

# Committee Meeting

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## ASSEMBLY LABOR COMMITTEE

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"New Jersey Labor Department's  
State-wide survey on occupational  
safety and health"

**LOCATION:** Committee Room 4  
Legislative Office Building  
Trenton, New Jersey

**DATE:** January 19, 1995  
10:00 a.m.

### MEMBERS OF COMMITTEE PRESENT:

Assemblyman Patrick J. Roma, Chairman  
Assemblyman Francis Bodine  
Assemblyman E. Scott Garrett  
Assemblyman Donald Hayden  
Assemblyman Steven Petrillo



### ALSO PRESENT:

Gregory L. Williams  
Office of Legislative Services  
Aide, Assembly Labor Committee

**Hearing Recorded and Transcribed by**  
The Office of Legislative Services, Public Information Office,  
Hearing Unit, State House Annex, CN 068, Trenton, New Jersey 08625



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CHAIRMAN  
STEPHEN A. MIKULAK  
VICE-CHAIR  
FRANCIS BODINE  
E. SCOTT GARRETT  
DONALD HAYDEN  
TOM FOLEY  
STEVEN PETRILLO

*New Jersey State Legislature*  
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COMMITTEE NOTICE

TO: MEMBERS OF THE ASSEMBLY LABOR COMMITTEE  
FROM: ASSEMBLYMAN PATRICK J. ROMA, CHAIRMAN  
SUBJECT: **COMMITTEE MEETING - January 19, 1995**

*The public may address comments and questions to Gregory L. Williams, Committee Aide, or make bill status and scheduling inquiries to Ramona A. Morales, secretary, at (609) 984-0445.*

*It is requested that testimony regarding the occupational safety and health survey also be made available in writing to the committee. Please provide 12 copies of the testimony.*

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The Assembly Labor Committee will meet on **Thursday, January 19, 1995 at 10:00 A.M. in Committee Room 4, Legislative Office Building, Trenton, New Jersey.**

At 10:00 A.M., the committee will hear testimony related to the New Jersey Labor Department's State-wide survey on occupational safety and health.

At 11:00 A.M., the committee will consider the following bill:

A-2378  
Mikulak

Prohibits the distribution and sale in State of gasoline containing methyl tertiary butyl ether.

Issued 01/13/95

Assistive listening devices available upon 24 hours prior notice to the committee aide listed above

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eem: 1-41

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ASSEMBLYMAN PATRICK J. ROMA: (Chairman) If I could have your attention. If everyone could be seated we're about to start.

This morning's Committee will be an overview of the New Jersey Department of Labor's Statewide Survey on Occupational Safety and Health. Following that, we will hear testimony on Assembly Bill No. 2378. At this time, we would have the Pledge of Allegiance led by Assemblyman Scott Garrett.

ASSEMBLYMAN GARRETT: (leads the audience in the Pledge of Allegiance)

ASSEMBLYMAN ROMA: Thank you, Assemblyman.

Roll call.

I understand that Assemblyman Mikulak is in the building, he'll be back and Assemblyman Foley is on his way.

MR. WILLIAMS: (Committee Aide) (calls roll) Assemblyman Foley? (no response)

Assemblyman Petrillo? (no response)

Assemblyman Hayden? (no response)

Assemblyman Bodine?

ASSEMBLYMAN BODINE: Here.

MR. WILLIAMS: Assemblyman Garrett?

ASSEMBLYMAN GARRETT: Yes, here.

MR. WILLIAMS: Assemblyman Mikulak? (no response)

Assemblyman Roma?

ASSEMBLYMAN ROMA: Here.

We'll start with Mene Kotsines the Legislative Liaison to the Department of Labor. Mene, if you could, please introduce your guests, while I've met them and worked with them, for the

benefit of the Committee and the people present. It would be helpful.

**M E L P O M E N E K O T S I N E S:** Of course.

Good morning, Mr. Chairman and members of the Assembly Labor Committee.

For the record, my name is Melpomene Kotsines, I am the Legislative Liaison for the New Jersey Department of Labor. To my left -- he needs no introduction -- is our Deputy Commissioner, Fred Kniesler, who is no stranger to this Committee. To my right is Assistant Commissioner Vivien Shapiro. She is our Assistant Commissioner for Labor Research and Analysis.

Ms. Shapiro has been with the Department for 24 years, in which she has almost served all that time in research with the exception of three months in UI, TDI, NJTPA. She is the recipient of a bachelor's in economics from Brandeis University and a master's in economics from Rutgers University.

At this time, Mr. Chairman, I will turn over this testimony to Assistant Commissioner Shapiro, and she will discuss the merits of the survey.

**F R E D E R I C K C. K N I E S L E R:** (off mike) She's going to pass the ball to me.

**MS. KOTSINES:** She's passing it to-- (indiscernible)

**MR. KNIESLER:** Good morning, Mr. Chairman and members of the Committee. At the end of December, Commissioner Calderone released a survey that had been done -- actually, the first one of this type -- on the worker safety and health in both the private and public areas.

I think as a result of that, the members of the Committee have expressed some interest in amplification of the contents of that report. I think what was probably most attention getting was the fact that the accident rates and the injuries in the public sector seem to surpass those in the private sector. I think that gave some concern.

I think I would ask Vivien to go into some of the points of the report and, if possible, some of the explanations that we have at this time on the various findings. Some of this statement is not refined to the point where we would like it and some is not easy to compare with other states or other areas because of its nature of being the first one done. But I think it does have some indications of the direction in which we should be moving.

With regard to the job activity department, the commissioners utilized the Industrial Safety Committee to a great extent, and we're expanding on our contacts with both agencies and companies with regard to safety training. Safety training programs are being held. They're being reinforced in content and they've been expanded in numbers. But, with that, I think I'd ask Vivien to go back to the report itself.

**V I V I E N   S .   S H A P I R O:** Thank you, Fred.

I think, as you noted, data from 1993 was the first year that New Jersey participated in this survey. It's done in cooperation with the Federal Bureau of Labor Statistics, under their guidance and instructions, so we have to follow their methodology as well.

The survey is conducted in two parts. Although all of the information is collected at one time, the data are analyzed and

released in two separate dates. The December data talked about incidence rates: How many injuries and illnesses were there per 100 full-time employees. There is not an awful lot of supporting data. We have some break outs by industry at this point.

Information on the characteristics of the injured parties, as well as information on the causes leading up to these events won't be available until April. So, unfortunately, it's that information we need to explain a lot of the raw numbers. So some of the questions that you've raised and some of the questions that we've raised can't be answered at this point.

For New Jersey, for calendar year 1993 -- there is a lag in the survey, because it's done after the end of the calendar year -- a sample of employers responded to the survey. They're selected by the Bureau of Labor Statistics, and we actually do the survey. For the private sector only, in New Jersey, there were 7.4 accidents per 100 full-time workers. That compares favorably with the nation, which was 8.5. For the nation, we don't have public sector data.

The striking piece of the data is that the public sector had a much higher incidence of workplace injuries and illnesses at 14.4 per 100 full-time workers.

As I said, we don't have a lot of supporting data. What we do know, however, is that the public sector has a lot of high-risk occupations, police and fire being two of the more notable ones which are not jobs that are in the private sector. Now, whether that explains all, but I think that explains part of the differential.

ASSEMBLYMAN ROMA: I don't mean to interrupt you, but--

MS. SHAPIRO: Oh, please do.

ASSEMBLYMAN ROMA: I'm looking at the chart that you had referred to. It indicates private industry as 7.4?

MS. SHAPIRO: In New Jersey.

ASSEMBLYMAN ROMA: And State government at 14.5?

MS. SHAPIRO: Yes, that was State, when I said public I combined State and local.

ASSEMBLYMAN ROMA: So we're talking about roughly double what the amount would be.

MS. SHAPIRO: Yes, that's very significant.

ASSEMBLYMAN ROMA: Now, I guess two other questions that come up would be the type of injury, number one, by category -- those sort of injuries that would likely fit into a category to increase the percentages. Secondly, while I understand that there are high-risk occupations, do we have actual data that would substantiate that these particular areas would fall within the police and fire?

MS. SHAPIRO: At this point, we don't. Hopefully, with the release of the additional information in April, we'll be able to give a more completed presentation before this group.

ASSEMBLYMAN ROMA: What about the categories of injuries?

MS. SHAPIRO: It's the same thing.

ASSEMBLYMAN ROMA: Okay.

MS. SHAPIRO: Basically, the information that was released was number of cases. Number of cases involving lost work days, some information on employment that enabled us to compute these incidence rates, as well as the industry, and there are really no final break outs.

ASSEMBLYMAN ROMA: Well, as you can appreciate, this Committee is very sensitive to workplace safety having worked on a number of initiatives and continuing to do so. Understanding that this data is extremely important to the Committee with its further deliberations, I would ask that you assemble that information, tell us what is necessary, put it together. Because we're very much interested in knowing what those categories are and what can be done in order to alleviate those sort of injuries.

MS. SHAPIRO: Definitely, once that information is available, it will be publicized, and we will be delighted to come before this group again.

ASSEMBLYMAN ROMA: What do you think would be the approximate time frame for putting together that information?

MS. SHAPIRO: Well, see we're under the Bureau of Labor Statistics Methodology Timetable, and at this point it is scheduled for April. There is not much we can do to expedite that sort of thing. We're bound by their release dates.

ASSEMBLYMAN ROMA: Well, with a new Congress and an excellent Governor and administration, I'm sure that you'll move that along.

MS. SHAPIRO: Oh, we will. I mean, it's frustrating from our end to be able to release gross numbers and not be able to get an understanding for some of the aberrations or the seeming aberrations.

ASSEMBLYMAN ROMA: Okay. Understand that it is a focus, primary concern of this Committee.

MR. KNIESLER: It is also an effort for us to coordinate our data with that of Workers' Compensation. That hasn't been

melded together yet either because of complications in the release time and the way categories are done. There's another part there that has to be brought into focus to help better explain -- to answer your questions.

MS. SHAPIRO: Yes, there is a wealth of information that will come from this survey. This survey marries two separate programs that the Bureau of Labor Statistics conducted over the past two decades but having the same information base will enable the information to be used in different ways. In addition, we did not, as a State, participate fully in the survey that enabled us to compute incidents rates. So this is really the first year of information and it's exciting.

ASSEMBLYMAN ROMA: Well, I think you understand some of the direction that I'm going in. If it were a back injury, let's say, perhaps, that would skew the results, and it would cause a higher percentage, but at least we know what we're looking at. And if we have that information, then, of course, we can come up with recommendations.

MS. SHAPIRO: Yes, we'll have information on severity and part of the body and information that can help labor and business work together to develop training programs, purchase new equipment, and that should be available. One of the things I did want to mention in the public sector -- and, again, we're somewhat limited as to what we can do with the top side numbers. But if you look at the State government, like you said, it was 14.5 injuries or illnesses per 100 full-time workers. We just took out -- removed the workers from residential care facilities and institutions; that number dropped down to 8.6. That tells me we have to look at what kind

of events are occurring in those facilities because they're apparently a large cause of the rate inflation. So our intuition of police and fire may be wrong, but at this point we cannot separate them either.

ASSEMBLYMAN ROMA: Well, I seem to recall, and this is somewhat related, in New York City where they were talking about the policemen using seat belts, the Commissioner there was talking about how that would drastically affect the number of injuries. I don't know if that is the case. We're talking about having a primary violation here in New Jersey in terms of a seat belt violation. I guess, when we're looking at all of this data, if we know the type of injury -- for example, is it a cervical sprain -- then we would be able to look at the categories and take preventative measures. That is why that information is extremely important, and any day that someone is injured at the work site is of grave concern to this Committee, and that's why, while we recognize that it's difficult to get the information together, we really don't have a choice. We have to try to get that together as quickly as possible.

MS. SHAPIRO: Well, that is one of the reasons the Department moved ahead to participate in this program. We knew it was invaluable information for the State, you know, the workers, the businesses, and the economy in general because there are things as a State we can do to reduce accidents in the workplace.

I don't know if there were any particular questions.

ASSEMBLYMAN ROMA: At this time, would any of the members of the Committee have questions? (no response)

No.

Let me also introduce Assemblyman Hayden who has joined us.

MR. KNIESLER: As additional data is compiled and the report is formed, you'll be the 1st or 2nd and up.

ASSEMBLYMAN ROMA: Thank you. You can continue. Are you finished?

MS. SHAPIRO: I was just prepared to answer questions. I did want to comment a little bit on the workers' comp data. A question had been raised about the comparability.

There are differences in what we have in workers' compensation information from what this survey will ultimately provide, but that is not going to preclude us from taking a look at the two sets of data and seeing how they differ. This survey is based on a sample, and there is an estimating procedure in place. It relates to all workplace accidents regardless of whether a workers' compensation claim has been filed.

The survey relates to events that occurred in the calendar year. The workers' compensation system looks at cases that were closed in the given period of time, and because of the judicial process, there are inherent delays in that.

Presumably, the survey data are representative of the universe. So we will expect differences, but I think the information from both systems will be useful. The information on the causes of workplace accidents, the data I referred to as being available in April, come from the employers' first reports of accidents that they compile now as part of the workers' compensation system. They're just posted in the document and provided to the Department.

A couple of other points on some of the information we found. We found out most of the injuries are in midsize firms. We're defining midsize firms--

ASSEMBLYMAN BODINE: In what?

MS. SHAPIRO: Midsize firms have a higher rate of accidents in the workplace. Those are firms between 50 and 500 and that wasn't a surprise. I didn't mention the number of injury and illness cases that occurred in 1993, and that was over 230,000, which is roughly the number of first reports of accidents that are filed each year with the Department. They run a quarter of a million, plus or minus a little bit.

Most of the cases reported, 94 percent of them were for injuries. The balance were for workplace illnesses, and workplace illnesses are a more difficult data element to capture. Often employers don't associate a latent illness with something that occurred in the workplace five or ten years before.

We've seen an increase, not from this study, but just in national studies, in repeated trauma. You know, carpal tunnel syndrome, things that five and ten years ago were never identified as being a workplace illness. Those are now being reported. So as employers' awareness improves and they become more knowledgeable the reporting changes. So we'd have to keep that in mind.

In the private sector, we saw the incidence range from a low in the finance, insurance, and real estate industry, and that was 2.8 percent, and construction, not surprisingly, was the highest in New Jersey with 10.1 accidents per 100 full-time workers.

We already mentioned in the public sector that the State government rate was slightly higher than in local government, and again, there was a range of rates with transportation, communications, public utilities, and social services being the highest for the State and government sector. In the local it was workers in the public utilities and law and order.

Given the fact that this was the first survey, we got an excellent response from New Jersey's employers. We surpassed the mandatory response rate. It is a mandatory survey, by the way, for employers, but the response rate was 87 percent, which I thought was excellent for our first year effort, and we're looking forward to more data.

ASSEMBLYMAN ROMA: We have a question from Assemblyman Bodine.

ASSEMBLYMAN BODINE: Yes, Mr. Chairman.

I wondered if such things as some of the charges that may be brought about by people who claim that they have asbestosis, or whatever that terminology is, both in the private and the public sector, are things of that nature included in these illness cases?

MS. SHAPIRO: The employers should be reporting those types of cases and illnesses, you know, as long as they can identify the cause and effect.

ASSEMBLYMAN BODINE: In the--

MS. SHAPIRO: I think the reporting on the illnesses is weaker than the reporting on injuries. It's just been, over the years -- employers are just not as aware of or as willing to report it.

ASSEMBLYMAN BODINE: Well, the awareness factor is there now--

MS. SHAPIRO: Yes.

ASSEMBLYMAN BODINE: --and, as you say, it has changed in the last 10 years. I just wondered if some of those things will be further defined in the presentation that you have in April?

MS. SHAPIRO: Yes, we will have a lot more information. In fact, I can share a copy of the survey booklet with the Committee so you'll have some idea of the types of information that we'll be able to generate. So if there are specific areas of interest, you'll know what data elements are available, and we can produce cross tabulations or different break outs for the Committee's analysis. We may miss something that is of interest to you.

ASSEMBLYMAN BODINE: Thank you.

ASSEMBLYMAN ROMA: You know, as we're going through this, sometimes the type of information that is reported could, in fact, make the difference. I guess the question is, is there a difference in what the private employers and public employers report?

MS. SHAPIRO: It's the same survey booklet, the same questions, so they're asked for the same information. Okay.

ASSEMBLYMAN ROMA: Identical information.

MS. SHAPIRO: The one difference, which I think is a fine line, the private employers must report under Federal OSHA. State employers have to report under our State, public employees' OSHA program.

ASSEMBLYMAN ROMA: It's still the same information.

MS. SHAPIRO: But it's the same. We folded it in, so that we would have comparable data. We didn't want to run separate surveys.

ASSEMBLYMAN ROMA: One of the things that you might want to add to that information that we had requested not only the copy of the report that you had referenced, so we can make it a part of the record, but the cost of these injuries, while first and foremost, the loss of human life or injuries is most important.

The secondary consideration, everybody takes certain types of information from a hearing in terms of the overall significance, but what we would be concerned about, especially, is the area of health care in terms of the cost, whether it be short-term or long-term, those sort of injuries. How that would arrive-- How you would come to a figure in terms of cost. The impact of the injury in terms of dollars, what it means for the illness, for the different types of problems that we're talking about. If we could have that in numbers, I think that would also be helpful.

MS. SHAPIRO: I think that is where we'll have to go back to the information from our workers' compensation system because the workers' compensation system gathers information at the end of a case, so there are figures on the medical fees and the awards. Whereas, most of this information in this survey is taken when the accident first occurs. So the cost information isn't available, but that's another thing.

ASSEMBLYMAN ROMA: Well, as I said before, somebody could have a cervical sprain, and that would be one cost. RSI, or carpal tunnel syndrome, or you could have a wrongful death

action, or some derivative cause, and that has a financial impact as well.

MS. SHAPIRO: Definitely.

ASSEMBLYMAN ROMA: So if you quantify those numbers as we continue, different people take different information from the hearing, but we want to make sure we have a complete picture.

MS. SHAPIRO: The Department of Health, as I'm sure you know, runs a separate survey -- it's called the Census of Fatal Occupational Injuries -- and that presents information on fatalities. This survey does not include occupational fatalities. It was separated out to get better quality data.

ASSEMBLYMAN ROMA: Okay. Further questions from the Committee? (no response)

One of the areas that you could touch upon, and I'm not sure if all the Committee members are aware, but in terms of the violence in the workplace and areas such as that, maybe you can give us some type of an overview and what, if any, recommendations you have or if that would also await receipt of the report.

MS. SHAPIRO: Fred, do you want to--

MR. KNIESLER: We have a new workplace violence prevention manual. This is like, a new, hot-off-the-press document. That has been addressed by our Division of Workplace Standards. They've done some exploration on fatalities in the workplace, and ironically, a lot of that is female, and it's domestic violence brought to the workplace. There's a lot of work going on in that area, and we're addressing that as well.

ASSEMBLYMAN ROMA: Well, in terms of the types of incidents, is it primarily a domestic situation that pours over into the workplace? Is that what you're saying?

MR. KNIESLER: In a lot of the instances, yes.

ASSEMBLYMAN ROMA: Would we also have the ability to be able to break down that information by category to get a better idea of this phenomena?

MR. KNIESLER: I think so-- (indiscernible)

MS. SHAPIRO: I think we will, but I would like to reserve judgment on that and check with the technical people as to how much detail we'll have on workplace violence. I don't know how we've broken it out, and we can give that back to you.

MR. KNIESLER: That, of course, is another new form of reporting -- like you mentioned certain illnesses that are today reported and kept track of -- a few years ago didn't exist. All of a sudden, now, workplace violence is becoming that critical, and it means we have to modify everything we do to the times that we work in, and this is one of the new areas.

ASSEMBLYMAN ROMA: We can't tell at this point what percentage would be the workplace violence?

MS. SHAPIRO: No.

ASSEMBLYMAN ROMA: You mentioned before, in terms of police and fire, it could very easily be that this category could change the percentages. So if there's something that we can do in that area--

MR. KNIESLER: There's more therapy done there. Right.

MS. SHAPIRO: Yes, there's more work to be done, and we'll check on our capability to deliver that information once the survey is complete.

MR. KNIESLER: We anticipated release of this first report would generate an interest in further reports because it was the first one and it didn't maybe ask more questions than it answered in some respects. But it was the first piece that we had to really produce to start the rest in motion.

MS. SHAPIRO: It's also very helpful for us to know where your interests and other users of the data interests are. Because once we have the full body of knowledge, we'd be happy to, you know, analyze the data in a way that would be helpful. I'd also like to comment -- we're using this information and some other related occupational safety and health agendas as a basis of a conference which we're tentively scheduling for early June, but at that point, we'd have additional information out, and we're in the planning stages right now.

ASSEMBLYMAN ROMA: Okay.

MS. SHAPIRO: So I'm glad to hear of your interest. I think it would be very helpful.

ASSEMBLYMAN ROMA: Many years ago, I worked at United Parcel, United Parcel Service, and one of the primary injuries was a back injury from picking up the packages. Depending on how you would pick up the package, you could increase the likelihood of a back injury. So if we know what the type of injury is, we're more likely to prevent the occurrence of that injury, and that's why we need this type of information.

MS. SHAPIRO: I'm glad to hear that, I'm glad we're doing something that's got value.

MR. KNIESLER: A lot of your insurance companies-- One of my previous positions was as municipal manager. Of course, we had various type injuries like -- that were associated with road

and public works department, parks department. The insurance carriers provide videos and training assistance for those particular injuries that are commonplace for that workforce. So that's been an assist, as well. So there are things being done partially because of claimed loads, costs, and some of the things that you addressed with the economic cost of this whole thing.

MS. SHAPIRO: And the individual employers will be able to compare their experience to the aggregate, and if they realize they're out of line, they're going to adopt programs and new initiatives to come down to industry standards, I would hope. Because, as you pointed out, it's a cost of doing business and one that can be avoided.

