well, there's this guy, and I said yeah, he's
11 terminal. Well, there's that guy; well, he's
12 got a colostomy bag. Well, no, all the old
13 ones are all gone. And I -- I think that --
14 there -- there's not a lot of truckers in
15 Florida basking in the sun.

16 And looking at -- after -- after I -- I got
17 this preliminary information and finally got
18 tied up with John Cistito* and NIOSH, I started
19 looking at other things, so I asked for height
20 and weight on our membership profile survey,
21 found out that only 12 percent of our members
22 are at their optimum or below their optimum
23 weight. That makes 88 percent of them heavier
24 than their optimum weight. Our mean is right
25 on the body mass index line between overweight

1 and obese. And of course on the other end of
2 obese you've got mortally obese -- morbidly
3 obese. Really big. Some of those guys have
4 got three people on one skeleton. Really. And
5 when you think about hauling around three
6 people's weight, for their height and weight
7 they've got three people all in one skin. It's
8 a -- it's a bad thing.

9 One thing that we found that the California
10 thing didn't -- oh, I'm going to go way beyond
11 that time. You can go now. Your services have
12 been fine up to this point. If this is on your
13 evaluation, you're in trouble.

14 **UNIDENTIFIED:** (Off microphone)

15 (Unintelligible)

16 **MR. SIEBERT:** California said that suicide was
17 not a really big thing in their 54 years of
18 age. But in mine, I only -- when I looked at --
19 -- when I was -- when I came up with that 57, I
20 on-- I had 1,200 -- 1,200 in my population, but
21 I -- of those, 485 I knew the cause of death,
22 and I had 14 suicides out of 485. The national
23 average is 27 out of 100,000. Oops. You want
24 to talk about some stress. Jerry put it out
25 there.

1 We actually sued a carrier, and in the suit we
2 asked the judge to put a cease and desist
3 against them, and we quoted the Fourteenth
4 Amendment. The Fourteenth Amendment outlawed
5 indentured servanthood and slavery. By signing
6 the contract this company had, the people were
7 automatically indebted to the company store so
8 far that they had zero percent -- zero percent
9 -- people who had actually paid off the lease
10 and walked off with the truck. They had 100
11 percent failure. And not only were they taking
12 back the truck, they were taking back these
13 people's homes and putting them out on the
14 street. This is the business environment in
15 which these workers are working.

16 So much of the stuff that I heard about the
17 agricultural workers, the nurses -- truck
18 drivers are right in there with them. The
19 precariousness of the employment. We have very
20 good trucking carrier companies who have a
21 average turnover of employees of 135 percent.

22 Now do you feel secure working for somebody
23 who's turning over their entire work force 1.3
24 times a year? Do you have a job that you want
25 to stay with, because a lot of them are

1 voluntarily leaving; they're not being fired.
2 They're looking for a greener pasture. They're
3 actually looking for a job that pays them for
4 the hours that they work. They can legally
5 work God only knows how many -- 82 in eight,
6 102?

7 **DR. DONALDSON:** (Off microphone)
8 (Unintelligible) 88 (unintelligible) 98
9 (unintelligible) work (unintelligible).

10 **MR. SIEBERT:** But that's just the start. They
11 wait at docks for 40 hours a week, and they
12 don't get paid for that. That's work. They
13 cannot go to sleep. They're waiting for free
14 for another 40 hours. So now we're up over 100
15 hours -- 120, somewhere around that -- for
16 \$35,000 a year. This is not the America that
17 we all know and love.

18 I was blown over the other day listening to NPR
19 coming in. And someone was talking about the
20 new worker program. Well, we will have
21 immigrants come in and do work that American
22 workers just won't do. And the -- and they guy
23 that was playing devil's advocate said yes, but
24 what you're -- what you're asking for is a
25 slave class in our -- in our society. And the

1 lady that was -- lady that was defending our
2 current administration's stand said well, would
3 you rather have a servant class that is illegal
4 or a legal servant class?
5 Can we economically compete on a global basis
6 and compete with political prisoners in China,
7 with slavery in China? Is this what our
8 society says is okay? There are enough people
9 in this country to drive trucks. They have the
10 skills. They have the experience. They refuse
11 to work that hard for that many hours for that
12 small amount of money. And it's not happening
13 just in trucking. It's happening in nursing
14 and it's happening in agricultural work, too.
15 Tyson had a plant in Wisconsin. They
16 renegotiated the contract. The entire work
17 force went out on -- on strike. The new
18 contract offered a beginning wage that was nine
19 cents an hour below the old -- no, offered a
20 top wage that was nine cents below the old --
21 let's get this straight. The new top wage in
22 the contract was nine cents below the old entry
23 level. That was as high as you could get.
24 You could get nine cents below what you used to
25 start at. And when asked why should the