ASSEMBLYMAN ROMA: It's sad but true. Sometimes things are not done until a problem occurs. There are some relatively simple things that can be done in order to avoid the occurrence of injury or death. Whatever we can do in order to increase that awareness with educational programs, or some type of program, it's incumbent upon all of us because workplace safety is to business, government to private sector, employees, employers, everyone. It just seems that this is an area, while I applaud the results that we've had in the report, we have a lot more work to do.

MS. SHAPIRO: Oh, definitely.

ASSEMBLYMAN ROMA: Further questions?

Assemblyman Hayden.

ASSEMBLYMAN HAYDEN: No, question, Mr. Chairman, just a comment. This is based on the statement that you made a little while ago about the police officers and the seat belts.

I was at a meeting last night at the State County Police Chiefs Association. One of the problems that they were speaking about, and it's recent, is that out of the academy 26 recruits graduated not too long ago, one from their respective departments, and each one of them had an accident. Twenty-six police officers had an accident.

So they're looking to extend the academy for an additional week to get them more training in pursuit driving. This is where they're seeing the problem is, but they're looking for the expertise to supply them with it. I just thought maybe that, you know, we can mention that.

ASSEMBLYMAN ROMA: Yes, I have no doubt that in those high-risk occupations, whether it be our firefighters or police, that in a high pursuit that there is the added chance of injury. So we need that information. But it's so important to have the categories and to have the percentages so that we can get a better understanding of where we can best employ our strategy. Across the board we see various injuries, we see percentages, but we need to be able to delineate and break it down. That's an excellent point.

Any further discussion? (no response) All right.

Do you have a presentation? Is that part of your presentation?

MS. KOTSINES: No.

ASSEMBLYMAN ROMA: Oh, okay.

MR. KNIESLER: No, we don't bring anything. We travel light.

ASSEMBLYMAN ROMA: I wasn't sure who brought the movies.

MS. KOTSINES: Thank you, Mr. Chairman.

ASSEMBLYMAN ROMA: Rick Engler, IUC AFL-CIO, and John Loos, CWA.

R I C K E N G L E R: Thank you very much for the opportunity to testify today.

ASSEMBLYMAN ROMA: Thank you for being with us.

MR. ENGLER: My name is Rick Engler. I'm Vice President and Program Director of the New Jersey Industrial and Union Council, AFL-CIO. We represent roughly 235,000 private and public sector workers in a wide range of industries across the State. We have offices in Cranford and Morristown.

First, I'd like to make a couple of general comments on the survey, and I'd ask the Committee members just to take a look as I mention this chart. This is, it says at the bottom that it's from the Department of Labor. I should clarify that it's the Department of Labor data, but in fact, it's based on a review of the Department of Labor records by Mount Sinai School of Medicine in New York.

What I want to point out on this report, and this is a report based on workers' compensation award data, is that over two periods that were compared from two periods in '84 through '87 compared through '88 through '91, there, in fact, has been a huge increase in compensated occupational disease clients. You can see that the increase in certain areas such as nervous system diseases, pneumocystis, which are dust diseases of the lungs, such as asbestos and silicosis and many others have gone up enormously.

Now, the question here, of course, is whether the actual disease's rate has gone up or whether there is better recognition. Certainly, there's probably a mixture of both.

Certainly, through efforts since -- like the 1983 Chemical Right to Know law, more people are aware of what they're working with. So if they do get an occupational disease, they're more likely to explain what they're working with to their physician.

But it does certainly raise some questions when there's an overall 50 percent increase in the number of awards, not claims, for occupational disease, especially since occupational disease is still often unrecognized and people still don't often make the connection between what they're exposed to and the resulting disease. So I thought that was important to note. The other thing that is important to note is that--

ASSEMBLYMAN ROMA: Excuse me, Mr. Engler.

MR. ENGLER: Yes.

ASSEMBLYMAN ROMA: Is there a representative from the Department of Labor still present in the room?

Could we ask that one of the members, maybe Mene stay with us for the remainder of this portion of the hearing.

Please continue.

MR. ENGLER: Sure.

The second point I wanted to make is that if you examine the occupational disease in a New Jersey report issued by the Department of Health in December '89, based on a Mount Sinai study, they projected, based on BLS statistics, that there were 5842 new cases of occupational disease per year in New Jersey.

That was a projection because, as Vivien Shapiro pointed out, this study wasn't done with this kind of sampling at that time. That study -- this study in 1989 was roundly attacked as wildly exaggerating the extent of occupational injury and illness. It has additional discussion in this of 2000 to 3000

deaths from occupational disease per year and up to 14,000 new cases of occupational disease. But what's striking is that here you have their citation of the '86 Bureau of Labor Statistics' data saying 5842 annual new cases of occupational disease and the Department's new data showing 13,000 new cases annually of occupational disease.

So I'm just suggesting that out of a minimum conservative interpretation that occupational disease is a very significant problem. That it maybe growing, that recognition is probably growing, and that there's some mix between increased recognition of this kind of disease and actual incidents increasing.

National statistics show, and I just want to point this out, because it's very relevant to the data -- is that between 1984 and 1993 nationally -- this is not New Jersey data -- there was a 770 percent increase in accumulative trauma disorders that you mentioned earlier, from repetitive motion, from poor design, from the whole range of probably new technology, again, combined with greater recognition. So we certainly await the April results as well to see how the disease categories are broken down.

ASSEMBLYMAN ROMA: Let me also suggest that you share this information with the Department of Labor. Mene Kotsines is back in the room and she's recovering from an injury. I hope you're feeling better.

MS. KOTSINES: Thank you.

ASSEMBLYMAN ROMA: At the same time, the information that you have, not only giving it to the Committee, but if you give that to the Department of Labor, it will help us with our exchange of information.

MR. ENGLER: I will certainly do that.

The other comment I wanted to make on the study was a little bit more sharply on the question of the extent of employer reporting and why the public sector had higher incidences rates. We certainly think that it proves that public employment in particular sectors of public employment are particularly dangerous. Our experience in the private sector is not only that employers sometimes don't recognize the extent of disease and therefore don't report it, there have been quite a few cases where employers were found to have deliberately, by the Federal U.S. Department of Labor, not to record illnesses or injuries on their OSHA 200 log. So you may see a sort of a skewing where public employers were relatively responsible in complete reporting, because, in fact, the sampling of public sector reporting was 100 percent of public employer establishments up to this survey.

They're used to doing that where private sector-- I think, there are some incentives that work sometimes not to fully -- not to fully report the extent of this disease.

The question then is, what can be done about this? If occupational disease is a significant problem, what can be done?

It's an elementary point, but these are preventable things, these are not something where you can't prevent them. I mean, it ranges as simple things that we do, such as imposing double fines in highway construction zones because of the extent of fatalities among police officers and construction workers and others. Two, have -- encouraging installation of ventilation systems in workplaces to try to control materials at their source.

We support the cooperative efforts towards joint labor-management safety committees particularly in the public sector that John Loos will talk about.

We also are grateful for the support that we've received particularly from Assemblyman Roma and the State Labor Department for joint labor-management training efforts that are centered at Rutgers University. I think those are appropriate. We think those kinds of programs are very important.

I am going to just say -- in closing make three points about three things that I think you all shouldn't do, in order to protect occupational safety and health.

First of all, the issue of universal labeling under the Chemical Right to Know law may well be coming up in this legislation in the next six months. There is no such bill introduced now. However, we expect very likely that there would be such a bill introduced based on discussions that we've had.

In short, the Chemical Right to Know provisions require that the actual name of the chemical be on containers. Without that information, no toxicologist, no physician, no worker can find out easily, exactly what they're working with. It does not help to go back to the pre-1983 days when our members would look at a drum and see something that said A-42 and then ask their doctor or ask their employer what is that stuff and then to get an answer, "We're not going to tell you the real name." There is no reason in the world for us to go backwards in the protection of public health on the question of labeling chemicals in the workplace.

The chemical name, which is essentially known as "universal labeling," on containers is an essential part of the Right to

Know law. We've agreed to reasonable modifications to deal with the kind of symbolic silly stuff, like perhaps, the Wite-Out kind of thing, if that's going to be used as an example. That's been dealt with through the regulatory process. There should be no taking away of vital knowledge on Right to Know.

The second is product liability, and I will give you a statement on that issue, because the issues that the Assembly will address -- I believe in your Committee -- on joint and several and on capping of punitive damages are extremely important.

There are certainly issues of victim rights in these questions and on these issues. But there's also a broader issue. That we need strong legal incentives for employers and manufacturers, in particular, on product liability questions, not to put on the market damaging and unsafe products like asbestos or, perhaps, fiberglass.

If you do something like cap punitive damages, you remove one of the few incentives that there are for employers and manufacturers not to do the right thing. So it's extremely important that the current punitive damages awards, which are uncapped, and there are very few of them, by the way -- very few of them -- on the joint and several liability provisions be left in place.

There was some modifications on the Senate side, those seem to us grudgingly reasonable. We are not happy about them, but we don't think that you should go backward on that issue because, again, we think that will lead to an increase in the occupational disease rate.

Third, and in closing, on Monday, as I understand it, the Pollution Prevention Act revisions are posted for a vote. Assembly Bill No. 903, we feel that bill is fundamentally flawed in terms of occupational health issues. It eliminates vital data that would be collected about a limited number of workplaces, some 800 industrial facilities where high quantities of chemicals are used. It eliminates reporting on so-called small processes. Well, a small process might be small to someone who lives 3 miles away, but it might not be such a small process to the chemical worker, or auto worker, electrical worker that's exposed day in and day out to low levels of exposure that could cause a chronic disease.

Another thing that Pollution Prevention Act amendments -- we think they could-- We think they may make workplaces even more dangerous in the following way. Under the current law, companies cannot take credit for pollution prevention if they shift workers in the community to workers. Meaning, under the present law, if a company reduces its omitting of an ozone depleting chemical, which is good for the environment, they cannot then replace that with a flammable solvent in the workplace that poses an increased health risk to workers. It's a question of how it effects the reporting.

The current law is very fine on this. It says, essentially, that in your reporting, if you make a change for the environmental reason, you have to consider what the impact is on workers at the same time, and you cannot trade off that question. And if this--

ASSEMBLYMAN ROMA: Could you-- Excuse me, one second.

MR. ENGLER: Sure.

ASSEMBLYMAN ROMA: Ms. Kotsines.

MS. KOTSINES: Yes.

ASSEMBLYMAN ROMA: On that 903, I'm not sure if that's in the package -- I've looked over the bill -- but it would be important for the members that this is coming up for a vote on Monday, especially if it impacts workers safety, if we have a position from the Department of Labor.

MS. KOTSINES: I just wrote that down now, Mr. Chairman. Don't worry.

ASSEMBLYMAN ROMA: Thank you.

Prior to the vote--

MR. ENGLER: We're really concerned about this. Meaning that again, the Pollution Prevention Act doesn't do anything to mandate changes in actual working condition. But if it allows the 800 facilities that are covered by the current law to simply shift risks around so that maybe the so-called environmental risk to the external community is reduced and that burden is then transferred to the workers inside, that's really, very, very inappropriate, and that's another reason why Assembly Bill No. 903 is fundamentally flawed, and we urge you to vote against it.

I should just say, final point, when the Pollution Prevention Act was being considered, we were active in the process. Because we didn't like some of the things in that Act concerning its impact on jobs. We were involved in modifying the bill with Senator Dalton, because we felt that certain things would have a negative impact on employment levels, and that would be another form of difficulty for hundreds of

thousands of industrial workers. Those questions have been resolved.

If we felt that the current Pollution Prevention was putting one member out of work, we would be certainly taking a different kind of look at it. We see no evidence for that whatsoever; we think that if this Legislature is indeed concerned about occupational health--

You should vote against 903 on Monday. So I bring you those requests on three issues: Right to Know, product liability, and pollution prevention. A positive step in the right direction is not supporting those, and we certainly do support efforts toward joint labor-management cooperation both on training, establishment of committees, and other cooperative efforts.

Thank you.

ASSEMBLYMAN ROMA: Okay, Mr. Loos. Thank you.

J O H N L O O S: Greg, I have a statement, has that been--

ASSEMBLYMAN ROMA: Mr. Engler, it would be helpful if you could reduce your comments to writing and supply it to the Committee. And in view of imminent vote on Monday, if you have some information for the Department of Labor.

MR. LOOS: My name is John Loos. I'm the Legislative/Political Coordinator for CWA. Thank you, Mr. Chairman, members of the Committee for this opportunity.

Recently released data collected by the New Jersey Department of Labor in 1993 reveals that State employees have a higher incidence rate of occupational injury and illness than their counterparts in the private sector and in local government. In light of this, it's time to consider a strategy to reduce significantly this rate. We submit that the only

strategy that will really work will be getting labor and management to become partners in reducing workplace hazards. The way to do this is by requiring the establishment of joint labor/management safety and health committees in every work site in the State.

At least two states, California and Oregon, have already done this through legislation, and Washington State accomplished it through an administrative order. In these three states, elected officials were not satisfied with compiling and reviewing sad statistics; rather, they took the bold step of requiring both employers and employees to take the issue of workplace safety and health seriously. By requiring joint safety and health committees, these government leaders were not establishing a new level of bureaucracy. Instead, they knew that where the rubber of real workplace hazards meets the road of prevention is in a cooperative effort between workers and management, jointly looking at their unique workplace and then jointly developing strategies of prevention for their workplace.

We could advocate the passage of legislation that, like the three states mentioned, would require every employer in the state, with at least 11 employees, to establish these joint committees. We do think such legislation would be in the best interest of the citizens of our State.

But let us suggest a more modest proposal. Suppose the State were to impose this requirement on itself first. Suppose that this Legislature, armed with the data from the Department of Labor that reveals that the State has a worse record than the private sector or local government, suppose this Legislature required that the State lead by example. Suppose this

Legislature upon hearing that our great State's Governor last week publicly called for greater labor-management partnership, and Commissioner Calderone at that same conference on Labor Management and Partnership called for an establishment of workplace health and safety committees. Suppose this Legislature passed legislation which mandated that every work site where there are more than 11 State employees working was required to have a joint health and safety committee.

If this Legislature were to take this bold step, it would accomplish two things. First, it would create an experimental situation whereby the State's Department of Labor would continue to monitor the incidence rate of occupational safety and health. With 1993 data being combined with 1994 and 1995 data, where there isn't mandated safety and health committees, then somewhat of a baseline and then requiring these committees throughout State government, beginning in 1996, we'd really set up an experimental situation here in this State where we could measure the effectiveness of these workplace committees. Will the incidence rate of job related illness and accidents decline significantly after the establishment of these joint committees? We believe it would.

If this was demonstrated, it would lead to the second benefit of this policy. Local governments and private sector employers might want to create these committees because they know they would work. Perhaps it would be established voluntarily. Or perhaps it might, at some point, need to be legislated. But if we had an experiment in State government of setting up these committees throughout the State, we would probably be able to garner broad public support for legislation

that extends to the private and local government sectors if the data was there.

If we were to engage in this experiment, we would do the entire nation a favor. It would be the largest single experiment in the effectiveness of joint safety and health committees in preventing job-related accidents and illnesses ever conducted in this nation. The winners would be many.

State employees would be winners: They'd be safer and healthier.

The State as an employer would be a winner: They'd have less lost time wages, lower SLI cost, greater productivity, lower workers' compensation cost, and fewer lawsuits.

All of our State's citizens would be winners: They would see lower cost of government, greater productivity among the State's workforce. They would see a state government that led the way by getting its own house in order before mandating that everyone else gets theirs in order.

We urge you to consider legislation that would require the establishment of these committees, and we would look forward to working with you in drafting such legislation.

I might just deviate from my prepared remarks to say this, for the last two contracts, at least that CWA has negotiated with the State of New Jersey, we have tried to establish these workplace safety and health committees in the contract. Nothing would prevent it from being done in the contract, but the State's position has been to always object to that. The best that we get is a statewide health and safety committee and a couple of departmentwide health and safety committees but not in the workplace.

About three weeks ago, I was over in the Hughes Justice Complex Building, and trying to get a little bit of exercise, I was walking down the flight of stairs. This is where, if there was a fire in that building, that you'd have hundreds of State employees exiting that building in a somewhat panicked state. As I'm going down the steps, I put my foot down and the step wasn't there. I almost fell, and I looked down and sure enough a big chunk of the step was taken out. I went down two more flights, and there was another stair in the same condition. Now, I reported that, but that's the type of environment that a joint safety and health committee that did a walk through a couple of times a year of an entire building they would pick that kind of stuff up in a moment. Flag it, put a sign up right away or put some sort of barricade up right away until that was repaired.

It seems that we have two choices: We can either focus on -- primarily on collecting data centrally and trying to come up with some broad public policy to prevent this type of injury, this type of workplace hazard, this type of illness, or we can decentralize, push it down into the workplace, and allow workers and management to jointly identify the hazards in their workplace and then come up with the creative solutions at that decentralized level.

ASSEMBLYMAN ROMA: Mr. Loos, I think Assemblyman Garrett has a question.

ASSEMBLYMAN GARRETT: You mentioned two departments may have already started that.

MR. LOOS: Yes, and I apologize for not knowing which two are, and if that's important to you, I can get you that information.

ASSEMBLYMAN GARRETT: Okay. Your point is really interesting to me. I think you may be on to something that we should be looking at. You know, the buzzword during the late 80s and the beginning of the 90s was quality management, TQM, and that sort of thing. As I'm listening to you, I'm thinking how does this -- it seems like it fits into that same area.

MR. LOOS: Absolutely.

ASSEMBLYMAN GARRETT: I'm sort of disturbed that you've had this negative response when you've tried to get it dealing with the administration. It seems the easiest way to do what you are suggesting -- I think it sounds like a fairly worthwhile idea -- is simply that the Governor has the power, I would assume, just by executive order to say that this should begin immediately and not so much that it should be done as a mandate in that sense. I mean, it would seem to me that the management and the departments would of themselves want to have something like this already whether it's a formalized committee with all sorts of rules and regulations or just some -- or more informal methods -- probably the better.

It seems to me the first step should be to see whether we could impose upon the Governor that she would take this step unilaterally and through an executive order. If that doesn't -- if she doesn't see the merits in it, then to take the next step.

MR. LOOS: I think that's really an excellent suggestion. Our attempt was with the two previous administrations, and we

have not sat down to bargain a contract with the Whitman administration.

ASSEMBLYMAN GARRETT: Right.

MR. LOOS: And we will begin that process this spring. I would expect that this will be one of the proposals that we put on the table. Any assistance--

ASSEMBLYMAN GARRETT: Well, keep me informed as that goes, and I'd be interested through the Chair and through the Committee.

MR. LOOS: Any assistance that each of you, individually or collectively as a committee, that you could give to the administration, letting them know that you think that it's a worthwhile idea, certainly would be appreciated.

ASSEMBLYMAN ROMA: In fact, if I may with the Department of Labor representative, Mene Kotsines, if you would bring back those concerns to the Commissioner, and perhaps something could be worked out. Okay.

MS. KOTSINES: Of course.

ASSEMBLYMAN ROMA: Thank you.

MR. LOOS: Good.

Yes, thank you.

ASSEMBLYMAN ROMA: I believe the last speaker is Kathleen O'Leary, Department of Health. I apologize, I was handed the sheet a few moments ago, and I realize that we all have a busy schedule today. But, perhaps, your testimony is the most important now that you're going last.

KATHLEEN O'LEARY: That's all right. Thank you very much.

ASSEMBLYMAN ROMA: Thank you.

MS. O'LEARY: Good morning. My name is Kathleen O'Leary. I'm the Director of the Occupational Health Service in the New Jersey Department of Health. I'd like to introduce Lisa Roche, who is on the staff in the Occupational Health Service. I think very timely and actually we received copies of the report just last night from our print shop.

One, you should have copies of the testimony and a copy of the report that just became available on our census of occupational fatalities for 1993.

MR. WILLIAMS: That's what was just passed out. That's the big thing, looks like-- Here it is, looks like this folks.

ASSEMBLYMAN ROMA: Okay.

MS. O'LEARY: And I have some extra copies here if anybody needs it.

I'm pleased to present to you information on occupational injury fatalities in New Jersey in 1993, which is the latest year with complete information. This information is important in addressing and preventing these tragic events, and I appreciate the opportunity to provide it to you.

ASSEMBLYMAN ROMA: Could I just make one request?

MS. O'LEARY: Yes.

ASSEMBLYMAN ROMA: Given the fact that it is in written form, is there some way to summarize--

MS. O'LEARY: Yes, I can.

ASSEMBLYMAN ROMA: --what is a very informative and what appears to be a voluminous report and with a lot of detail which the Committee would like to review. But if you could touch upon some of the key aspects, I think that might help the deliberation of the Committee.

MS. O'LEARY: Fine, we can do that.

This is a -- the project is done under-- It's an effort between both the Federal government and the State. We have in effect a contract with the Bureau of Labor Statistics. So this is part of a national effort to get a statistic regarding occupational fatalities. This was initiated in 1990, and actually now all 50 states are participating in it, so it's a national effort, and New Jersey is one of those states.

In fact, the Occupational Health Services has been collecting data on occupational fatalities since 1983. So we now have a-- We can in effect start to do some analysis in trends, from 1983 to the current time.

BLS provides the funding to the states which is matched by the states, so we have both Federal dollars and State dollars that are used in this effort.

In 1993, in New Jersey, there were 142 deaths due to injuries incurred at work or a rate of 4 per 100,000 workers. Included in the 142 deaths are motor vehicle accidents while working, homicides, and suicides. This number does not include the deaths that were due to diseases from exposures at work. Again, the same comment there, these are just from injuries. Very often the occupational diseases are not recognized, and in effect, there's a latent period for when the disease actually manifests itself. So this report just deals with occupational fatalities due to injuries.

The numbers of deaths in 1993 were greater than the numbers of deaths due to occupational injuries in any other year. The injuries occurred in every county of the State. As you look through the report, you'll see that we have the numbers for each

county. The deaths occurred to workers in every industry and occupational group. The occupational groups with the most deaths were operators, fabricators, and these are such as truck drivers, construction laborers.

The main causes of injury were: motor vehicle traffic accidents, 38 out of the 42, falls, mostly from ladders, scaffolding, was 27; homicides, which I think you'll be interested in-- And if you take a look there is special information about both the motor vehicle accidents, on page 21 of the report with some details, and also, I think your interest in violence in the workplace. There's information about homicides, again, in the report on page 25.

Just a couple of examples of the kind of fatalities we're talking about are:

- \* Highway worker setting safety cones on a highway was struck by a van.
- \* A crossing guard walking onto a highway.
- \* An ironworker falling from a second story steel beam.
- \* A night manager of a fast food restaurant shot during a robbery.
- \* Service station attendant shot during a robbery.

So you can see that there's a large number of persons from different types of industries, different occupations that are experiencing these fatalities.

I think all the experts in the area of occupational health believe that these deaths are preventable, that there are known ways in which they could be controlled. For example, to help prevent the deaths from motor vehicle accidents, seat belts

should be used, drivers should be trained in safety, speed limit should be adhered to.

This morning on the news, when I was listening to the news, they came out with a new study that very often truck drivers are in fact driving when they're tired. They need to know more about that they need more rest in between long travel times.

Some of the data that we've collected can be used to identify hazardous occupations, which is what you're talking about, so that you could start to understand who has experienced these fatalities. You can direct the resources then to safety programs, and instead of just not in effect knowing where to direct your programs that's why we want to use this kind of data. You can identify areas where you can modify or have safety and health standards that may need to be developed. You can identify areas where they may need further research.

So in targeting these areas for prevention, it's important to look at the number of fatalities, which I think is really well described in the report. The fatality rates, because very often the numbers may not -- in effect they have to be related with the number of persons that are employed either in that industry or occupation and the potential years of life lost. Using these indicators, some areas that we think need to be targeted are workers that are over age 65, truck drivers, construction workers, and workers in transportation.

And just to comment, one of the things that we're doing in occupational health, it sort of complements this effort. One, you have a census which is just collecting information and describing who is experiencing these fatalities. We have a complementary effort going on where we actually investigate the

fatality, try to find out what the circumstances were, find the common factors that are associated with that fatality, and then do education around that effort. So we're not just collecting data, we're actually going out and doing investigations -- and again, this is part of a national effort -- then making that information known to the industries and businesses that are being affected and coming up with educational information which is one of the things I gave you.

In a very sort of brief way, describe how the fatality happened and how it can be corrected.

So I know that you're pressed with time. I think if you look through the report, you'll see that a lot of the information that you were looking at, you're going to find there. Especially, I would suggest, again, looking at-- If you take a look at page 25 around homicides, some of the information you were asking, who's experiencing these types of fatalities, I think, it's described.

ASSEMBLYMAN ROMA: I would like to compliment you on the information that you submitted. Many of the reports that we received have quite a bit of information. But the way you have broken this down seems to follow the comments that I have made before in terms of categories. I would like to compliment you on this report. Page 7, talks about a ground fault interrupter, and apparently a lifeguard in a swimming pool pump house was electrocuted, and now there is a survey that is being done--

MS. O'LEARY: Yes.

ASSEMBLYMAN ROMA: --in order to make sure that ground fault interrupters are installed.

MS. O'LEARY: Yes, the Department of Health and another group consumer health service does inspections of pools. So again, that's the kind of thing that you get cooperation and mostly information. If in effect people knew that that was a risk, that could be corrected, and they would do that routinely now as they go through their inspections.

ASSEMBLYMAN ROMA: It seems to me that any facility where the public is invited, and even though access would be limited to certain people, this is an area where we should enhance our safety efforts. It seems to me that this should have been done before, but I certainly applaud your efforts in pushing this to a conclusion. It shouldn't have to take a situation as tragic as this to bring it to our attention when we're dealing with facilities where that many people would frequent the area.

This reinforces a comment that I made earlier. Sometimes we only react to a situation when there's some type of a lawsuit or some devastating injury or death. Here is a situation where conceivably some type of a lawsuit would be brought, and it's not going to bring that person's life back. So it seems to me that everything that we've said this morning is extremely important in terms of getting the data together to make sure that certain types of injuries or deaths do not reoccur. But again, it was not meant as a criticism of your report. Quite frankly, I'm surprised that we don't have these sort of safety devices already installed in this State.

MS. O'LEARY: Yes, and I think that sometimes you can use the data to then identify a problem. And that's why during these investigations of each fatality you start looking and you find a lot of common factors. Then if you pull that data

together, then you know where the corrections have to be made. Right.

ASSEMBLYMAN ROMA: I would ask that both your Department and the Department of Labor, working together, come up with some additional recommendations, and being extremely anxious to implement additional procedures as quickly as possible, if you could expedite your efforts with the Department of Labor, so that when we have our second report, we'll have additional information and hopefully some legislator recommendations. Hopefully, some of this can be done by executive order or departmental order, but if need be, then we'll look at the legislation.

Questions from the Committee. (no response)

Thank you.

MS. O'LEARY: Just one other comment, too, you might be interested. Lisa has worked with the Bureau of Labor Statistics, you mentioned that what are the costs associated with these fatalities.

ASSEMBLYMAN ROMA: I try not to emphasize the cost because it's primarily a person's life or the quality of life that's important to me. But there are some people that concentrate primarily on the cost involved. And I think it is-- The example that I used, a wrongful death action, might make them think very carefully about installing the ground fault interrupter.

MS. O'LEARY: Yes.

But what we're saying is we have some additional information about the cost that we're putting together. We can make that available to you.

ASSEMBLYMAN ROMA: I would appreciate that.

Thank you once again.

MS. O'LEARY: Good. And in the future it will become part of the report.

ASSEMBLYMAN ROMA: Thank you, again, for an illuminating report.

MS. O'LEARY: Thank you.

ASSEMBLYMAN ROMA: Is there anyone else that will be addressing the Committee with reference to workplace safety?  
(no response)

We're running a few minutes behind schedule. We'll take a five minute break, and then we're going to start with the Assembly Bill No. 2378.

**(MEETING CONCLUDED)**

APPENDIX

# NEW JERSEY INDUSTRIAL UNION COUNCIL, AFL-CIO

Main Office: 14 Commerce Drive, Cranford, N.J. 07016 (908) 272-4200

South Jersey Office: 9 East Main Street, Moorestown, N.J. 08057 (609) 866-9405

January 19, 1995

To: Members of the New Jersey Assembly

From: Bill Kane, President  
Rick Engler, Program Director

RE: **SUPPORT WORKER & PUBLIC HEALTH:**  
**OPPOSE A.903**

2,500 workers die and 15,000 get sick from workplace disease each year in New Jersey. Chemical poisonings, dust diseases of the lungs, nervous system disease, and cancer from on-the-job exposure to chemicals are probably increasing, according to recent N.J. workers' compensation data.

Since last July, working people in about 800 New Jersey industrial facilities have benefited from a law that helps prevent chemical exposures. Under the *New Jersey Pollution Prevention Act*, companies must evaluate how they use chemicals that are safer for the environment *and for workers*.

**The IUC, which represents 235,000 workers across New Jersey, urges you not to gut this law that is working to protect worker and public health.**

Pollution prevention, as defined in the current law, means changes in production technologies, raw materials, or products that result in reduction in the use and discharge of hazardous substances without shifting risks to employees, consumers, or the environment. Pollution prevention methods can include substitution of safer chemicals, production process modification, in-process recycling, and improved maintenance of equipment. **The Pollution Prevention Act is clearly resulting in healthier workplaces: companies report that they plan over 122 million lbs. of toxic use reductions in the next five years.**

**ACS-903 is fundamentally flawed concerning worker protection. Here are just two key reasons why:**

**1) ACS-903 eliminates vital data that now must be collected to reduce worker exposures to chemicals.** Under the current law, about 800 companies must evaluate the dangers of fumes, spills, and leaks at the *process* level where worker exposure initially occurs. Under ACS-903 "small" processes that emit, for example, cancer causing chemicals could be ignored. Without a *process* level of evaluation, companies will be discouraged from discovering where their employees might be at risk.

**2) ACS-903 may even make workplaces more dangerous than they are already!** ACS-903 takes occupational health concerns out of pollution prevention planning. Under the current law, companies cannot take credit for pollution prevention methods that shift risk of toxic exposure to workers. But ACS-903 eliminates this safeguard. Thus, for example, an attempt to reduce toxic solvent stack emissions could lead to substitution of a flammable solvent that could pose dangers to workers or firefighters.

*Don't be misled by Assemblyman DiGaetano's position that "occupational health" has been restored in ACS-903 to the bill's statement of intent and thus his bill would not harm workers. This restoration does nothing to address the concerns above.*

*The IUC does not support laws that put its members out of work!* While the law requires that companies develop Pollution Prevention Plans, it does not force any facility to actually reduce chemical use, nor does it include any provision that allows the DEP to ban or phase-out chemicals. When the law was passed with IUC support in 1991, the Industrial Union Council stopped potential bans from being included in the Act. Our position was and is today that since employees could lose their job from bans, it was not appropriate to include bans in the Act unless effective job security or income replacement could be guaranteed for all impacted workers. *We believe that current industry claims that the current Act will lead to job loss are undocumented and bogus.*

**Do not endanger the health of people who labor in a highly polluted environment -- the workplace. Vote NO on ACS-903.**

The New Jersey Industrial Union Council, AFL-CIO represents 235,000 workers in the private and public sectors. Affiliates benefiting from the Pollution Prevention Act include the Oil, Chemical & Atomic Workers, Auto Workers, Steelworkers, Intl. Chemical Workers, Machinists, Paperworkers, Teamsters, and other unions. For more information call (609) 866-9405. TNGI/AFL-CIO prevpoll

2x

# Key Issues Involving "Tort Reform"

Below find a explanation of the issues prepared by IUC Counsel for Safety, Health, and Workers Compensation, David Tykulsker.

Under New Jersey law, you cannot sue your employer for a work-related injury or illness. You are limited to claiming workers compensation benefits. However, if someone besides the employer did something wrong that caused the injury or illness, you can sue them for what they did wrong. This is called a **tort suit**. For example, you can bring a tort suit against the manufacturer of asbestos containing products for failing to put a label on the product warning of the hazard when such failure causes asbestosis or lung cancer.

The tort system has been responsible for providing substantial compensation to workers and consumers. By allowing for the possibility of full compensation, the tort system provides an important incentive for companies to protect workers and the public. Now, the asbestos, tobacco, and chemical industries, having caused hundreds of thousands of deaths and illness', are trying to limit your ability to bring tort suits. Here is what they are trying to do through state and federal legislation:

♦ **Cap Punitive Damages.** When you prove that you have been injured or made ill by a company doing something wrong, you are entitled to be compensated for your problems -- these are called **compensatory damages**. But when companies engage in outrageous, uncivilized conduct, such as deliberately preventing you or anyone else from knowing that you can get cancer from exposure to their product, they need to be punished; when you prove that corporate conduct has sunk to this level, you are entitled to punishment money known as **punitive damages**. By making the amount of this punishment money subject only to a jury's discretion, no company can ever accurately calculate how much profit there is in doing wrong. The impossibility of doing this profit and loss calculation in advance is a very important incentive in making sure that companies don't do the wrong thing.

Now industry wants to put a cap on the amount of punitive damages, which means that a corporation can now calculate the likely amount of punitive damages it will face if it were to engage in outrageous, uncivilized conduct. Once punitive damages are readily calculable, a wrongdoing company can calculate whether it is likely to be profitable to do wrong. If this type of tort "reform" passes, every company will have an incentive to see if doing the wrong thing would be profitable. *Capping punitive damages will directly lead to more dangerous, unsafe corporate practices.*

♦ **Eliminate Joint and Several Liability.** Sometimes workers get injured or sick, or the environment is ruined, through the combined acts of two or more companies, but one of those companies is not available to pay the compensatory damages, due to corporate dissolution, bankruptcy or other reasons. When one or more defendants can't pay the damages, the question is who is responsible for chasing after someone else to pay -- the innocent plaintiff, or the other defendants who have been found to be partially responsible for the problem.

"**Joint and several liability**" is the legal term meaning that the partially wrongdoing defendants have to pay the innocent plaintiff in full, and then chase after the other partially responsible defendants to be reimbursed. Industry now wants to eliminate "joint and several liability" and make the victim chase after the missing party to get compensation. *This is unfair!*

*We encourage you to reprint this article in your union's publications. Please credit the New Jersey Industrial Union Council, AFL-CIO. For more information, call (609) 866-9405.*

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# Study finds job-related diseases on rise in state

By TOM JOHNSON

New Jersey workers continue to be threatened by occupational diseases, physicians and labor officials said yesterday, citing a dramatic increase in workers' compensation awards in recent years.

The trend of increasing occupational diseases is particularly alarming, they argued, since it occurs at a time when major environmental laws are under attack in the Legislature.

"There is no question that occupational disease is a substantial public health problem," said Dr. Philip Landrigan, chairman of the Department of Community Medicine at the Mt. Sinai School of Medicine in New York, during a Statehouse press conference. "Our most conservative finding is that occupational disease is not diminishing."

Landrigan and a Mt. Sinai colleague, Dr. Steven Markowitz, analyzed workers' compensation awards of the New Jersey Workers' Compensation Board from 1984 through 1991.

But Jim Sinclair, a lobbyist for the New Jersey Business & Industry Association, questioned the validity of correlating occupational diseases with worker compensation awards, saying claims tend to increase when unemployment rises. That was the case in the last few years when hundreds of thousands of manufacturing jobs were lost.

"Our position is the workplace is a safer place," Sinclair said. Efforts to overhaul right-to-know and pollution prevention laws will decrease the regulatory burden on industry while making the programs more effective, he said.

Landrigan and Markowitz are authors of "Occupational Disease in New Jersey," a report issued in 1989 by the state health department. They released their latest study at a press conference where they were joined by state labor leaders.

In their study, the doctors found that during two separate four-year time spans dust diseases of the lung and nervous system diseases had increased by more than 100 percent, while cancer incidence had increased by more than 90 percent.

Comparing the period 1984-1987 with 1988-1991, the physicians found there were, on average, 2,119 more individuals who were awarded workers compensation for occupational disease in New Jersey each year. Overall, there was a 50 percent increase in occupational diseases from the two periods.

Markowitz and others argued the problems stemming from occupational disease are probably more serious than their analysis indicates because traditionally occupational diseases are underreported.

"These statistics are just the tip

Worker compensation awards			
Illness	1984-87		Percentage change
	1988-91		
Poisonings	1,485	2,057	38.5%
Multiple illnesses	1,155	2,063	78.6
Heart attacks	338	326	-3.6
Stroke (cerebrovascular)	51	43	-15.7
Hearing loss	270	316	17.0
Eye diseases	86	120	28.3
Musculoskeletal inflammation	254	304	19.7
Pneumoconioses	193	447	131.6
Mental disorders	98	162	65.3
Neoplasms (cancer)	68	131	92.6
Skin diseases (dermatitis)	64	67	4.6
Nervous system diseases	127	276	117.1
Contagious diseases	32	28	-12.5
Occupational diseases total	4,221	6,340	50.2
All occupational injuries and diseases	44,325	46,133	4.1

Source: N.J. Department of Labor

The Star-Ledger

of the iceberg," said Eric Scherzer of the Oil, Chemical and Atomic Workers union. "A tremendous amount of diseases don't show up until after workers retire."

Landrigan acknowledged the increase in occupational disease may be partly attributed to better recognition of the illnesses and their cause by the medical community.

But he also argued many of the occupational diseases are related to occupational exposure to toxic chemicals, particularly those dealing with dust diseases of the lungs and many cancers.

In a 1989 study for the state Department of Health, Landrigan and Markowitz estimated that, at a minimum, between 2,170 and 2,870 deaths result each year in New Jersey from just five types of occupational disease. They also estimated that from 7,317 to 14,776 new cases of occupational disease develop each year as a result of work-related exposures.

"New Jersey workers benefit from important laws that address the problem of occupational disease," said Landrigan, citing the state's pollution prevention law, the worker and community right-to-know law and legal rights allowing victims to sue manufacturers of defective products or unsafe chemicals.

There are bills pending in the Legislature to overhaul each of those laws, a move that Landrigan argued would be short-sighted. "Don't be blinded by short-term economic consequences," he urged lawmakers.

But Assemblyman Paul DiGaetano (R-Passaic), a sponsor of a bill to overhaul the pollution prevention law,

ronment," DiGaetano said.

Nancy Lawson, a lobbyist for the Chemical Industry Council of New Jersey, said her member companies have reduced toxic releases to the environment by 37 percent in just one year. She also questioned the validity of the physicians' study.

"Most cancer studies show 30 percent of cancers are due to tobacco and up to 35 percent are due to lifestyle, such as what we eat and drink," Lawson said. "There's no scientific study that links these two issues that the doctors are talking about."

Landrigan conceded many businesses have dramatically curbed releases of toxic chemicals to the environment since industry has been required to report such emissions to the federal Environmental Protection Agency under the federal right-to-know law.

"It's very likely that the better containment of those toxics within the factory spares the local community at the expense of the workers," he added.

Rick Engler, a vice president of the New Jersey Industrial Union Council, AFL-CIO, maintained, "Big corporations are behind the current assault on worker health protections in the New Jersey Legislature."

"It seems to us to comprise a comprehensive attack on workers' health and safety."

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**Occupational Disease Morbidity**  
**New Jersey Workers' Compensation Board**  
**1984-1987 versus 1988-1991**

Average Annual  
Workers Compensation Awards

	<u>1984-1987</u>	<u>1988-1991</u>	<u>Change</u>	<u>% Change</u>
Poisonings	1485	2057	+572	+38.5%
Multiple illness	1155	2063	+908	+78.6%
Circulatory system disorders				
Heart attacks	338	326	-12	-3.6%
Stroke (cerebrovascular)	51	43	-8	-15.7%
Hearing loss	270	316	+46	+17.0%
Eye diseases	86	120	+34	+28.3%
Musculoskeletal "inflammation"	254	304	+50	+19.7%
Pneumoconioses	193	447	+253	+131.6%
Mental disorders	98	162	+64	+65.3%
Neoplasms(cancer)	68	131	+63	+92.6%
Skin diseases (dermatitis)	64	67	+3	+4.6%
Nervous system diseases	127	276	+149	+117.1%
Contagious diseases	32	28	-4	-12.5%
<hr/>				
Occupational diseases <u>Total</u>	4221	6340	2119	+50.2%
All occupational injuries and diseases (WC awards)	44,325	46,133	+1808	+4.1%

Source: New Jersey Department of Labor



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JOHN LOOS  
Legislative/political Coordinator

## Joint Labor/Management Safety & Health Committees

Recently released data collected by the NJ Department of Labor in 1993 reveals that state employees have a higher incidence rate of occupational injury and illness than their counterparts in the private sector and in local government. In light of this, it is time to consider a strategy to reduce, significantly, this rate. We submit that the only strategy that will work will be getting labor and management to become partners in reducing workplace hazards. The way to do this is by requiring the establishment of joint labor/management safety and health committees in every worksite in the state.

At least two states (California and Oregon) did this through legislation; and Washington State accomplished it through an administrative order. In these three states, elected officials were not satisfied with compiling and reviewing sad statistics; rather, they took the bold step of requiring both employers and employees to take the issue of workplace safety and health seriously. By requiring joint safety and health committees, these government leaders were not establishing a new level of bureaucracy. Instead, they knew that where the rubber of real workplace hazards meets the road of prevention is in a cooperative effort between workers and management, jointly looking at their unique workplace and then, jointly, developing strategies of prevention for their workplace.

We could advocate the passage of legislation that, like the three states mentioned, would require every employer in the state, with at least eleven employees, to establish these joint committees. And we do think such legislation would be in the best interest of the health and safety of the citizens of our state. But let us suggest a more modest proposal. Suppose the state were to impose this requirement on itself, first. Suppose that this legislature, armed with the Labor Department's data that reveals the state has a worse safety and health record than either the private sector or local government, led by example. Suppose this legislature, hearing that our great state's governor last week publicly called for greater labor-management partnership, passed legislation which mandated that every worksite where there are more than eleven state employees working, was required to have a joint safety and health committee up and running by January 1, 1996.

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If this legislature were to take this bold step, it would accomplish two things. First, it would create an experimental situation whereby the state's Department of Labor would continue to monitor the incidence rate of occupational safety and health. With 1993 being part of a base-line that included 1994 and 1995 as well, we could then begin to measure over time, in 1996 and thereafter, the effectiveness of these joint committees. Would the incidence rate of job related illness and accidents decline significantly after the establishment of these joint committees? We believe it would. And if this was demonstrated, it would lead to the second benefit of this policy. Local governments and private sector employers might want to create these committees *because they would know they work*. Perhaps they would be established voluntarily. Or perhaps they might, at some point, need to be legislated. But it is conceivable that they could be legislated with broad public support, based upon a clear record of success in state government.

If New Jersey were to engage in this experiment, we would do the entire nation a favor. It would be the largest single experiment of the effectiveness of joint committees in preventing job-related accidents and illnesses ever conducted in this nation. The winners would be many.

State employees would be winners: They would be safer and healthier.

Employers would be winners: They would have less lost-time wages, greater productivity, lower workers compensation costs and fewer lawsuits.

And all of our state's citizens would be winners: They would see lower costs of government and greater productivity among the state's workforce. And they would see a state government that led the way by getting its own house in order before mandating that everyone else get theirs in order.

Imagine, citizens of our state proud of their state government.

We urge you to consider legislation which would require the state to establish joint labor/management safety and health committees.

## **Oregon Safety Committee Regulations**

**Legislative/Administrative Authority:** Oregon Safe Employment Act (1973); Workers' Compensation Reform Bill, Senate Bill 1197 (1990); Oregon Administrative Rules 437, Division 40.

**Agency with jurisdiction:** Oregon Occupational Safety and Health Division (OR OSHA), Department of Insurance and Finance.