1 American public subsidize Tyson's payroll, the
2 man said what do you mean? The reporter said
3 you are offering a top wage that makes these
4 people all qualify for food stamps if they have
5 one kid. He said I don't offer wages; I offer
6 work. But the work he's offering is for
7 illegal aliens, because folks who are used to
8 getting an honest day's dollar for an honest
9 day's work still deserve that today, even
10 though we're in a global economy.
11 I'm almost through. When we -- we have a lot
12 of -- lot of talk about fatigue in trucking.
13 And I will -- I suspect that there are a lot of
14 fatigue fatalities that are marked down as
15 fatigue that are not fatigue. They're death
16 fatalities. Well, of course he died, he had a
17 wreck. No, he died before. Because when you
18 see a trucker who does not make any steering
19 correction and no braking and goes off and hits
20 a tree or a bridge abutment, that's called
21 fatigue. He was asleep. I'm saying that a lot
22 of those are really asleep; they died and the -
23 - the same thing happened. There was no --
24 there was no corrective move. He was already
25 dead in the saddle.

1 NIOSH has -- has talked earlier about -- and
2 I'd like to encourage them to continue -- they
3 talked about funding a center of excellence for
4 transportation workers. And I've been to the
5 Center for Production Workers Rights and seen
6 the work that those folks are doing there, and
7 if we had such a thing for our sector, I think
8 that would be a great thing. And I've heard --
9 oh, I don't know -- rumors that perhaps this
10 center of excellence may become virtual. And
11 if that's the case, I want to be first in line
12 to bid for the job of cleaning the windows on
13 the virtual headquarters. Thank you.

14 **MS. PRATT:** I think that all of our schedule
15 presenters who have -- who are here have
16 presented. We have four we are waiting for and
17 I don't know if it's because they are scheduled
18 later in the session and had planned to arrive,
19 or if they -- they aren't going to arrive. How
20 shall we handle this?

21 **UNIDENTIFIED:** (Off microphone)
22 (Unintelligible)

23 **MS. PRATT:** Are there any comments?

24 **UNIDENTIFIED:** (Off microphone)
25 (Unintelligible)

1 risk factors that lead to musculoskeletal
2 disorders.

3 So the Postal Service approached the unions,
4 with OSHA's help, and suggested this
5 partnership. And what we came up with was
6 something we called the ergonomic risk
7 reduction process. To those from business that
8 wonder about the cost effectiveness of
9 ergonomics, I will tell you, after three years
10 of considerable personal involvement,
11 ergonomics will save you a ton of money. For
12 the people that worry about stress in the
13 workplace and workers that feel disenfranchised
14 from their employee, I will tell you -- or from
15 their employer, rather, I will tell you that
16 ergonomics, when properly structured --
17 involving the workers on the floor, giving them
18 the knowledge and the power to make the changes
19 that they need to make to eliminate the risk
20 factors that they encounter every day -- will
21 help you to reduce worker stress.

22 We came up with a model where we put an
23 ergonomist in one of our large mail processing
24 facilities for 90 days. And the purpose is to
25 transfer knowledge, to make the people in the

1 facility aware of the risk that they face in
2 the performance of their duties, to provide
3 them with the knowledge to both identify and
4 eliminate those risks, and to build teams to go
5 around that plant to identify those risks in
6 every area and come up with the solutions to
7 implement to eliminate those risks.

8 We were skeptical, I guess would be a good word
9 -- it'd be a Christian word -- initially when
10 the company approached us. But I have to tell
11 you that this process has far exceeded
12 anybody's expectations.

13 We currently have 93 large processing
14 facilities involved with this ergonomic risk
15 reduction process. The goal -- the objective
16 ultimately is to bring all 400 of our major
17 processing and distribution plants on line with
18 this. Those plants that are currently in range
19 in size from 800 employees to 2,500 employees.
20 Actually I guess I'd have to go a little higher
21 on that top end. Morgan Station in New York,
22 which takes up four city blocks in Manhattan, I
23 believe they employ somewhere around 12,000 or
24 13,000 employees in that facility alone.
25 That's the downtown plant for Manhattan that

1 takes care of all of Metro New York and the
2 surrounding area.

3 What we've seen -- going off the top of my head
4 for the metrics -- the lost workday injuries,
5 we took the facilities in the first seven
6 phases, we rolled out in anywhere between eight
7 and ten facilities in a phase. We compared
8 phases one through seven against the rest of
9 the nation. That group comprised about 66 of
10 these large plants. The lost workday injuries
11 were down somewhere in the neighborhood of 34
12 or 36 percent, I believe, compared to the rest
13 of the nation. The lifting and handling MSDs,
14 the lost -- lost work -- light duty workdays
15 where someone would get hurt and come back was
16 down close to 70 percent, if I remember the
17 slide. Larry Liberatore is here from OSHA,
18 he's one of my partners so I'm asking him for a
19 little help here 'cause -- all I remember were
20 the numbers were staggering.