**Litigation:** No legal challenges to date.

**Scope/Application:** Applies to all public and private employers of 11 or more employees. Also to employers with 10 or fewer employees with Lost Workday Case Incident Rate (LWCIR) in top 10% for employers in that industry or with workers' compensation premium classification in top 25%. Employers of only seasonal workers may substitute crew safety meetings prior to commencement of work at each job site. Employers in logging may meet intent by complying with the crew safety meetings and training required by vertical standard for Logging. (Current scope expands regulations in effect 1982-90 requiring that employer establish JSHC only if LWCIR exceeded 75% of the industry average).

**Committee membership:** Employee members are volunteers or elected by peers. Equal number of employee and employer representatives, but employees can outnumber employers if agreed upon by workers and management. Terms of at least one year, staggered so at least one experienced member is always on committee.

**Committee size:** At least 2 members for employers with 20 or fewer employees. At least 4 members for employers with more than 20 employees.

**Committee chair:** Elected by committee members.

**Meetings:** At least monthly except months when quarterly safety inspections are made. Quarterly meetings permitted for low hazard workplaces. Written agenda required. Members compensated for meetings at regular wage.

**Minutes:** Prepared and maintained for 3 years for inspection by OR-OSHA. Posted for all employees to see and sent to each committee member. All reports, evaluations, and recommendations of JSHC to be part of the minutes.

### **Minimum duties:**

- Evaluate accident and illness prevention programs and make written recommendations for improvements.
- Establish procedures for inspections by JSHC inspection team.
- Conduct inspections at least quarterly, document hazards in writing, and recommend abatement of unsafe conditions and work practices.
- Inspect satellite locations and mobile work sites as well as main facility, where necessary.

**Summary and Comparison of Existing State Laws and Regulations  
Governing Workplace Safety and Health Committees:**

**Washington, Oregon, and California**

prepared by

**Steven Hecker, Associate Professor**

**University of Oregon Labor Education and Research Center**

**November, 1990**

State mandated requirements specifying the establishment and function of joint employee-employer safety and health committees exist in many industrial nations. Meanwhile in the U.S. this concept has been receiving increasing attention as a potentially important element of an effective workplace safety and health program. To date three states have enacted legislation and/or administrative orders which provide for such committees, which I shall refer to as joint safety and health committees (JSHCs). These are Washington, Oregon, and California.

Washington's provisions pre-dated the federal Occupational Safety and Health Act of 1970. The earliest requirements date to 1945. Legislation enacted in 1960 provided for JSHCs with specific structures and duties and required that minutes of meetings be forwarded to the Washington Department of Labor and Industries. With the passage of the Washington Industrial Safety and Health Act in 1973, which established Washington as a state plan state under the federal OSHAct, the safety committee provisions were not included in Washington's state safety and health standards. However, they were reinstated in somewhat different form by administrative order in 1978 and have remained in effect through the present.

Oregon's legislation was initially passed in 1981 and regulations were implemented in the following year. Workers' compensation reform legislation passed in 1990 has amended the earlier law, and new regulations which are broader in scope will go into effect in March 1991. California's enabling legislation was passed in 1989 and final regulations implementing the law are expected imminently. As far as the author is aware, there have been no legal challenges to the regulations in any of the three states.

The following summaries of the provisions governing JSHCs in these three states are based on the latest regulations issued by the respective OSHA agencies with reference, where applicable, to earlier versions. In the case of California revisions are imminent, but the enabling legislation and the August 1990 version of the JSHC regulations presented for hearing in August 1990 form the basis of this analysis.

## Washington Safety Committee Regulations

**Legislative/Administrative Authority:** Washington Industrial Safety and Health Act (1973); Administrative Orders 78-22 (1978) and 80-20 (1980).

**Agency with jurisdiction:** Division of Industrial Safety and Health (WISHA), Department of Labor and Industries.

**Litigation:** No legal challenges to date.

**Scope/Application:** Applies to all public and private employers of 11 or more employees. Employers of fewer than 11 employees and employers with dispersed work crews and shift schedules can substitute foreman-crew meetings for safety committees, provided they comply with JSHC duties.

**Committee membership:** Employee members elected by employees; "method of election . . . is an option of that group." Employer members selected by employer. Number of employer members not to exceed number of employee members. Terms of members not to exceed one year. Size of committee should be guided by size of firm, diversity of operations, degree of hazards, and meeting space available (size is a guideline only, not specified in rules).

**Committee chair:** Chairperson elected by committee members.

**Meetings:** Frequency determined by JSHC vote. If deadlocked, committee to consult with WISHA safety education representative. Meeting length not to exceed one hour unless majority vote to do so.

**Minutes:** Must be prepared and retained for one year. Attendance and subjects discussed shall be documented. Minutes available for inspection by WISHA noncompliance personnel.

**Minimum duties:**

- Review safety and health inspection reports to aid correction of unsafe conditions and practices.
- Evaluate accident investigations to determine if corrective action was properly taken.
- Evaluate accident/illness prevention program and make recommendations for improvement.

**Training of committee members:** None specified beyond training required for all employees.

**Enforcement:** JSHC requirements are citable by WISHA compliance officers. Approximately 1400 instances of violation of one or more provisions of JSHC regulation cited 1986-88. Violations are normally referred to WISHA Education Department for consultation on setting up JSHCs and safety programs.

STATEMENT ON OCCUPATIONAL INJURY FATALITIES IN 1993

ASSEMBLY LABOR, BUSINESS AND INDUSTRY COMMITTEE

PUBLIC HEARING JANUARY 19, 1995

I am Kathleen O'Leary, Director of the Occupational Health Service in the Department of Health.

I am pleased to present to you information on occupational injury fatalities in New Jersey in 1993, the latest year with complete information. This information is important in addressing and preventing these tragic events and I appreciate the opportunity to provide it.

The Census of Fatal Occupational Injuries (CFOI) Project is a cooperative effort between the federal government and the state governments. It was initiated in 1990 by the United States Department of Labor's Bureau of Labor Statistics (BLS) with ten states including New Jersey. This is the second year with all 50 states and the District of Columbia participating. The impetus for the CFOI Project was the realization that no true count of occupational fatalities existed and that estimates varied widely due to different reporting sources and definitions. The objective of the CFOI Project is to collect detailed information on every occupational fatality in a timely fashion so that an accurate count can be made, and programs developed to prevent future fatalities.

The BLS provides funding to the states which is matched by the states. The states actively collect, verify, code, computerize, and transmit to BLS detailed information on their occupational fatalities, according to the BLS protocol. Identifying information (i.e., workers' names and employers'

names) is not sent to the BLS. In New Jersey, the CFOI Project is conducted by the Occupational Health Service within the New Jersey Department of Health.

In 1993, in New Jersey, there were 142 deaths due to injuries incurred at work, or 4 per 100,000 workers. Included in these 142 deaths are motor vehicle accidents while working (not commuting), homicides, and suicides. This number does not include the deaths due to diseases from exposures at work, such as work-related cancer, lung disease due to asbestos, etc.

The number of deaths (142) in 1993 was greater than the number of deaths due to occupational injuries in any year since 1986 when there were 146 deaths. The fatal injuries occurred in every county of the State except Sussex, with the greatest numbers in Middlesex, Essex, Monmouth, and Camden counties. The victims were mostly men and relatively young; the average age was 43. The deaths occurred to workers in every industry and occupational group, with the most occurring in the construction industry, transportation and public utilities industry, and the service industry. The occupational groups with the most deaths were operators, fabricators, and laborers (such as truck drivers, construction laborers), precision production, craft, and repair (including construction tradespeople such as painters, structural metal workers and including mechanics), and services (such as firefighters and police officers, street crossing guards).

The main causes of injury were motor vehicle traffic accidents (often to pedestrians) - 38, falls (mostly from ladders, scaffolding, or buildings

and involving construction workers) - 27, and homicide (often to workers in the retail trade industry and usually involving firearms or knives) - 20.

A few examples of the fatalities are:

- o A highway workers setting safety cones on the highway was struck by a van which had been struck by another vehicle;
- o A crossing guard walked onto a highway to stop traffic for two pedestrians and was struck by a car;
- o An ironworker fell 26 feet to the ground from a second-story steel beam of an office building under construction;
- o The owner of a company was on the second floor waiting for the freight elevator. The elevator door opened, the owner stepped inside, and fell over 14 feet down. The interlocks that prevented the elevator door from opening if the elevator was not there were not functioning and the lighting was poor;
- o A night-manager of a fast food restaurant was shot during a robbery;
- o A clerk in a video store was stabbed during a robbery; and
- o A service station attendant was shot during a hold-up.

Experts believe that these deaths are preventable through a combination of engineering and safety controls at the workplace, employer and employee training, and enforcement of health and safety standards. For example, to help prevent deaths due to motor vehicle accidents, seat belts should be used, drivers should be trained in safety, and speed limits should be adhered to. To address falls, fall protection such as safety lines for the workers should be used and safety equipment should be inspected and maintained. Homicides can be prevented by providing extra protection for night-time workers with access to money such as bullet-proof booths at all-night gas stations and better night lighting, making it known that very little money can be accessed by employees, silent alarms and surveillance cameras, and restricting the production and sale of bullets that can penetrate body armor.

CFOI data can be used to:

- o identify hazardous occupations, industries, activities, and locations;
- o direct resources for safety programs to prevent injuries;
- o identify areas for modifying or developing safety and health standards; and
- o identify areas for further research.

In targeting areas for prevention efforts, it is important to look at the number of fatalities, the fatality rates, and the potential years of work life lost. Using these indicators, some areas to target for prevention efforts are workers over age 65, truck drivers, construction laborers and trades workers, and workers in farming and transportation.

Several federal and State agencies enforce workplace safety and health standards. The federal Occupational Safety and Health Administration covers private employees in New Jersey except certain self-employed workers (i.e., sole proprietors), unpaid family workers, laborers on small farms, and certain workers in industries which are covered by other federal agencies (e.g., Federal Aviation Administration, U.S. Coast Guard). The New Jersey Public Employees Occupational Safety and Health (PEOSH) Programs in the Departments of Labor and Health cover public employees in New Jersey, except federal government employees. In addition, the New Jersey Department of Labor provides consultative site visits in response to requests from employers under a contract with federal OSHA.

Also, the Occupational Health Service implements the New Jersey Fatality Assessment and Control Evaluation (FACE) Project to identify factors that increase the risk of work-related fatal injuries. Project staff conduct on-site evaluations of reported fatalities due to falls, electrocutions, and confined space exposure, prepare and disseminate reports of the on-site evaluations including recommendations for prevention to the employers, employees, unions, and others involved, and develop informational materials on preventing these types of fatalities. The National Institute for Occupational Safety and Health partially supports

the Project which exists in eleven other states. Common recommendations made in the FACE evaluation reports include:

Electrocutions

de-energize, insulate, and test electrical circuits  
develop or improve job safety and training programs

Falls

use fall protection  
inspect and maintain safety equipment  
conduct a job hazard analysis  
develop an emergency response plan  
develop or improve job safety and training programs

Confined Space

develop a confined space entry program  
conduct air monitoring in confined spaces  
develop or improve job safety and training programs

To date, 82 FACE workplace investigations have been conducted; the majority (63%) were for fatal falls.

In addition to providing reports with recommendations to individuals and agencies involved with the fatalities, the FACE project also uses FACE investigations for larger public awareness programs. For example:

- o one page hazard alerts have gone to appropriate industry groups on prevention of falls during truck tarping operations,

bridge maintenance operations, and electrocutions during road construction;

- o because of 11 fatalities among tree trimmers in the State since 1990, the NJDOH is distributing an alert on the prevention of tree trimming fatalities that will go to all tree trimmer companies and municipalities in the State; and
  
- o because of a recent electrocution of a lifeguard in a swimming pool pump house that could have been prevented if there was an electrical ground fault circuit interrupter, the NJDOH will be asking all local sanitarians who inspect public pools this spring to notify pool owners of the importance of installing this electrical device if they have not already done so (until recently the construction code for swimming pools did not require installation of ground fault circuit interrupters).

In addition to the Census of Fatal Occupational Injuries (CFOI) Project and the Fatality Assessment and Control Evaluation (FACE) Project, the Surveillance Program in the Occupational Health Service conducts a number of other surveillance projects.

The Surveillance Program collects and analyzes data related to occupational health and occupational hazards, and implements public health interventions designed to control and eliminate the occurrence of occupational disease and injury.

Specific activities of the Surveillance Program include:

1. Heavy metals surveillance

Since 1985, clinical laboratories have been required to report elevated blood and urine lead levels to the New Jersey Department of Health (NJDOH) (N.J.A.C. 8:44-2.11). Physicians have also been required to report adult lead poisoning since May 1990 (N.J.A.C. 8:57-3.2). Workers with elevated blood lead levels  $\geq$  40 ug/dl and their physicians are interviewed and sent informational materials by OHS staff. Educational sessions for health professionals are provided. OHS industrial hygienists conduct evaluations of workplaces and make recommendations to reduce lead exposure, or referrals are made to OSHA for worksite follow-up. The Lead Surveillance project is partially supported by NIOSH to conduct outreach to employers.

Clinical laboratories are also required to report tests with elevated blood or urine levels of mercury, cadmium and arsenic to the NJDOH. Follow-up on cases and workplaces identified from the mercury reports was initiated in mid-1990 and from cadmium reports in 1992, with funding from NIOSH. The follow-up includes case, employer and physician outreach, and education. There is more limited follow-up to arsenic reports.

## 2. Silicosis

A register of individuals with silicosis identified from hospital discharge records, death certificates and physician reports has been established. Since 1985, hospitals have been required to report silicosis cases, per N.J.A.C. 8:57-3.1. Since May 1990, physicians have been required to report silicosis cases, per N.J.A.C. 8:57-3.2. Medical records and work histories are obtained on the individuals to confirm the diagnosis of silicosis and to identify workplaces. All workplaces currently using silica receive industrial hygiene evaluations to evaluate potential silica hazards.

## 3. Occupational asthma

In March 1988, sentinel physicians were identified and requested to report occupational asthma. Since May 1990, physicians have been required to report occupational asthma, per N.J.A.C. 8:57-

3.2. Cases have also been identified from hospital reports. The case reports are followed up with worker interviews and education called Sentinel Event Notification System for Occupational Risks and industrial hygiene evaluations of workplaces. This project is called Sentinel Event Notification System for Occupational Risks (SENSOR) and is funded by the National Institute of Occupational safety and Health (NIOSH).

4. Other occupational lung diseases (pneumoconioses)

Since 1985, hospitals have been required to report all cases of pneumoconioses to the NJDOH and local health departments. Under the "Minimum Standards for Local Health Departments (LHDs)," LHDs are required to follow-up on the hospital reports with interviews and worksite evaluations. The NJDOH has provided training and consultation to local health officials to increase their capacity to conduct follow-up and the NJDOH tracks LHD activities. Physicians have been required to report cases of pneumoconioses since May 1990.

5. Education

The Program has developed educational materials on lead, mercury, cadmium, silica, asbestos and pesticide exposures; reference and resource materials. An annual newsletter ("Surveillance Update") and periodic special reports are distributed. Results of projects

have been published in peer reviewed scientific journals and presented at professional meetings and conferences.

6. Technical assistance

Staff provide technical assistance to other health professionals and to the public on all areas of occupational health.

NEW JERSEY DEPARTMENT OF HEALTH  
OCCUPATIONAL DISEASE SURVEILLANCE SYSTEM

Condition	Number of New Cases Reported						Cumulative Total
	From Beginning of Reporting through 1988	1989	1990	1991	1992	1993	
Elevated blood lead levels <sup>1</sup>	2,154	539	542	320	287	421	4,263
Asbestosis <sup>2</sup>	1,124	474	519	799	774	726	4,414
Occupational asthma <sup>3</sup>	29	40	60	53	43	89	314
Silicosis <sup>4</sup>	509	49	144	66	68	70	906
Elevated blood and urine mercury levels <sup>1</sup>	200	17	87	61	24	17	406
Elevated blood and urine cadmium levels <sup>1</sup>	46	37	144	17	2	15	261
Elevated blood and urine arsenic levels <sup>1</sup>	60	17	20	5	1	24	127

<sup>1</sup> Data source: laboratory and physician reports. Reporting began in 1985.

<sup>2</sup> Data sources: physician and hospital reports. Reporting began in 1985.

<sup>3</sup> Data sources: physician and hospital reports. Reporting began in 1988.

<sup>4</sup> Data source: hospital reports, physician reports, death certificates, employer medical screenings. Reporting began in 1979.

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### Occupational Lead Exposure

Interventions aimed at preventing hazardous lead exposure and assisting workplaces in improving their exposure reduction programs are a vital component of our occupational lead surveillance system.

Interventions with employers include a telephone interview, mailed educational materials, selected high hazards industry evaluations, and selected referrals to OSHA. Construction work has been identified by the surveillance system as being particularly hazardous for lead exposure. Thirteen percent of all blood lead reports to the NJDOH have been from workers in construction. A much greater proportion of construction workers had seriously elevated blood lead levels (levels equal to or greater than 50 ug/dl) than workers in other industries (35% were in construction compared to 13% in other industries).

Realizing that much of the state's bridge construction work is done by contractors who bid on work through the New Jersey Department of Transportation, the officials from the Department of Health met with officials from the Department of Transportation to discuss possible ways of addressing the lead exposure problem.

The result of these meetings was the "1992 New Jersey Department of Health Lead Health and Safety Plan for Bridge Painting." This document mandates the safety and health language that must be included in the contract between the construction contractor and the New Jersey Department of Transportation for specific bridge construction projects involving potential lead exposure. The contractor must submit a written "Lead Health

and Safety Plan" (LHASP) to the Department of Transportation. This plan includes requirements that are at least as stringent as, and in some cases exceed requirements of the current OSHA Lead in Construction Standard that went into effect in June 1993.

As a result of the biological requirements of the LHASP, the number of blood lead reports from NJDOT, contract workers to the ABLES System increased dramatically from 86 reports in 1991 to 412 in 1993. The mean blood lead level of workers at NJDOT construction sites went from 42 ug/dl in 1991 to 32 ug/dl in 1994.

In addition to concerns about DOT contracted construction work, we have been concerned about the impact of federal mandates regarding lead abatement on worker exposure to lead. As a result, we initiated a pilot project to evaluate lead health and safety programs at several types of lead abatement jobs. On-site industrial hygiene evaluations were designed to assess various types of technologies used to remove lead, evaluate employee exposure to lead dust and fumes during lead abatement work, evaluate the contractor's occupational health program in controlling such exposures, and make pragmatic recommendations for minimizing employee exposure to lead.

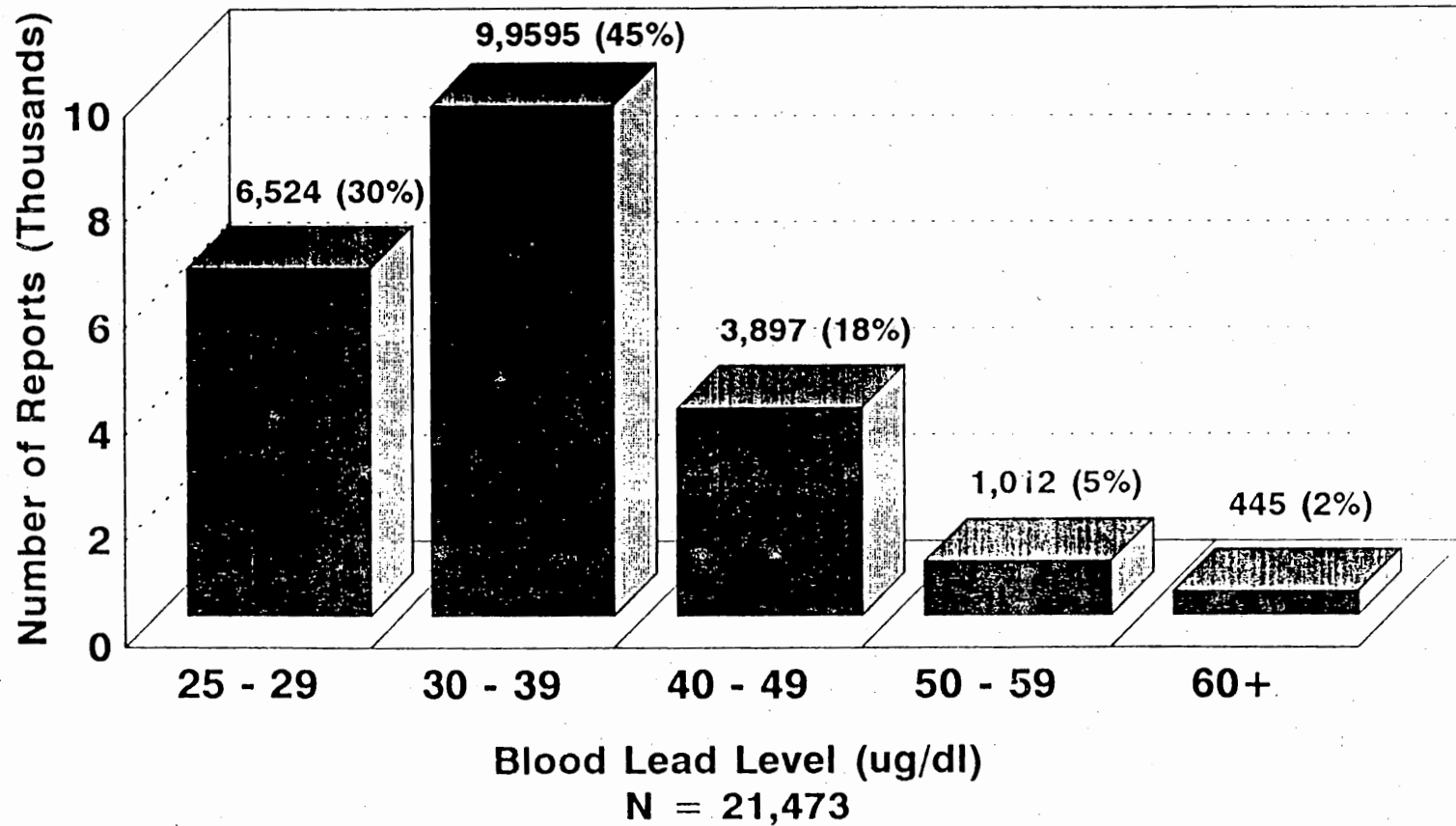
Industrial hygiene evaluations of lead abatement work were conducted at five sites: a water storage tank, a water tower, a bridge, a library, and a high school.

We found that air levels for lead exceeded the current OSHA PEL at all sites. Blood lead levels were above the NJDOH reportable level in at least one employee at 3 of the 4 sites where blood lead data were available

Areas in which contractors were particularly deficient include the presence of a competent health and safety person, worker training, the presence of a clean eating area, and written medical removal protection program. Although showers were provided at four sites, workers at three out of these four sites did not use these facilities.

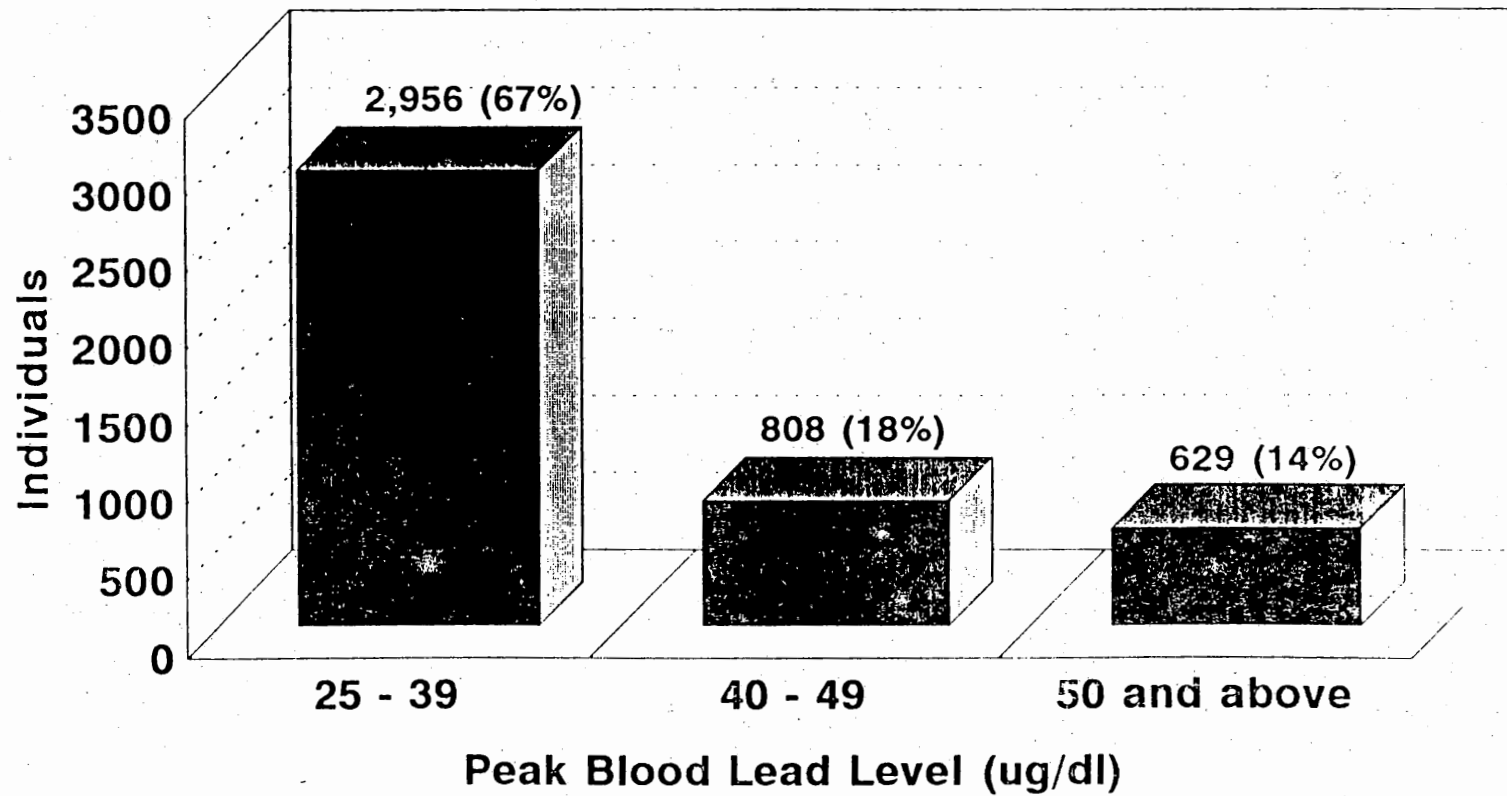
Contractors appeared to be responsible to our verbal and written recommendations. At the water storage tank site, verbal recommendations made to the foreman to hook up a shower hot water connection, install a carbon monoxide monitor on the supplied air line, and enclose an inadequate environmental enclosure, were implemented within two hours. The contractor who conducted lead abatement work on two sites, a library and a high school, implemented NJDOH verbal recommendations for the first site and markedly improved his control practices for the second site based on our recommendations from the first site. (Follow-up data are not yet available for all sites.)

**N.J.D.O.H. Lead Surveillance  
Blood Lead Distribution - All Reports  
October 1985 - July 1994**



26X

**N.J.D.O.H. Lead Surveillance  
Peak Blood Lead Distribution  
October 1985 - July 1994**



**N = 4393**

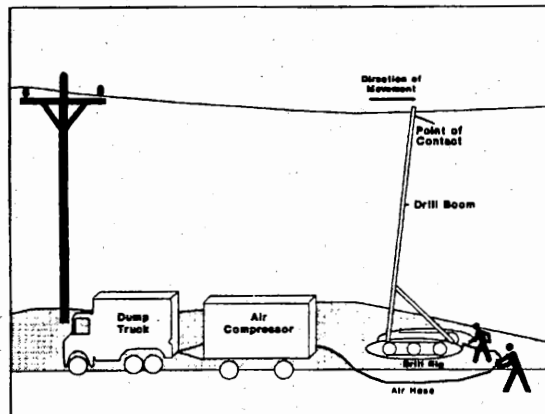
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# FACE Facts

Fatality Assessment and Control Evaluation (FACE) Project

## Drill Crew Electrocuted by High Voltage Overhead Power Line

**Two drilling crew members were electrocuted when the boom of their drill rig contacted a high voltage overhead power line.**



### Background

The victims were employed by a small drilling and blasting company, which had been hired to find and blast large rocks that lay in the path of new gas lines. As a preliminary step, the two workers were drilling test bores alongside a roadway to search for rocks.

The drill operator had 12 years of experience at his job. Although his co-worker was primarily employed as shop mechanic, he occasionally assisted in the field as a driller or laborer.

The drill rig used was a small, self-propelled, tracked vehicle with a 27 foot high boom. The rig was powered by a large air compressor that was towed behind a dump truck. The compressor was attached to the drill rig with a 4 inch diameter steel-reinforced air hose. The operator worked the controls while standing behind the drill rig. To move the rig, it was necessary for one person to stand behind the rig to operate the controls while a second person lifted the air hose. This prevented the hose from dragging on the ground.

### The Incident

The incident took place on a dry, clear, hot summer day. There were no witnesses, but evidence suggests that it occurred as the two men were moving the rig off the road at the end of the work day. Apparently the mechanic was operating the rig while the drill operator moved the compressor hose. As they moved the rig up a small incline at the side of the road, the raised boom may have made the rig unstable. (According to company policy, the boom should have been lowered before moving the rig.) It appears the mechanic stopped the rig and was moving the 27 foot boom sideways when it contacted the 26 3/4 foot high, 7,200 volt overhead power line.

The two workers were electrocuted. The mechanic received the shock through the drill rig as he stood holding the rig controls. The power passed through the steel-reinforced air hose to the second victim. The medical examiner determined the cause of the two deaths as electrocution accompanied by severe body burns.

### Recommendations

- Employers must ensure that workers maintain a minimum distance of ten feet between equipment and power lines, in keeping with federal and state regulations. Where safe clearance is difficult to maintain, the following precautions should be taken:
  - Change equipment or work practices to maintain the proper clearance; for example in this case using a shorter boom.
  - Ask the local utility company to shut off power to the lines. The lines should be tested to make sure that they are not carrying power before beginning work nearby.
  - Ask the utility company to isolate the power lines with insulating hoses and blankets. Note: This step may not be adequate to insulate against contacts with heavy equipment.
- Employers should ensure that employees are properly trained in the safe operation of equipment and that safety procedures are followed at all times. All employee training programs should be in writing.
- Drilling equipment should be posted with signs warning of the danger of contact with overhead power lines. Signs should also indicate the height of the drill boom.

# Please Post

New Jersey Department of Health  
CN 360  
Trenton, New Jersey 08625-0360

## **Fatality Assessment & Control Evaluation Project**

The New Jersey Department of Health, in conjunction with the National Institute for Occupational Safety and Health, is currently conducting a research study of work-related fatal injuries. This project, known as FACE (Fatality Assessment and Control Evaluation), seeks to identify the factors that contribute to electrical, fall, and confined space fatalities. The FACE study will help in the development and use of improved safety measures for preventing fatal injuries in the future.

We hope you find this **FACE Facts** informative and that you will share it with others. If you have any comments or questions, please call the FACE Project at (609) 984-1863.

29x

**CENSUS OF  
FATAL OCCUPATIONAL INJURIES  
NEW JERSEY - 1993**



**Occupational Health Service  
Division of Epidemiology, Environmental  
and Occupational Health Services**

Christine Todd Whitman  
Governor

Len Fishman  
Commissioner of Health

30X

**CENSUS OF FATAL OCCUPATIONAL INJURIES  
NEW JERSEY - 1993**

**NEW JERSEY DEPARTMENT OF HEALTH  
IN COOPERATION WITH THE  
U.S. DEPARTMENT OF LABOR  
BUREAU OF LABOR STATISTICS**

**JANUARY, 1995**

Report Prepared By: Lisa M. Roche, M.P.H., Ph.D.

**Census of Fatal Occupational Injuries Program**

Emily O'Hagan Smith, M.P.H., Principal Investigator  
Noreen Rooks, Technical Staff

**Division of Epidemiology  
Environmental and Occupational Health Services**

William E. Parkin, D.V.M., Dr.P.H., Assistant Commissioner  
Kathleen O'Leary, Director, Occupational Health Service

This report includes revised counts of fatal occupational injuries in 1992 in New Jersey and the United States.

Copies of this report are available from the:

New Jersey Department of Health  
Occupational Health Service  
Health and Agriculture Building, Room 701  
CN-360  
Trenton, New Jersey 08625-0360  
(609) 984-1863

## ACKNOWLEDGMENTS

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Martin Karlin, New York Regional Office  
Charles Maurice, New York Regional Office  
Guy Toscano, Washington Office  
Janice Windau, Washington Office

We wish to express our gratitude to the following people and agencies for providing source documents on the occupational injury fatalities and for technical assistance:

### **New Jersey Department of Health**

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Public Employees Occupational Safety and Health Program

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Thomas Pompei - Division of Program Analysis and Evaluation  
Public Employees Occupational Safety and Health Program

### **New Jersey Department of Transportation**

Sandra Jenkins, Lisa Glodowski - Division of Highway Safety

### **Office of New Jersey State Medical Examiner**

Geetha Natarajan, M.D., Acting State Medical Examiner  
Joan Buriello, Lorraine Thomas

### **Occupational Safety and Health Administration**

Avenel Area Office  
Marlton Area Office  
Hasbrouck Heights Area Office  
Parsippany Area Office

### **Garden State Press Clipping Service**

### **County Medical Examiners' Offices**



**State of New Jersey**  
**DEPARTMENT OF HEALTH**

CN 360  
TRENTON, N.J. 08625-0360

CHRISTINE TODD WHITMAN  
GOVERNOR

LEN FISHMAN  
COMMISSIONER OF HEALTH

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**FORWARD**

The Census of Fatal Occupational Injuries (CFOI) Program is a cooperative effort between the federal government and the state governments. It was initiated in 1990 by the United States Department of Labor's Bureau of Labor Statistics (BLS) with ten states including New Jersey. This is the second year with all 50 states and the District of Columbia participating. The impetus for the CFOI Program was the realization that no true count of occupational fatalities existed and that estimates varied widely due to different reporting sources and definitions. The objective of the CFOI Program is to collect detailed information on every occupational fatality in a timely fashion so that an accurate count can be made, and programs developed to prevent future fatalities.

The BLS provides funding to the states which is matched by the states. The states actively collect, verify, code, computerize, and transmit to BLS detailed information on their occupational fatalities according to the BLS protocol. Identifying information (i.e., workers' names and employers' names) is not sent to the BLS. In New Jersey, the CFOI Program is conducted by the Occupational Health Service within the New Jersey Department of Health.

We are pleased to provide you with this report on the occupational injury fatalities that occurred in New Jersey in 1993, and hope you find it helpful as we work together to prevent these tragedies. For additional information on the CFOI Program or this report please contact Emily O'Hagan Smith or Lisa M. Roche at (609) 984-1863.

A handwritten signature in cursive script that reads "Len Fishman".

Len Fishman  
Commissioner of Health

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## HIGHLIGHTS - 1993 NEW JERSEY FATAL OCCUPATIONAL INJURIES

- 142 total fatalities (Table 1)
- 4 fatalities per 100,000 workers (Figure 1)
- 134 were men, 8 were women (Table 1)
- age at death ranged from 18 to 74, average age was 43, over half were younger than 45 years of age (Table 1)
- 118 were White (of which 10 were Hispanic), 17 were African-American (of which 1 was Hispanic), 3 were Asian or Pacific Islander (Table 1)
- 134 worked for wages or salary, 8 were self-employed (Table 1)
- 116 worked for private employers (including self-employed), 26 worked for public employers
- every county except one had at least one fatality, the most fatalities occurred in the counties of Middlesex (20), Essex (16), Monmouth (16), and Camden (10) (Map)
- the highest numbers of fatalities occurred in the occupational groups of operators, fabricators and laborers (56), precision production, craft and repair (33), and service (20) (Table 2)
- the highest rates of fatalities (number per 100,000 workers) occurred in the occupational groups of farming, forestry, and fishing (14), operators, fabricators and laborers (13), and precision production, craft and repair (10) (Figure 3)
- the highest numbers of fatalities occurred in the industries of construction (34), transportation and public utilities (27), and services (20) (Table 3)
- the highest rates of fatalities (number per 100,000 workers) occurred in the construction (20), agriculture (excluding forestry and fishing ) (11), and transportation and public utilities (9) industries (Figure 4)
- the external cause of injury included motor vehicle traffic accidents (38), falls (27), and homicide (20) (Table 4)
- the sources of injury included vehicles (57), structures and surfaces (26), and bullets (14) (Table 5)
- the most common worker activities at the time of the injury were vehicular and transportation operations (44) and constructing, repairing and cleaning (36) (Table 6)
- an average of 24 potential years of work life (the number of years before age 65 of the victims) was lost per fatality (Table 8)

## DATA SPECIFICATIONS AND SOURCES

All work-related injury deaths that occurred in New Jersey in 1993 were counted, including homicides, suicides, and motor vehicle accidents. A death is considered work-related if the event leading to the fatal injury occurred on the employer's premises and the person was there to work or occurred off the employer's premises and the person was there to work or the event or exposure was related to the person's work or status as an employee. Private and public sector employees, self-employed persons (including self-employed, partners or owners of an unincorporated business, professional practice or farm, and self-employed contractors), and certain volunteers (e.g. firefighters, law enforcement officers, emergency medical service workers) are included. Also included are people traveling on the job, but not commuting to or from the job. Institutionalized persons who are fatally injured while employed off the premises of their institutions are included.

Each fatality is confirmed by two independent sources or one source and a follow-up questionnaire to the employer or another knowledgeable person. The sources include death certificates, state and county medical examiners' reports, federal and state regulatory agencies' investigation reports, New Jersey workers' compensation records, newspaper clippings, New Jersey Department of Transportation motor vehicle fatality records, New Jersey Department of Health FACE investigation reports, and federal employee fatality records.

Only deaths due to an injury are included in this report; deaths due to an illness are not included. An occupational injury is defined as a wound or other condition caused by external forces or caused by a specific event or incident or series of events within a single workday shift. Cuts, fractures, amputations, animal bites, heatstroke, sunstroke, hyperthermia, and poisonings and asphyxiations resulting from a short-term exposure (within the workers' shift) are considered to be injuries. Also considered injuries are work injuries listed as either an underlying or contributory cause of death on the death certificate, the medical examiner report, or the autopsy report (for example, a death resulting from pneumonia contracted while the victim was hospitalized with a hip fracture incurred at work).

An occupational illness is defined as a condition produced in the work environment over a period longer than one workday or shift. An occupational illness may result from systemic infection, repeated stress or strain, exposure to toxins, poisons, fumes, or other continuing conditions of the work environment. Heart attacks and strokes are considered injuries if a traumatic work injury is listed as a contributory or underlying cause of death on the death certificate or other medical report. A heart attack that occurs while lifting or pushing an object or while performing other physical activities is considered an illness since no traumatic injury is involved. The reason occupational illnesses are not included in this report is that many deaths due to occupational illnesses or diseases are missed because they may not be diagnosed until many years after the work exposure and/or they may not be linked to work.

Employment information from the Current Population Survey (CPS), a household survey conducted by the Bureau of the Census for the BLS, was used to calculate the fatality rates. The method of calculation was number of fatalities divided by number of annual average employed persons (estimates) in 1993 and then multiplied by 100,000. The fatality rates are all expressed as number of deaths per 100,000 workers. Fatality rates were not calculated for categories with less than five deaths. Appendix 1 contains the employment estimates used to calculate the fatality rates. CFOI includes all fatal occupational injuries even those not covered

by the Occupational Safety and Health Administration (OSHA) or other Federal and State agencies. Since the CFOI data is more complete, comparisons can not be made between CFOI data and other agencies' data.

**Notes:** The use of employment information from the Current Population Survey to calculate the fatality rates is considered developmental by the BLS. The BLS will continue to study how best to calculate occupational injury fatality rates. The words accident or accidental occur in this report. These words are used only as necessary; i.e., when they appear in the names of coding categories in the International Classification of Disease, 9th Edition, External Injury Codes (e.g., Motor Vehicle Traffic Accidents). The use of these words is not to be taken as acceptance of the occupational fatalities as events that could not be avoided. On the contrary, occupational fatalities are believed to be preventable.

## DEMOGRAPHIC CHARACTERISTICS

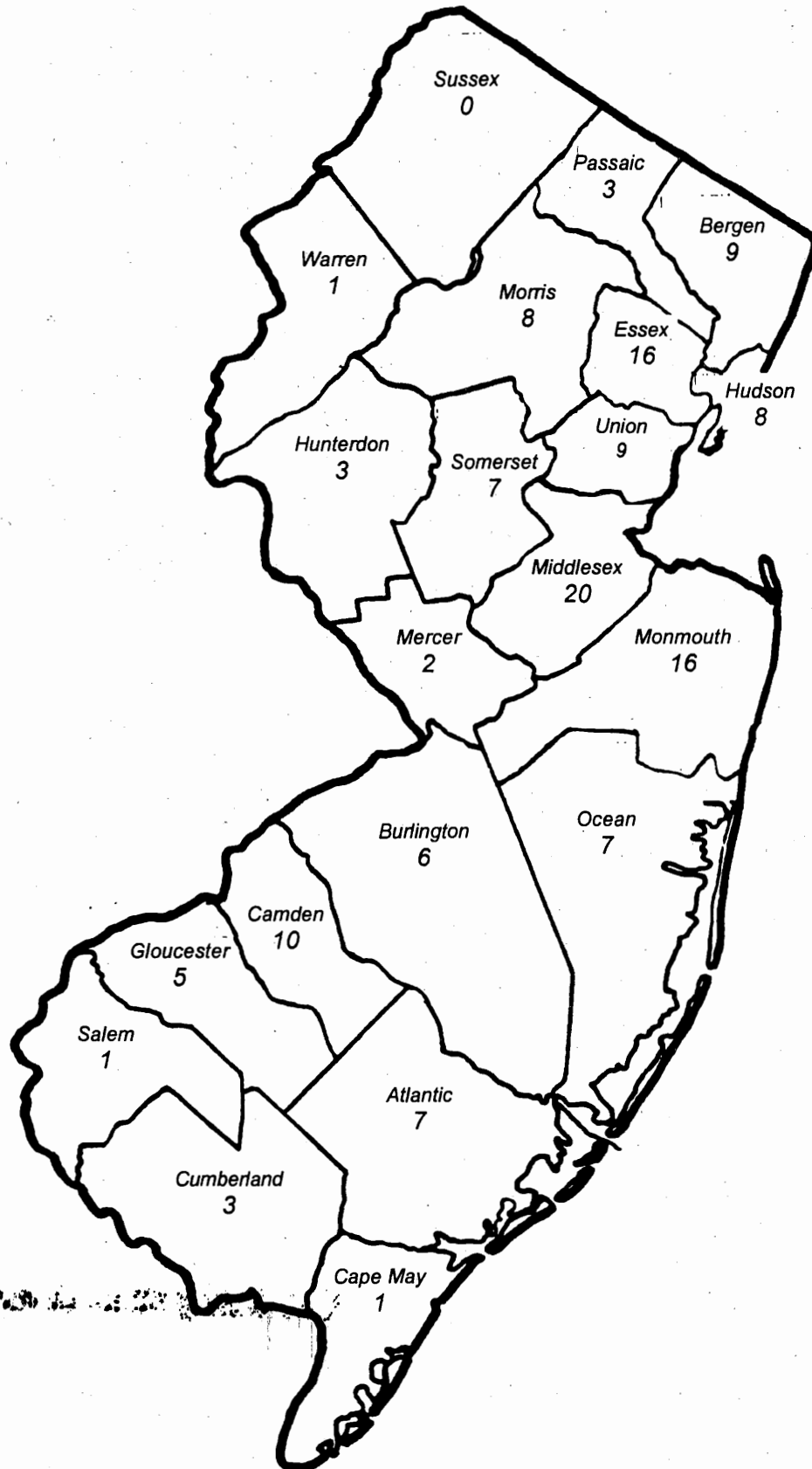
### Numbers

Table 1. shows the employee status, gender, age, race, and Hispanic origin of the 142 fatal occupational injury victims in New Jersey in 1993. Six percent of the victims were self-employed and eighteen percent were government employees, including thirteen percent in state, county or municipal government. Most of the victims were male (94%) and the ages ranged from 18 to 74 with over half younger than 45 years of age (53%). Most were white (83%), with the next largest racial group being African American (12%). All the fatal injuries occurred in New Jersey with one or more in every county except one (see map on next page).