21 If anybody's seriously interested in an
22 ergonomics program, I have some business cards
23 with me. I'd be happy to give them to you and
24 give you some more precise information later,
25 but the ergonomics works. I don't care what

1 your goal is. You know, I took some heat from
2 people who thought that, as a union, we
3 shouldn't embrace this because they said well,
4 one of the byproducts is that management gets a
5 more efficient operation. And that's true.
6 But my reason for becoming involved was to keep
7 people from getting hurt. If the company can
8 do it a little bit safer and get a little -- I
9 mean a little faster, get a little more out of
10 it, that's okay because one of the realities of
11 the Postal Service is that they are beginning
12 to shed workers. They're down approximately
13 100,000 employees in the last three years.
14 They're going heavily to automated operations,
15 and that's inevitable. We're not going to
16 change that. But what we can change is the way
17 people do the job, the way people are
18 approached and given the ability to both do
19 their job and to make sure that job is done
20 safely, and to protect the people we represent.
21 And if the company benefits from that, that's
22 okay because that means that people that come
23 after me are going to have a job, too. So if
24 you'd like to see me on the way out, I'd be
25 happy to give you a card and share some more

1 information. Thanks.

2 **MS. PRATT:** Is there anyone else who would like
3 to make any comments?

4 (No responses)

5 I think what we'll do then is we'll ask Nancy
6 Stout to give us some reflections on what we
7 heard this afternoon, and we'll -- if anyone
8 else comes in the meantime, we'll certainly
9 give them an opportunity to speak, as well.

10 **MS. STOUT:** Well, gosh, most of all I just want
11 to say thank you. This was a wealth of
12 information today and I think it was
13 enlightening to all of us, even those of us who
14 try to keep an eye on the big picture -- a lot
15 of very general and very specific information
16 that I think is going to be really useful to
17 NIOSH and the occupational safety and health
18 community when we start developing our research
19 agendas a little more specifically.

20 Gosh, I heard an awful lot. We heard about
21 different concerns about different worker
22 groups from truck drivers to airline workers to
23 water transportation and fishermen and railway
24 workers, addressing quite a number of different
25 outcomes; a lot of emphasis I think on MSDs and

1 -- and motor vehicle crashes and rollovers and
2 chemical and -- exposures and mission --
3 emission exposures, stress -- stress and
4 fatigue and obesity and lifestyle kinds of
5 outcomes, and sleep apnea and distractions.
6 There are an awful lot of issues on the -- on
7 the plate to be considered in a research
8 agenda.

9 We heard about the need for increased seat belt
10 use. A number of folks spoke to the need for
11 different kinds of data, from under-reporting
12 of injuries to anthro-- the need for
13 anthropometric data, really encompassing the
14 whole realm of public health research model,
15 from better data to longitudinal studies to the
16 need for intervention evaluation and -- and
17 more training and changes in work practices and
18 -- and behaviors. And I think interestingly,
19 as with this morning's session that was more
20 general and less specific to this industry, I
21 think there was some -- I heard some focus on,
22 you know, the need to look at emerging issues
23 and the changing nature of work and
24 organizational changes, from new security
25 issues, extended working hours and so forth.

1 And I -- and we also heard some good examples
2 that sort of reinforce the need to work in
3 partnership and how that really extends the
4 value and usefulness of our research.

5 So thank you so much for your input. We've --
6 we're trying hard to capture it word by word,
7 and we take it very seriously. We appreciate
8 the time that you took to come and provide us
9 remarks.

10 Are there any final comments from anyone in the
11 audience? Sid? Thank you.

12 ADJOURN

13 **DR. SODERHOLM:** I'd like to thank Nancy and
14 Stephanie and all the speakers. And some of --
15 it doesn't look like the snow's up over the
16 windows yet, so -- some of -- some of us will -
17 -

18 **UNIDENTIFIED:** (Off microphone)
19 (Unintelligible)

20 **DR. SODERHOLM:** Yes. Yes. Ray, thank you. We
21 -- yeah, we thank Ray for the hard work today
22 and the transcription we -- we will get.
23 So this will go in the docket. Some of us will
24 stick around. We real-- if you see somebody
25 coming in who thinks they have a later time

1 slot, we will certainly be here to -- to accept
2 their input the best way we can at that point,
3 so don't discourage them. And so we'll -- some
4 of us will be around for a little while yet.
5 So if you have -- you know, talk partnerships,
6 any feedback to us, please give us and visit
7 the web site, keep involved in NORA. Thank you
8 very much.

9 (Whereupon, the meeting adjourned at 2:40 p.m.)

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CERTIFICATE OF COURT REPORTER**STATE OF GEORGIA****COUNTY OF FULTON**

I, Steven Ray Green, Certified Merit Court Reporter, do hereby certify that I reported the above and foregoing on the day of December 5, 2005; 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 24th day of December, 2005.

STEVEN RAY GREEN, CCR**CERTIFIED MERIT COURT REPORTER****CERTIFICATE NUMBER: A-2102**