**TABLE 1**  
**NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES BY**  
**SELECTED DEMOGRAPHIC CHARACTERISTICS, NEW JERSEY - 1993**

CHARACTERISTIC	NUMBER	PERCENT
<b>Total</b>	<b>142</b>	<b>100</b>
<b>Employment Status</b>		
Wage & Salary Workers	134	94
Self Employed	8	6
<b>Gender</b>		
Men	134	94
Women	8	6
<b>Age</b>		
Under 20	1	1
20-24	16	11
25-34	33	23
35-44	25	18
45-54	35	25
55-64	22	15
65 and over	10	7
<b>Race</b>		
White	118	83
African American	17	12
Asian or Pacific Islander	3	2
American Indian, Aleut, Eskimo	1	1
Unknown	3	2
<b>Hispanic Origin</b>		
Hispanic	13	9
<b>Source:</b> Census of Fatal Occupational Injuries, Occupational Health Service, New Jersey Department of Health in cooperation with the Bureau of Labor Statistics.		

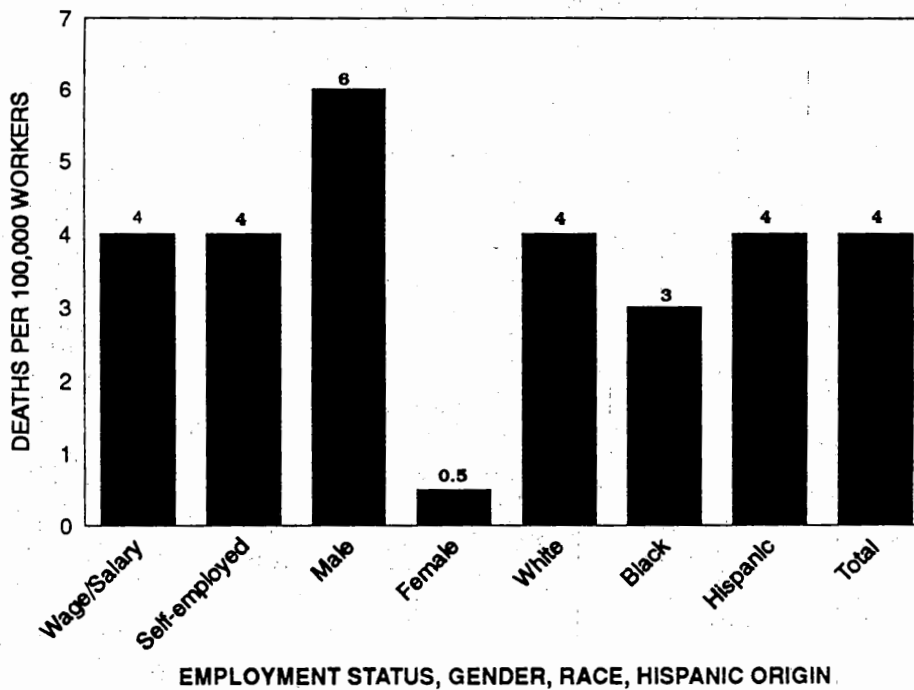
FATAL OCCUPATIONAL INJURIES BY COUNTY  
NEW JERSEY 1993 - N=142



**Rates**

The overall rate of fatal occupational injuries was 4 fatalities per 100,000 workers. Figure 1. shows the fatal occupational injury rates by employment status, gender, race, and Hispanic origin. Male workers had a much higher rate than female workers - 6 versus less than 1. Whites had a higher rate than African Americans - 4 versus 3. Workers of Hispanic origin had the same fatality rate as all the workers - 4.

**FIGURE 1  
FATAL OCCUPATIONAL INJURY RATES  
NEW JERSEY, 1993 (N=135)\***

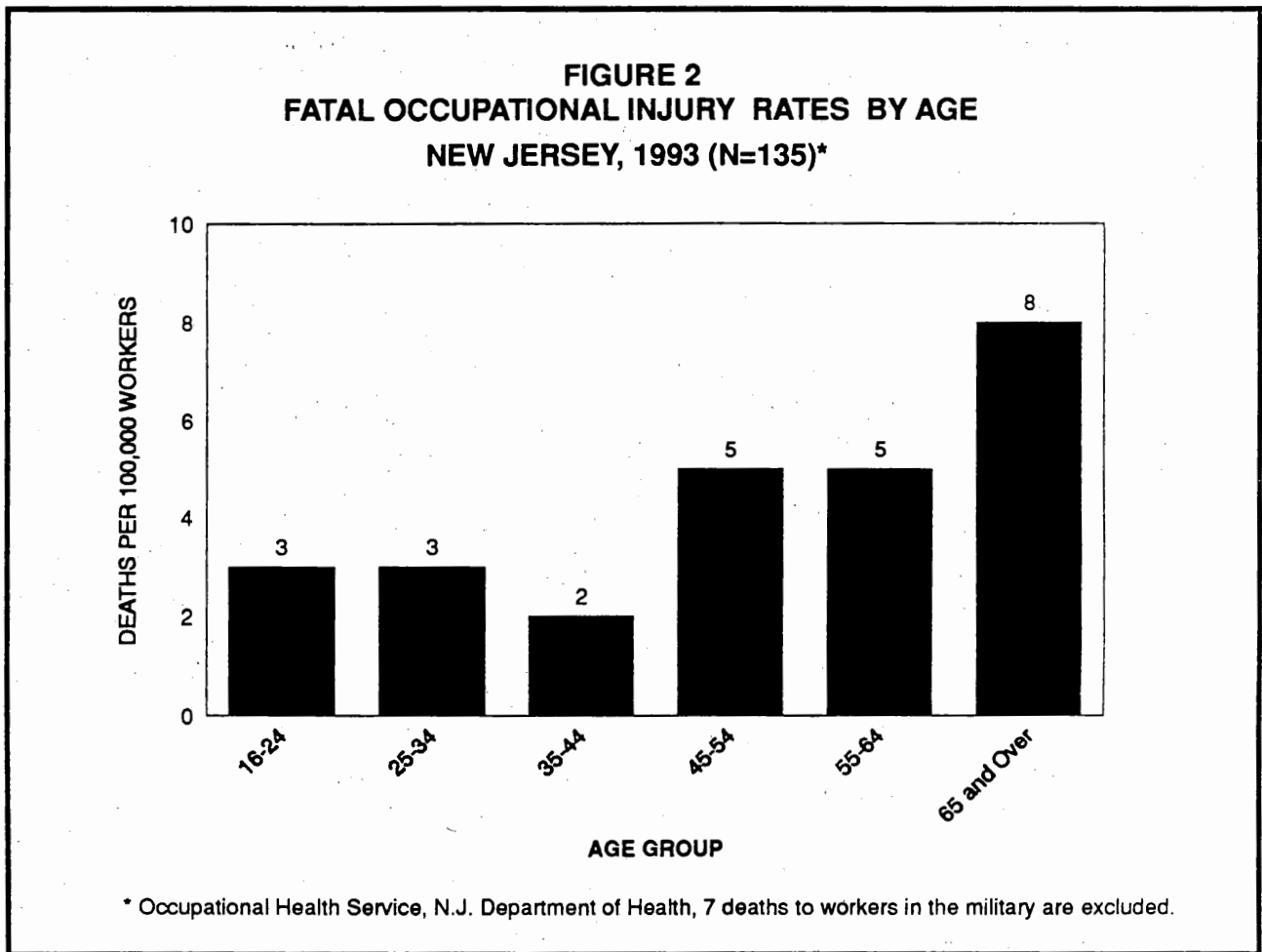


\* Occupational Health Service, N.J. Department of Health, 7 deaths to workers in the military are excluded.

**New Jersey State Library**

Figure 2. shows the fatal occupational injury rates by age group. The younger age groups (16-24, 25-34, 35-44) had rates lower than the overall rate and the older age groups (45-54, 55-64, 65 and over) had rates higher than the overall rate. The age group 65 and over had a rate of 8 which was twice as high as the overall rate of 4.

Note: See Appendix 1 for the employment estimates used to calculate the fatality rates. These rates do not include the military because the number of workers from the military in each demographic category is not available.



# OCCUPATION AND INDUSTRY

## Numbers

Tables 2. and 3. provide the occupation and industry of the 142 fatal occupational injuries in New Jersey in 1993. The largest number of deaths, 56, occurred among workers in the occupational category of operators, fabricators, and laborers which included ten truck drivers and ten construction laborers. The next largest number of deaths, 33, was among workers in the precision production, craft, and repair occupations including 21 in construction trades and nine mechanics and repairers. Industries with high numbers of deaths were construction, 34, transportation and public utilities, 27, and services, 20.

**TABLE 2  
NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES  
BY OCCUPATION, NEW JERSEY - 1993**

OCCUPATION*	NUMBER	PERCENT
<b>All Occupations</b>	<b>142</b>	<b>100</b>
<b>Operators, Fabricators, Laborers</b>	<b>56</b>	<b>39</b>
Transportation and material moving	29	20
Truck drivers	10	7
Handlers, equipment cleaners, helpers and laborers	24	17
Laborers, construction	10	7
Machine operators, assemblers, and inspectors	3	2
<b>Precision Production, Craft and Repair</b>	<b>33</b>	<b>23</b>
Construction trades	21	15
Mechanics and repairers	9	6
Precision production	3	2
<b>Service</b>	<b>20</b>	<b>14</b>
Protective service	12	8
Cleaning and building service except household	3	2
<b>Technical, Sales and Administrative Support</b>	<b>12</b>	<b>8</b>
Sales occupations	8	6
<b>Managerial and Professional Specialty</b>	<b>10</b>	<b>7</b>
Executive, administrative, managerial	7	5
Professional specialty	3	2
<b>Farming, Forestry, and Fishing</b>	<b>6</b>	<b>4</b>
Farming and related	4	3
<b>Military**</b>	<b>5</b>	<b>4</b>
Non-commissioned officers and other enlisted personnel	3	2
Commissioned and warrant officers	2	1

\*Based on the 1990 Occupational Classification System developed by the Bureau of the Census.

\*\*Does not include two workers in the military who are included under Technical, Sales, and Administrative support.

**Source:** Census of Fatal Occupational Injuries, Occupational Health Service, New Jersey Department of Health in cooperation with the Bureau of Labor Statistics.

**Note:** Percentages may not add to 100 due to rounding. Totals for major categories may include subcategories not shown separately.

**TABLE 3  
NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES  
BY INDUSTRY, NEW JERSEY - 1993**

INDUSTRY*	NUMBER	PERCENT
<b>All Industries</b>	<b>142</b>	<b>100</b>
<b>Construction</b>	<b>34</b>	<b>24</b>
Special trades contractors	20	14
Plumbing, heating, and air conditioning	5	4
Roofing, siding, and sheet metal work	4	3
General building contractors	7	5
Single family housing construction	4	3
Heavy construction except building	7	5
Highway and street	4	3
Except highway	3	2
<b>Transportation and Public Utilities</b>	<b>27</b>	<b>19</b>
Trucking and warehousing	10	7
Trucking services	8	6
Water transportation	6	4
Towing and tugboat service	5	4
Local and interurban passenger transit	3	2
Electric, gas, and sanitary services	3	2
<b>Services</b>	<b>20</b>	<b>14</b>
Business services	7	5
Amusement and recreation services	3	2
Health services	3	2
<b>Public Administration**</b>	<b>18</b>	<b>13</b>
Justice, public order and safety	8	6
Fire protection	4	3
Police protection	3	2
National security	5	4
Executive, legislative, and general	3	2
<b>Retail Trade</b>	<b>17</b>	<b>12</b>
Eating and drinking places	5	4
Gas service stations	4	3
Car dealers	3	2
Other retail stores	3	2
<b>Manufacturing</b>	<b>13</b>	<b>9</b>
Lumber and wood products	3	2
<b>Agriculture, Forestry and Fishing</b>	<b>5</b>	<b>4</b>
Agriculture	4	3
<b>Finance, Insurance and Real Estate</b>	<b>5</b>	<b>4</b>
Real estate	4	3
<b>Wholesale Trade</b>	<b>3</b>	<b>2</b>

\* Standard Industrial Classification Manual, 1987.

\*\* Does not include eight workers employed in government in other industries - three workers in construction, two workers in transportation and public utilities, and three workers in services.

Source: Census of Fatal Occupational Injuries, Occupational Health Service, New Jersey Department of Health in cooperation with the Bureau of Labor Statistics.

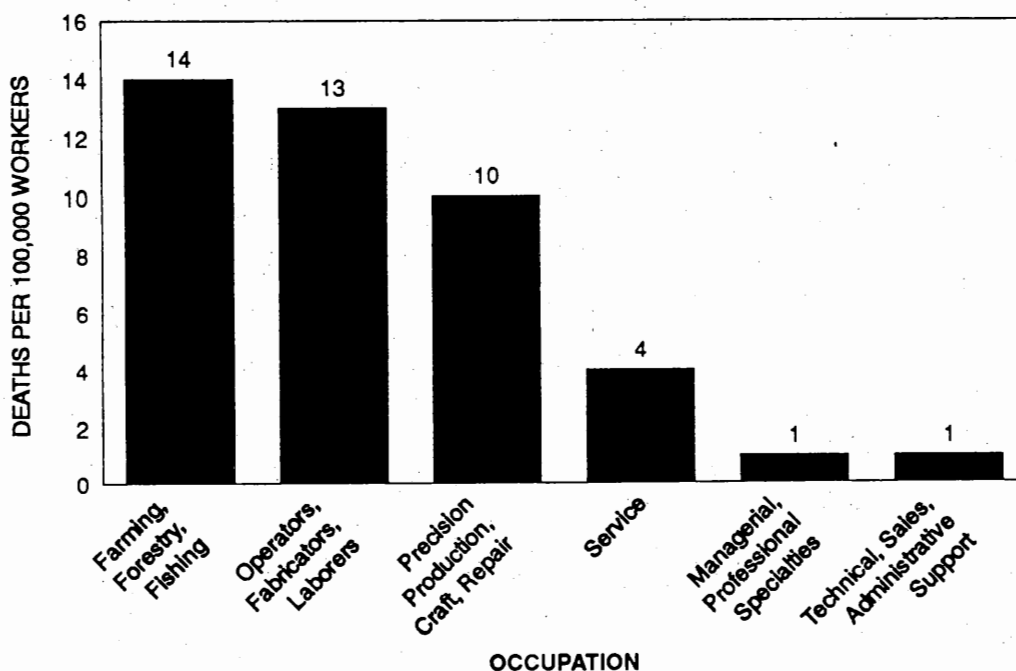
Note: Percentages may not add to 100 due to rounding. Totals for major categories may include subcategories not shown separately.

### Rates

Figures 3. and 4. depict the fatal occupational injury rates (number of deaths per 100,000 workers) by occupation and industry. Occupations with the highest fatal occupational injury rates were farming, forestry and fishing (14), operators, fabricators and laborers (13), and precision production, craft, and repair (10). Industries with the highest fatal occupational injury rates were construction (20), agriculture (excluding forestry and fishing) (11), transportation and public utilities (9), and government (5). The remaining occupation and industry groups had occupational injury death rates at or below the overall rate of 4 deaths per 100,000 workers.

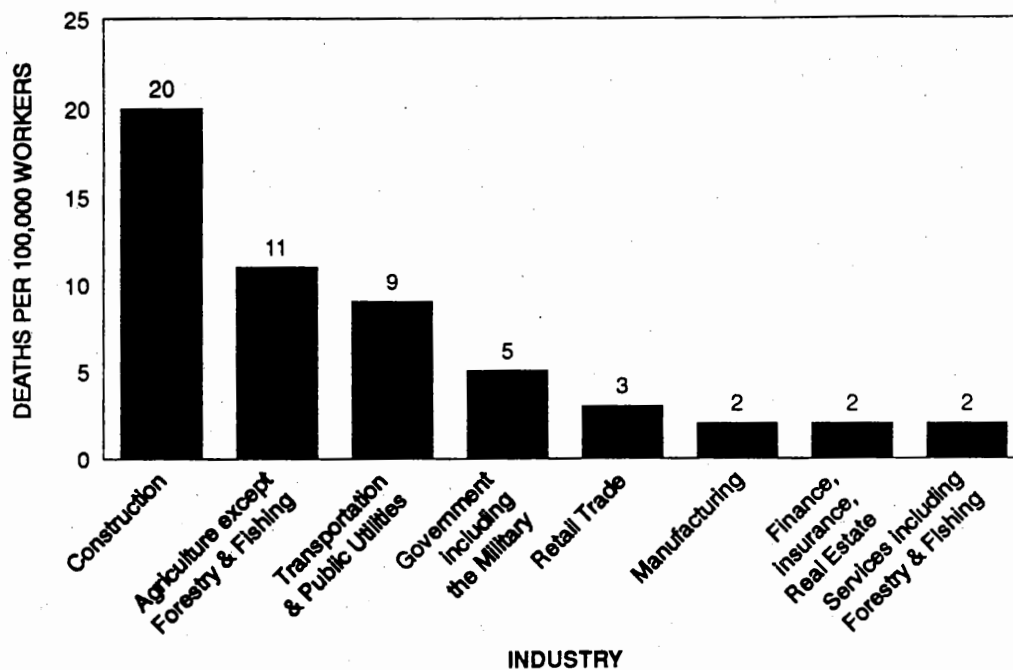
**Note:** See Appendix 1. for the employment estimates used to calculate the fatality rates. The rate for the industry of wholesale trade was not calculated due to the small number of fatal occupational injuries - 3. The agriculture industry includes the self-employed; the other industries do not (construction - 4 self-employed, transportation and public utilities - 2 self-employed, and retail trade - 2 self-employed). The agriculture industry does not include forestry and fishing; forestry and fishing is included in the services industry. All public employees including military workers are included in the government industry - 26 workers.

**FIGURE 3**  
**FATAL OCCUPATIONAL INJURY RATES BY OCCUPATION**  
**NEW JERSEY, 1993\* (N=135)**



\* Occupational Health Service, N.J. Department of Health, 7 deaths to workers in the military are excluded

**FIGURE 4**  
**FATAL OCCUPATIONAL INJURY RATES BY INDUSTRY**  
**NEW JERSEY, 1993 (N=132)\***



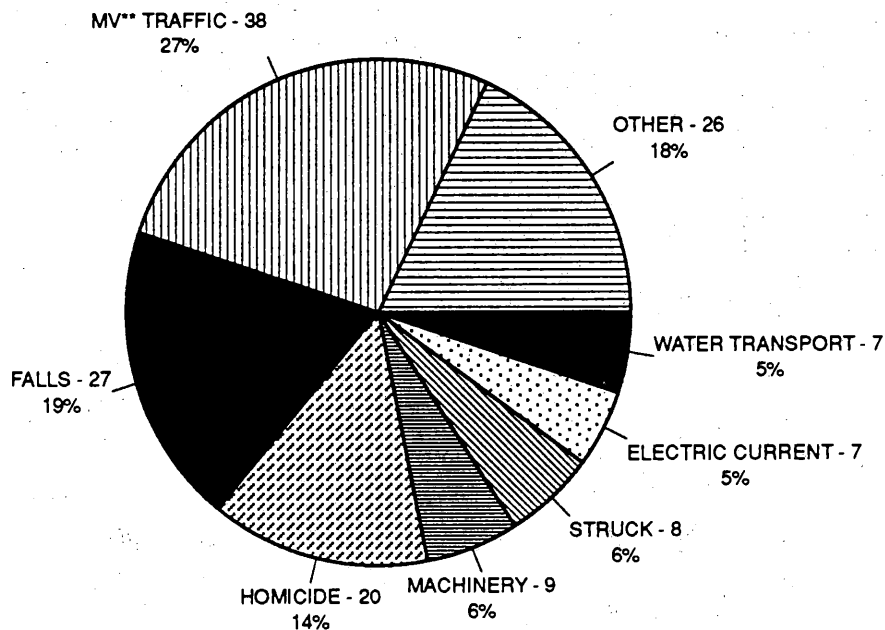
\* Occupational Health Service, N.J. Department of Health, 10 deaths to workers in wholesale trade (3) and self-employed (7) are excluded. All workers in government are included with government (N=26).

## EXTERNAL CAUSE OF INJURY

The major external causes of injury in the 142 fatal occupational injuries are shown in Table 4. and in Figure 5. The major external causes of injury were motor vehicle traffic accidents (27%), accidental falls (19%), homicide (14%), machinery accidents (6%), struck accidentally by falling object (6%), accidents caused by electrical current (5%), and water transport accidents (5%).

**FIGURE 5**  
**FATAL OCCUPATIONAL INJURIES**  
**NEW JERSEY, 1993 (N=142)\***

EXTERNAL CAUSE OF INJURY (ICD-9 E-CODE)



\* Occupational Health Service, New Jersey Department of Health  
\*\* Motor Vehicle

**TABLE 4  
NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES  
BY CAUSE, NEW JERSEY - 1993**

CAUSE*	NUMBER	PERCENT
<b>All Causes</b>	<b>142</b>	<b>100</b>
<b>Motor Vehicle Traffic Accidents (MVTA)</b>	<b>38</b>	<b>27</b>
MVTA involving collision with pedestrian	14	10
MVTA involving collision with motor vehicle	9	6
MVTA involving collision on highway	7	5
MVTA due to loss of control, no collision on highway	4	3
<b>Motor Vehicle Nontraffic Accidents</b>	<b>4</b>	<b>3</b>
<b>Water Transport Accidents</b>	<b>7</b>	<b>5</b>
Accident to watercraft causing submersion	5	4
<b>Air &amp; Space Transport Accidents</b>	<b>3</b>	<b>2</b>
<b>Railway Accidents</b>	<b>2</b>	<b>1</b>
<b>Accidental Falls</b>	<b>27</b>	<b>19</b>
Fall from or out of building or other structure	8	6
Fall on or from ladder	7	5
Fall into hole or other opening in surface	4	3
Fall from scaffolding	3	2
Other fall from one level to another	3	2
<b>Homicide</b>	<b>20</b>	<b>14</b>
Assault by firearms	11	8
Assault by cutting and piercing instrument	8	6
<b>Accidents Caused by Machinery</b>	<b>9</b>	<b>6</b>
Lifting machines and appliances	5	4
<b>Struck Accidentally by Falling Object</b>	<b>8</b>	<b>6</b>
<b>Accidents Caused by Electric Current</b>	<b>7</b>	<b>5</b>
<b>Suicide</b>	<b>5</b>	<b>4</b>
<b>Accidents Caused by Submersion, Suffocation &amp; Foreign Bodies</b>	<b>4</b>	<b>3</b>
Accidental drowning and submersion	3	3
<b>Accidents Caused by Fire and Flames</b>	<b>3</b>	<b>2</b>
<b>Accidents Due to Natural and Environmental Factors</b>	<b>2</b>	<b>1</b>
<b>Accidental Poisoning by Other Solid and Liquid Substances, Gases and Vapors</b>	<b>1</b>	<b>1</b>
<b>Injury by Other and Unspecified Means, Undetermined Whether Accidentally or Purposely Inflicted - Burns, Fire</b>	<b>1</b>	<b>1</b>
<b>Accident Caused by Firearm Missile - Handgun</b>	<b>1</b>	<b>1</b>

\* Based on the International Classification of Disease, 9th edition, External Injury Codes (ICD-9 E Codes).

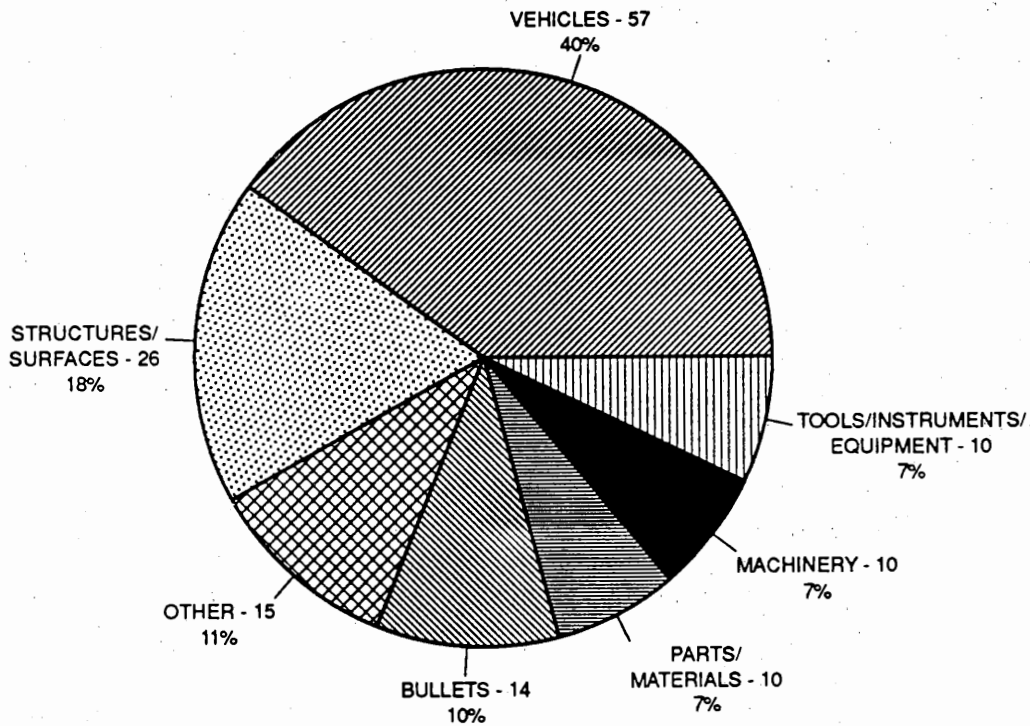
**Source:** Census of Fatal Occupational Injuries, Occupational Health Service, New Jersey Department of Health in cooperation with the Bureau of Labor Statistics.

**Note:** Percentages may not add to 100 due to rounding. Totals for major categories may include subcategories not shown separately.

## SOURCE OF INJURY

The sources (i.e., the object, substance, exposure, or bodily motion that directly produced the injury) of the 142 fatal injuries are shown in Table 5. and in Figure 6. The main sources were vehicles (40%), structures and surfaces (18%), bullets (10%), machinery (7%), parts and materials (7%), and tools, instruments, and equipment (7%).

**FIGURE 6**  
**FATAL OCCUPATIONAL INJURIES**  
**NEW JERSEY, 1993 (N=142)\***  
**SOURCE OF INJURY (ROSH\*\* CODES)**



\* Occupational Health Service, New Jersey Department of Health  
\*\*Redesigned Occupational Safety and Health

**TABLE 5**  
**NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES**  
**BY SOURCE, NEW JERSEY - 1993**

SOURCE*	NUMBER	PERCENT
<b>All Sources</b>	<b>142</b>	<b>100</b>
<b>Vehicles</b>	<b>57</b>	<b>40</b>
Highway vehicle, motorized	42	30
Automobile	15	11
Van	8	6
Semitrailer, tractor trailer, trailer truck	7	5
Dump truck	5	4
Bus	3	2
Pick-up truck	3	2
Water vehicle	7	5
Tugboat, commercial fishing boat	6	4
Air vehicle	3	2
Train	3	2
Forklift	2	1
<b>Structures and Surfaces</b>	<b>26</b>	<b>18</b>
Ground	10	7
Floors	10	7
<b>Other Sources</b>	<b>22</b>	<b>15</b>
Bullets	14	10
Fire, flame	3	2
Water	3	2
<b>Machinery</b>	<b>10</b>	<b>7</b>
Material handling machinery	4	3
Construction, logging and mining machinery	3	2
<b>Parts and Materials</b>	<b>10</b>	<b>7</b>
Electric parts	4	3
Building materials - solid elements	3	2
<b>Tools, Instruments, and Equipment</b>	<b>10</b>	<b>7</b>
Hand tools - non-powered	8	6
Knives	7	5
<b>Persons, Plants, Animals, and Minerals</b>	<b>3</b>	<b>2</b>
<b>Chemicals and Chemical Products</b>	<b>2</b>	<b>1</b>
<b>Containers</b>	<b>2</b>	<b>1</b>

\* Based on the 1992 BLS Occupational Injury and Illness Classification Structures.

Source: Census of Fatal Occupational Injuries, Occupational Health Service, New Jersey Department of Health in cooperation with the Bureau of Labor Statistics.

Note: Percentages may not add to 100 due to rounding. Totals for major categories may include subcategories not shown separately.

## WORKER ACTIVITY

Table 6. indicates the worker activity at the time of the 142 fatal injuries. The main activities were vehicular and transportation operations (31%) including driving or operating (18%), constructing, repairing, cleaning (25%), and tending a retail establishment (8%).

**TABLE 6**  
**NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES**  
**BY WORKER ACTIVITY AT THE TIME OF INJURY, NEW JERSEY - 1993**

WORKER ACTIVITY*	NUMBER	PERCENT
<b>All Activities</b>	<b>142</b>	<b>100</b>
<b>Vehicular and Transportation Operations</b>	<b>44</b>	<b>31</b>
Driving, operating	26	18
Truck	10	7
Automobile	9	6
Industrial/construction vehicle	3	2
Riding in, on	11	8
Bus	4	3
Directing, flagging traffic	3	2
Boarding, alighting	3	2
<b>Constructing, Repairing, Cleaning</b>	<b>36</b>	<b>25</b>
Construction, assembling, dismantling	18	13
Construction, nec	10	7
Installing	4	3
Repair, maintenance	10	7
Repairing	6	4
Inspecting or checking	4	3
<b>Other, Not Elsewhere Classified</b>	<b>20</b>	<b>14</b>
Tending a retail establishment	12	8
<b>Using or Operating Tools, Machinery</b>	<b>8</b>	<b>6</b>
Operating heavy equipment	3	2
Logging, trimming, pruning	3	2
<b>Only Body Position Known</b>	<b>8</b>	<b>6</b>
Standing	4	3
<b>Materials Handling Operations</b>	<b>6</b>	<b>4</b>
<b>Protective Service Activities</b>	<b>5</b>	<b>4</b>
<b>Activity, Unspecified</b>	<b>15</b>	<b>11</b>

\* Based on activity codes developed by the Bureau of Labor Statistics.

Source: Census of Fatal Occupational Injuries, Occupational Health Service, New Jersey Department of Health in cooperation with the Bureau of Labor Statistics.

Note: Percentages may not add to 100 due to rounding. Totals for major categories may include subcategories not shown separately.

## WORKER LOCATION

Table 7. shows the location of the 142 workers at the time of the fatal injury. The most workers were on a street or highway (28%) or at an industrial place or premises (28%) including construction site (9%).

<b>TABLE 7</b> <b>NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES</b> <b>BY LOCATION OF THE WORKER AT TIME OF INJURY, NEW JERSEY - 1993</b>		
<b>WORKER LOCATION*</b>	<b>NUMBER</b>	<b>PERCENT</b>
<b>All Locations</b>	<b>142</b>	<b>100</b>
<b>Street and Highway</b>	<b>40</b>	<b>28</b>
<b>Industrial Place and Premises</b>	<b>40</b>	<b>28</b>
Construction site	13	9
Railway yard	4	3
<b>Other Places</b>	<b>22</b>	<b>15</b>
Sea	9	6
Parking lot, garage (employer's premises)	6	4
<b>Public Building</b>	<b>19</b>	<b>13</b>
Restaurant, cafe	5	4
Shop, commercial, store (except grocery)	5	4
<b>Home**</b>	<b>14</b>	<b>10</b>
<b>Place for Recreation and Sport</b>	<b>3</b>	<b>2</b>
<b>Farm</b>	<b>2</b>	<b>1</b>
<b>Residential Institution</b>	<b>2</b>	<b>1</b>

\*Based on activity codes developed by the Bureau of Labor Statistics.  
 \*\*Not necessarily own home.

Source: Census of Fatal Occupational Injuries, Occupational Health Service, New Jersey Department of Health in cooperation with the Bureau of Labor Statistics.

Note: Percentages may not add to 100 due to rounding. Totals for major categories may include subcategories not shown separately.

## SPECIAL TOPICS, FATAL OCCUPATIONAL INJURIES

### *African-Americans*

Seventeen (12%) of the victims were African American. Additional information on these fatalities is important because the working situations of African Americans can be different than for workers of other races. Some details of the fatalities involving African Americans are given below:

<b>Gender:</b>	17 (100%)	Male	<b>Age:</b>	2 (12%)	20-24
				5 (29%)	24-34
<b>Hispanic:</b>	16 (94%)	Not Hispanic		3 (18%)	35-44
	1 (12%)	Hispanic		4 (24%)	45-54
				3 (18%)	55-64
<b>Employer:</b>	15 (88%)	Private employers			
	2 (12%)	Public employers			
<b>Occupation:</b>	8 (47%)	Operators, fabricators, laborers, including			
		3 (18%) construction laborers			
		3 (18%) transportation occupations			
	3 (18%)	Managerial and professional specialties			
	3 (18%)	Precision production, craft, repair, including			
		2 (12%) construction trades			
	2 (12%)	Military - non-commissioned officers and other enlisted personnel			
	1 (6%)	Technical, sales, administrative support			
<b>Industry:</b>	5 (29%)	Construction, including			
		3 (18%) special trades contractors			
		2 (12%) single family housing construction			
	3 (18%)	Manufacturing			
	3 (18%)	Services			
	2 (12%)	Transportation and public utilities			
	2 (12%)	Retail trade			
	2 (12%)	Public administration - national security			
<b>External Cause of Injury:</b>	3 (18%)	Accidental falls, including			
		2 (12%) falls from or out of building or other structure			
	3 (18%)	Motor vehicle traffic accidents, including			
		2 (12%) due to loss of control without collision on highway			
	3 (18%)	Homicide			
	2 (12%)	Struck accidentally by falling object			
	2 (12%)	Accidents caused by machinery			
	1 (6%)	Motor vehicle non-traffic accidents			
	1 (6%)	Accidents caused by fire and flames			
	1 (6%)	Accidents caused by electric current			
	1 (6%)	Suicide			
<b>Source:</b>	5 (29%)	Vehicles			
	4 (24%)	Structures and surfaces, including			
		2 (12%) ground			
	3 (18%)	Bullets			
	2 (12%)	Machinery			
	1 (6%)	Containers			
	1 (6%)	Tools, instruments, equipment			
	1 (6%)	Fire and flames			

<b>Activity:</b>	6 (35%)	Constructing, repairing, cleaning, including
	2 (12%)	inspecting or checking
	4 (24%)	Vehicular and transportation operation, including
	2 (12%)	driving or operating a vehicle
	2 (12%)	riding in or on a bus
	2 (12%)	Materials handling operations
	1 ( 6%)	Using or operating tools, machinery
	1 ( 6%)	Only body position known
<b>Location:</b>	2 (12%)	Other, not elsewhere classified
	1 ( 6%)	Activity unspecified
	7 (41%)	Industrial place or premises
	4 (24%)	Street and highway
	3 (18%)	Home
	2 (12%)	Public building
	1 ( 6%)	Other

The occupation and industry of the 17 African American fatalities is different than the occupation and industry of the total 142 fatalities. A higher percentage of the African Americans were in the occupational categories of: operators, fabricators, and laborers; managerial and professional specialties; and the military. A lower percentage were in the precision production, craft, and repair occupational category and none were in the service occupations category. Regarding industry, a higher percentage of the African Americans were in manufacturing. These differences between African American fatalities and all worker fatalities may be due to a different occupation and industry distribution of African American workers compared to all workers in the New Jersey workforce.

## Women

Only eight (6%) of the 142 fatal occupational injuries occurred among women. More information on these fatalities is of interest because the circumstances for women are usually very different than for men. Additional details on the fatalities among women are given below:

<b>Race:</b>	7 ( 88%)	White	<b>Age:</b>	4 (50%)	20-24
	1 ( 13%)	American Indian, Aleut, Eskimo		1 (13%)	45-54
				1 (13%)	55-64
				2 (25%)	65 and over
<b>Hispanic:</b>	8 (100%)	Not Hispanic			
<b>Employer:</b>	8 (100%)	Private employers			
<b>Occupation:</b>	3 ( 38%)	Technical, sales, administrative support, including 2 (25%) sales			
	3 ( 38%)	Service			
	1 ( 13%)	Farming, forestry, fishing			
	1 ( 13%)	Operators, fabricators, laborers			
<b>Industry:</b>	4 ( 50%)	Services			
	1 ( 13%)	Agriculture, forestry, fishing			
	1 ( 13%)	Transportation and public utilities			
	1 ( 13%)	Retail trade			
	1 ( 13%)	Finance, insurance, real estate			
<b>External Cause of Injury:</b>	3 ( 38%)	Homicide - assault by cutting and piercing instrument			
	3 ( 38%)	Motor vehicle traffic accidents			
	1 ( 13%)	Water transportation accidents			
	1 ( 13%)	Air and space transport accidents			
<b>Source:</b>	5 ( 63%)	Vehicles, including 2 (38%) automobiles			
	3 ( 38%)	Tools, instruments, equipment - knives			
<b>Activity:</b>	4 ( 50%)	Vehicular and transportation operations			
	1 ( 13%)	Constructing, repairing, cleaning			
	2 ( 25%)	Other, not elsewhere classified			
	1 ( 13%)	Unspecified			
<b>Location:</b>	3 ( 38%)	Street and highway			
	2 ( 25%)	Home			
	1 ( 13%)	Public building			
	1 ( 13%)	Sea			
	1 ( 13%)	Other, not elsewhere classified			

A much higher percentage of the women died from motor vehicle traffic accidents and homicide than did all the other workers.

**External Cause of Injury - Motor Vehicle Traffic Accidents**

The most common cause of injury was motor vehicle traffic accidents, accounting for 38 (27%) of the 142 fatalities. Further details on these 38 deaths are given below:

<b>Gender:</b>	35 (92%)	Male	<b>Age:</b>	6 (16%)	20-24
	3 ( 8%)	Female		7 (18%)	24-34
				7 (18%)	35-44
<b>Race:</b>	33 (87%)	White		6 (16%)	45-54
	3 ( 8%)	Black		6 (16%)	55-64
	1 ( 3%)	Asian or Pacific Islander		6 (16%)	over 65
	1 ( 3%)	Unknown			
<b>Employer:</b>	25 (66%)	Private employers			
	13 (34%)	Public employers			
<b>Occupation:</b>	18 (47%)	Operators, fabricators, laborers of which			
		5 (13%) truck drivers			
		3 ( 8%) construction laborers			
	7 (18%)	Service occupations, including			
		3 ( 8%) crossing roads			
	6 (16%)	Precision production, craft, and repair			
	4 (11%)	Military, including			
		3 ( 8%) non-commissioned officers and other enlisted personnel			
	2 ( 5%)	Technical, sales, administrative support - news vendors			
	1 ( 3%)	Managerial and professional speciality occupations			
<b>Industry:</b>	10 (26%)	Public administration, including			
		4 (11%) national security			
		3 ( 8%) public order and safety			
	8 (21%)	Transportation and public utilities, including			
		3 ( 8%) trucking except local			
	7 (18%)	Construction, including			
		4 (11%) highway and street construction			
	6 (16%)	Retail trade			
	4 (11%)	Services			
	2 ( 5%)	Wholesale trade			
	1 ( 3%)	Finance, insurance, real estate			
<b>Source:</b>	37 (97%)	Vehicles, including			
		14 (37%) automobiles			
		7 (18%) vans			
		5 (13%) semi-trailer, tractor trailer			
		4 (11%) dump trucks			
		3 ( 8%) buses			
	1 ( 3%)	Machinery - front-end loader			
<b>Activity:</b>	29 (76%)	Vehicular and transportation activities, including			
		16 (42%) driving, operating			
		8 (21%) riding in, on			
		3 ( 8%) directing, flagging traffic			
	5 (13%)	Constructing, repairing, cleaning			
	2 ( 5%)	Protective service activities			
	1 ( 3%)	Activity unspecified			

1 ( 3%) Only body position known - standing

**Location:**

34 (89%) Street and highway  
2 ( 5%) Parking lot or garage  
1 ( 3%) Industrial place and premises - railway yard  
1 ( 3%) Not elsewhere classified

The more specific external causes of injury for the 38 fatalities were motor vehicle traffic accidents:

- involving collision with another motor vehicle, victim was driver.....8
- involving collision with another motor vehicle, victim was passenger.....1
- involving collision with a pedestrian, victim was pedestrian.....14
- involving collision with non-motor vehicle, victim was driver .....1
- involving collision on the highway but not with another vehicle, victim was driver.....6
- involving collision on the highway but not with another vehicle, victim was other specified person .....1
- involving collision with a train.....1
- due to loss of control without collision on highway, victim was passenger .....3
- due to loss of control without collision on highway, victim was driver .....1
- other non-collision, victim was other specified person.....1
- unspecified, victim was passenger .....1

The time of occurrence of the 38 fatal injuries was between 6:01 a.m. and noon for 16, between 12:01 p.m. and 6:00 p.m. for 15, between 6:01 p.m. and midnight for 3 and between 12:01 a.m. and 6:00 a.m. for 4. The counties in which the most fatalities due to motor vehicle traffic accidents occurred were Camden (6), Middlesex (6), Monmouth (6), Essex (3), and Somerset (3).

**Examples of work-related motor vehicle traffic accidents are:**

A highway worker setting safety cones on the highway was struck by a van which had been struck by another vehicle.

A crossing guard walked onto a highway to stop traffic for two pedestrians and was struck by a car.

**External Cause of Injury - Falls**

Accidental falls accounted for twenty-seven (19%) of the 142 fatal occupational injuries. Details of these fatalities are given below:

<b>Gender:</b>	27 (100%)	Male	<b>Age:</b>	1 (4%)	20-24
				2 (7%)	24-34
<b>Race:</b>	24 (89%)	White		8 (30%)	35-44
	3 (11%)	Black		10 (37%)	45-54
				6 (22%)	55-64
<b>Employer:</b>	24 (89%)	Private employers			
	3 (11%)	Public employers			
<b>Occupation:</b>	14 (52%)	Precision production, craft and repair, including			
		3 (11%) structural metal workers			
		3 (11%) painters			
		2 (7%) roofers			
	8 (30%)	Operators, fabricators, laborers, including			
		3 (11%) construction laborers			
	2 (7%)	Farming, forestry, fishing - groundskeepers and gardeners excluding farm			
	2 (7%)	Managerial and professional specialties - managers and administrators			
	1 (4%)	Technical, sales, administrative support			
<b>Industry:</b>	16 (59%)	Construction, including			
		3 (11%) single-family housing construction			
		3 (11%) roofing, siding, sheet metal work			
		2 (7%) plumbing, heating, air conditioning			
		2 (7%) painting, paper hanging			
		2 (7%) structural steel erection			
	3 (11%)	Manufacturing			
	3 (11%)	Transportation and public utilities			
	3 (11%)	Services			
	2 (7%)	Agriculture, forestry, fishing - ornamental shrub and tree services			
<b>Source:</b>	25 (93%)	Structures and surfaces, including			
		10 (37%) floors			
		9 (33%) ground			
	1 (4%)	Parts and materials			
	1 (4%)	Non-classifiable			
<b>Activity:</b>	14 (52%)	Constructing, repairing, cleaning, including			
		9 (33%) construction, assembling, dismantling			
		3 (11%) repair, maintenance			
	3 (11%)	Using or operating tools, machinery			
	2 (7%)	Vehicular and transportation operations			
	1 (4%)	Materials handling operations			
	4 (15%)	Only body position known, including			
		2 (8%) climbing, descending a ladder			
	1 (4%)	Other			
	2 (7%)	Activity unspecified			

<b>Location:</b>	15 (56%)	Industrial place and premises, including 9 (33%) construction site
	7 (26%)	Home
	2 (8%)	Public building
	1 (4%)	Place for recreation and sport
	1 (4%)	Residential institution
	1 (4%)	Other places

The specific external causes of injury for the 27 fatalities were:

- fall from or out of building or other structure ..... 8
- fall from ladder ..... 7
- fall into other hole or other opening in surface ..... 4
- fall from scaffolding ..... 3
- other fall from one level to another ..... 3
- other and unspecified fall ..... 2

The time of occurrence of the 27 fatal injuries was between 6:01 a.m. and noon for 13, between 12:01 p.m. and 6:00 p.m. for 10, and between 6:01 p.m. and midnight for 3. The time of occurrence was unknown for one fatality. The counties in which the most fatalities occurred were Essex (3), Middlesex (3), and Somerset (3).

**Examples of work-related fatalities due to falls are:**

A construction worker on top of a holding tank fell through a 3 foot by 7 foot opening covered by loose plywood to the bottom of the tank 35 feet below.

An iron worker fell 26 feet to the ground from a second-story steel beam of an office building under construction.

The owner of a company was on the second floor waiting for the freight elevator. The elevator door opened, the owner stepped inside, and fell over 14 feet down. The interlocks that prevented the elevator door from opening if the elevator was not there were not functioning and the lighting was poor.

A truck driver fell 12 feet from the top of a load of wooden roof trusses while securing them on the truck trailer.

**External Cause of Injury - Homicide**

The third most common cause of injury was homicide, with 20 (14%) of the 142 fatal occupational injuries. Additional information on the fatalities due to homicide is given below:

<b>Gender:</b>	17 (85%)	Male	<b>Age:</b>	4 (20%)	20-24
	3 (15%)	Female		7 (35%)	25-34
<b>Race:</b>	14 (70%)	White	4 (20%)	35-44	
	3 (15%)	Black	3 (15%)	45-54	
	2 (10%)	Asian or Pacific Islander	1 ( 5%)	55-64	
	1 ( 5%)	American Indian, Aleut, Eskimo	1 ( 5%)	65 and over	
<b>Employer:</b>	17 (85%)	Private employers			
	3 (15%)	Public employers			
<b>Occupation:</b>	7 (35%)	Operators, fabricators, laborers, including			
		4 (20%) garage service station related occupations			
		2 (10%) taxicab drivers and chauffeurs			
	4 (20%)	Technical, sales, and administrative support, including			
		2 (10%) sales counter clerks			
	4 (20%)	Service, including			
		2 (10%) food preparation and service			
	3 (15%)	Managerial and professional speciality, including			
	2 (10%) manager, food serving and lodging establishments				
	1 ( 5%) Precision production, craft and repair				
	1 ( 5%) Military				
<b>Industry:</b>	9 (45%)	Retail trade, including			
		4 (20%) gas service stations			
		3 (15%) eating places			
	3 (15%)	Transportation and public utilities, including			
		2 (10%) taxi-cabs			
	3 (15%)	Services, including			
		2 (10%) video-tape rental establishments			
	2 (10%)	Finance, insurance, real estate			
2 (10%)	Public administration				
	1 ( 5%) Manufacturing				
<b>Source:</b>	11 (55%)	Bullets			
	8 (40%)	Knives			
	1 ( 5%)	Other striking handtools - not powered			
<b>Activity:</b>	11 (55%)	Tending a retail establishment			
	2 (10%)	Driving, operating an automobile			
	1 ( 5%)	Protective service activities			
	1 ( 5%)	Office work			
	1 ( 5%)	Only body position known - walking			
	1 ( 5%)	Activity not elsewhere classified			
	3 (15%)	Activity unspecified			

<b>Location:</b>	12 (60%)	Public building, including 4 (20%) restaurant, cafe 3 (15%) shop, commercial, store (except grocery)
	3 (15%)	Home
	3 (15%)	Street and highway
	1 ( 5%)	Industrial place and premises
	1 ( 5%)	Other places not elsewhere classified

The specific external causes of injury for the 20 fatalities were:

- assault by firearms ..... 11
- assault by cutting and piercing instrument ..... 8
- striking by blunt or thrown object..... 1

The time of occurrence of the 20 fatal injuries was between 6:01 a.m. and noon for 4, between 12:01 p.m. and 6:00 p.m. for 5, between 6:01 p.m. and midnight for 7, and between 12:01 a.m. and 6:00 a.m. for 3. The time of occurrence is missing for one of the fatalities. The county with the most fatalities was Essex (4).

**Examples of work-related homicides are:**

A night-manager of a fast food restaurant was shot during a robbery.

A clerk in a video store was stabbed during a robbery.

A night supervisor of a factory was shot by a person who entered the factory.

A service station attendant was shot during a hold-up.

A cab driver was shot in the cab by an apparent robber.

**Potential Years of Work Life Lost**

With the 142 fatalities, an average of 24 potential years of work life (the number of years before age 65 of the victim) was lost per fatality for a total of 3,221 potential years of work life lost. The total and average potential years of work life lost by occupation and industry are given in Table 8.

<b>TABLE 8</b>			
<b>NUMBER OF POTENTIAL YEARS OF WORK LIFE LOST BY</b>			
<b>OCCUPATION AND INDUSTRY, NEW JERSEY - 1993</b>			
<b>OCCUPATION* OR INDUSTRY**</b>	<b>FATALITIES</b>	<b>POTENTIAL YEARS OF</b>	
		<b>WORK LIFE LOST</b>	
		<b>TOTAL NUMBER</b>	<b>AVG. PER FATALITY</b>
<b>All Workers</b>	<b>142</b>	<b>3221</b>	<b>24</b>
<b>Occupation</b>			
Operators, Fabricators, Laborers	56	1267	23
Precision Production, Craft, Repair Service	33	736	22
Technical, Sales, and Administrative Support	20	328	16
Managerial and Professional Speciality	12	301	25
Farming, Forestry, and Fishing	10	246	25
Military	6	145	24
	5	198	40
<b>Industry</b>			
Construction	34	772	23
Transportation and Public Utilities	27	591	22
Services	20	458	23
Public Administration***	18	437	24
Retail Trade	17	419	25
Manufacturing	13	280	22
Agriculture, Forestry and Fishing	5	133	27
Finance, Insurance, and Real Estate	5	85	17
Wholesale Trade	3	46	15
<p>*Based on the 1990 occupational classification system developed by the Bureau of the Census.</p> <p>**Standard Industrial Classification Manual, 1987.</p> <p>***Does not include eight workers employed in government in other industries.</p> <p>Source: Census of Fatal Occupational Injuries, Occupational Health Service, New Jersey Department of Health in cooperation with the Bureau of Labor Statistics.</p>			

## FATAL OCCUPATIONAL INJURIES, UNITED STATES, 1993

Table 9. provides information on the 6,271 fatal occupational injuries that occurred nationwide in 1993. In New Jersey compared to the country, a higher proportion of the victims were:

- wage and salary workers;
- over 45 years of age;
- in the service occupations;
- in the precision production, craft, and repair occupations;
- in the construction industry;
- in the transportation and public utilities industry; and
- fatally injured in falls (twice the proportion).

**TABLE 9**  
**NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES BY**  
**SELECTED CHARACTERISTICS, UNITED STATES - 1993**

CHARACTERISTIC	NUMBER	PERCENT
<b>Total</b>	<b>6,271</b>	<b>100</b>
<b>Employment Status</b>		
Wage and Salary Workers	4,981	79
Self-employed <sup>1</sup>	1,290	21
<b>Gender</b>		
Men	5,790	92
Women	481	8
<b>Age</b>		
Under 20	169	5
20-24	502	8
25-34	1,510	24
35-44	1,576	25
45-54	1,193	19
55-64	801	13
65 and over	514	8
<b>Race</b>		
White	5,106	81
Black	664	11
Asian or Pacific Islander	190	3
American Indian, Aleut Eskimo	47	1
Other	263	4
<b>Hispanic Origin</b>		
Hispanic <sup>2</sup>	604	10

**TABLE 9 (Continued)**  
**NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES BY**  
**SELECTED CHARACTERISTICS, UNITED STATES - 1993**

CHARACTERISTIC	NUMBER	PERCENT
<b>Occupation<sup>3</sup></b>		
<b>Operators, Fabricators, Laborers</b>	<b>1,959</b>	<b>31</b>
Transportation and material moving moving occupations	1,182	19
Truck drivers	731	12
Handlers, equipment cleaners, helpers and laborers	572	9
Construction laborers	218	3
Laborers, except construction	202	3
Machine operators, assemblers, and inspectors	205	3
<b>Precision Production, Craft, and Repair</b>	<b>1,095</b>	<b>17</b>
Construction Trades	565	9
Mechanics and repairers	317	5
<b>Farming, Forestry, and Fishing</b>	<b>961</b>	<b>15</b>
Farming operators and managers	409	7
Other agricultural and related occupations	214	3
Farm workers, including supervisors	209	3
<b>Technical, Sales, and Administrative Support</b>	<b>842</b>	<b>13</b>
Sales occupations	556	9
Technicians and related support occupations	167	3
<b>Managerial and Professional Speciality</b>	<b>681</b>	<b>3</b>
Executive, administrative, and managerial	427	7
Professional speciality	254	4
<b>Service Occupations</b>	<b>539</b>	<b>9</b>
Protective service occupations	288	5
<b>Military</b>	<b>121</b>	<b>2</b>
<b>Industry<sup>4</sup>-Private</b>	<b>5,590</b>	<b>89</b>
<b>Construction</b>	<b>924</b>	<b>15</b>
Special trades contractors	517	8
Heavy construction except building	255	4
<b>Transportation and Public Utilities</b>	<b>890</b>	<b>14</b>
Trucking and warehousing	467	7
<b>Agriculture, Forestry, and Fishing</b>	<b>855</b>	<b>14</b>
Agricultural production - crops	398	6
Agricultural production - livestock	209	3
<b>Retail Trade</b>	<b>784</b>	<b>13</b>
Food stores	223	4
Eating and drinking places	199	3

**TABLE 9 (Continued)**  
**NUMBER AND PERCENT OF FATAL OCCUPATIONAL INJURIES BY**  
**SELECTED CHARACTERISTICS, UNITED STATES - 1993**

CHARACTERISTIC	NUMBER	PERCENT
<b>Manufacturing</b>	<b>762</b>	<b>12</b>
Lumber and wood products	204	3
<b>Services</b>	<b>758</b>	<b>12</b>
Business services	188	3
<b>Wholesale Trade</b>	<b>250</b>	<b>4</b>
<b>Mining</b>	<b>174</b>	<b>3</b>
<b>Finance, Insurance and Real Estate</b>	<b>116</b>	<b>2</b>
<b>Industry - Government<sup>5</sup></b>	<b>681</b>	<b>11</b>
Local	340	5
Federal	186	3
State	146	2

<sup>1</sup> Includes paid and unpaid family workers, and may include owners of incorporated businesses, or members of partnerships.

<sup>2</sup> Persons identified as Hispanic may be of any race.

<sup>3</sup> Based on the 1990 Occupational Classification System developed by the Bureau of the Census.

<sup>4</sup> Standard Industrial Classification Manual, 1987 Edition.

<sup>5</sup> Includes fatalities to workers employed by governmental organizations regardless of industry.

**Source:** Census of Fatal Occupational Injuries, Bureau of Labor Statistics, U.S. Department of Labor.

**Note:** Percentages may not add to 100 due to rounding. Totals for major categories may include subcategories not shown separately.

## CONCLUSION

Fatal occupational injuries are not random events and should not be considered the "price of having a job." Occupational fatalities are preventable through a combination of engineering and safety controls at the workplace, employer and employee training, and enforcement of health and safety standards.

Several federal and state agencies enforce workplace safety and health standards. The federal Occupational Safety and Health Administration covers private employees in New Jersey except certain self-employed workers (i.e., sole proprietors), unpaid family workers, laborers on small farms, and certain workers in industries which are covered by other federal agencies (e.g., Federal Aviation Administration, U.S. Coast Guard). The New Jersey Public Employees Occupational Safety and Health (PEOSH) Program covers public employees in New Jersey, except federal government employees.

Also, the Occupational Health Service implements the New Jersey Fatality Assessment and Control Evaluation (FACE) Program to identify factors that increase the risk of work-related fatal injuries. Program staff conduct on-site evaluations of reported fatalities from falls, electrocutions, and confined space exposure, prepare and disseminate reports of the on-site evaluations including recommendations for prevention to the employers, employees, unions and others involved, and develop informational materials on preventing these types of fatalities. The National Institute for Occupational Safety and Health partially supports the Program which exists in eleven other states. Common recommendations made in the FACE evaluation reports include:

### *Electrocutions*

- de-energize insulate, isolate, and test electrical circuits
- develop or improve job safety and training programs

### *Falls*

- use fall protection
- inspect and maintain safety equipment
- conduct a job hazard analysis
- develop an emergency response plan
- develop or improve job safety and training programs

### *Confined Space*

- develop a confined space entry program
- conduct air monitoring in confined spaces
- develop or improve job safety and training programs

CFOI data can be used to:

- identify hazardous occupations, industries, activities, and locations;
- direct resources for safety programs to prevent injuries;
- identify areas for modifying or developing safety and health standards; and
- identify areas for further research.

In targeting areas for prevention efforts, it is important to look at the number of fatalities, the fatality rates, and the potential years of work life lost. Using these indicators some areas to target for prevention efforts are workers over age 65, truck drivers, construction laborers and trades workers, and workers in farming and transportation.

## APPENDIX 1

### ESTIMATED ANNUAL AVERAGE EMPLOYMENT BY SELECTED DEMOGRAPHIC CHARACTERISTICS, OCCUPATION, AND INDUSTRY, NEW JERSEY - 1993<sup>1</sup>

	IN THOUSANDS
Total <sup>2</sup>	3,706
<b>Demographic Characteristics</b>	
Wage & Salary Workers	3,479
Self-Employed	227
Men	2,021
Women	1,685
White	3,095
African-American	454
Hispanic	330
16-24	468
25-34	959
35-44	1,009
45-54	742
55-64	405
65 and over	123
<b>Occupation</b>	
Farming, Forestry, Fishing	44
Precision Production, Craft, Repair	338
Operators, Fabricators, Laborers	447
Services	462
Managerial and Professional Specialty	1,194
Technical, Sales, and Administrative Support	1,220
<b>Industry<sup>3</sup></b>	
Agriculture (excluding Forestry and Fishing)	35
Construction	134
Transportation and Public Utilities	273
Manufacturing	565
Retail Trade	542
Wholesale Trade	167
Government (excluding the Military)	545
Government (including the Military <sup>4</sup> )	555
Services (including Forestry and Fishing)	928
Finance, Insurance, Real Estate	297
Mining	4

<sup>1</sup> From the Current Population Survey, Bureau of the Census for the Bureau of Labor Statistics, U.S. Department of Labor.

<sup>2</sup> Does not include military workers or workers 14 and 15 years old.

<sup>3</sup> Does not include self-employed and family workers except in Agriculture.

<sup>4</sup> 10,000 military workers, from the U.S. Department of Defense, 1992.

## REVISED 1992 NEW JERSEY AND UNITED STATES FATAL OCCUPATIONAL INJURIES

### New Jersey

The revised count of fatal occupational injuries in 1992 in New Jersey is 138. This represents 24 additional fatalities from the previously published count of 114. These 24 fatalities were identified or verified as work related since the original count was published. The external causes of injury for the 24 additional fatalities are homicide (17) and suicide (7). The revised major external causes of injury are listed below:

Motor vehicle traffic accidents	36 (26%)
Homicide & injury purposely inflicted by other persons	29 (21%)
Other accidents	27 (20%)
Accidents caused by machinery	17 (12%)
Accidents caused by electric current	6 (4%)
Accidental falls	16 (12%)
Suicide & self-inflicted injury	8 (6%)
Accidents caused by fire & flames	5 (4%)
Accidents caused by submersion, suffocation & foreign bodies	5 (4%)
Motor vehicle non-traffic accidents	3 (2%)
Air & space transport accidents	2 (1%)
Accidental poisoning by drugs, medicinal substances & biologicals	2 (1%)
Accidental poisoning by other solid and liquid substances, gases and vapors	2 (1%)
Water transport accidents	1 (1%)
Vehicle accidents NEC	1 (1%)
Accidents due to natural & environmental factors	1 (1%)

### United States

The revised count of fatal occupational injuries in 1992 in the United States is 6,217, which is 134 more than the originally published count of 6,083. Additional fatal work injuries were identified or verified as work-related since the original count was published.



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ASSEMBLY LABOR, BUSINESS AND INDUSTRY COMMITTEE  
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January 13, 1995

Commissioner Peter J. Calderone  
NJ Department of Labor  
CN 110  
Trenton, New Jersey 08625

Dear Commissioner Calderone:

Thank you for accepting the Assembly Labor Committee's invitation to speak about the Department of Labor's survey on occupational safety and health.

Among the issues related to the survey that I expect will be of interest to committee members are:

1. What, if any, reasons you can ascertain at this time for higher levels of occupational illnesses and injuries in the public sector compared to the private sector.
2. Current department efforts and any new initiatives being considered to make improvements in public or private sector occupational safety and health, including any changes that may result if A-2064 is enacted and a State PEOH plan is submitted to the U.S.D.O.L. and the new efforts you have previously mentioned regarding violence in the workplace. Any suggestions you have on what the committee and the Legislature can do to help your efforts are welcome.
3. How the data from the survey compare to workers' compensation claims data. Are there plans to make use of those data to enhance occupational safety and health efforts?

Commissioner Calderone

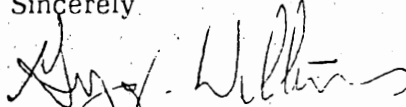
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January 13, 1995

4. Any comments you have regarding the Department of Health's surveys in this area, such as the pending survey on workplace fatalities, are quite welcome.

I think the committee shares the your desire to be proactive in promoting measures that will reduce workplace injury and illness, increase the safety and health of public and private sector workers and reduce related employer costs. I certainly look forward to your comments.

Sincerely,



Gregory L. Williams  
Senior Research Associate

c: Lenny Katz, Assistant Commissioner of Labor  
Members of the Assembly Labor Committee  
Richard McGlynn, Assembly Majority Staff  
Tim Clark, Assembly Minority Staff



NEW JERSEY DEPARTMENT OF  
**LABOR**

**News &  
Information**

Office of the Commissioner

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**Fewer Job-Related Injuries and Illnesses  
Suffered by Private Sector Workers in New Jersey  
than in Nation as a Whole,  
New Survey Finds**

TRENTON, December 21, 1994 -- New Jersey workers in private industry on the whole suffered fewer job-related injuries and illnesses in 1993 than their counterparts across the nation, Labor Commissioner Peter J. Calderone announced today.

According to Calderone, a new Department of Labor survey on worker safety and health showed that workers in the private sector suffered an occupational injury or illness at a rate of 7.4 for every one hundred workers compared with a rate of 6.5 registered throughout the nation.

"While this is our State's first comprehensive survey on occupational safety and health, we're gratified to see that the figures show workers in New Jersey are somewhat safer than their counterparts across the nation," Calderone said. "Much of the credit for our showing deserves to go to management and labor which for the most part have been successful in creating a workplace atmosphere where concern for the well-being of New Jersey's workers is a major priority."

(more)

*Working to Keep New Jersey Working*

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Calderone said the study was New Jersey's first annual Occupational Safety and Health Survey. It was conducted by the New Jersey Labor Department's Office of Labor Research and Analysis, in cooperation with the U. S. Department of Labor, Bureau of Labor Statistics, which collected employer reports from a sample of over 9,600 private and public sector establishments in New Jersey.

"Among all workers in New Jersey, including governmental workers, one case of job-related injury or illness occurred among every twelve workers, an overall rate of 8.3 per 100 workers," Calderone said.

According to Calderone, over 230,000 injuries and illnesses were suffered by workers in private workplaces as well as in State and local government facilities in New Jersey during 1993; of these, over 13,000 were occupational illnesses.

Calderone said the incidence rate for government workers (State, county and municipal) in New Jersey was nearly double that of the private sector at 14.4 per 100 workers. State government workers alone had an incidence rate of 14.5.

"Even though the public sector included typically hazardous occupations such as police and fire protection, we have an incidence rate for injuries and illnesses for public sector workers that is drastically out of line with the experience of private sector employers," he said.

"The annual survey of occupational injuries and illnesses in workplaces provides an essential tool for

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promoting efforts to make New Jersey's workplaces safer and healthier," the Commissioner continued. "By collecting information identifying job-related incidents, workers, managers and governmental officials can continue to work toward reducing or eliminating many job hazards. The survey findings help to measure the results of these efforts."

"While similar information has been produced by the New Jersey Department of Labor for workers in the public sector since 1988, comparable data for private firms has not been available," Calderone said. Public workers, including volunteer fire fighters, have been surveyed since 1988 under provisions of the New Jersey Public Employees Occupational Safety and Health Act as part of the state's ongoing commitment to reduce public worker injuries and illnesses.

However, comparable data for these workers throughout the nation as a whole does not exist because they are not covered by the Occupational Safety and Health Act (OSHA) of 1970 which covers only workers in the private sector.

#### **Private Sector Results**

Workers employed in New Jersey's private sector during calendar year 1993 suffered 177,000 recordable injuries and illnesses. Occupational illnesses accounted for approximately 6.1 percent of the reported cases.

Lost workday injuries and illnesses (which include cases involving either actual absence from work or restricted work activity) accounted for about 46 percent of the total cases in 1993. The lost workday cases included over 81,000 cases,

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an incidence rate of 3.4 per 100 workers, while the rate for cases which did not result in a full workday lost from regular employment was 4.0.

Injury incidence rates ranged from a low of 2.8 for small private establishments, those employing between 1 and 19 employees, to a high of 10.0 for employers with 100-249 employees.

The total case incidence rate was 10.1 in the construction industry, the highest major division rate in the private sector. Transportation and public utilities, registering the second highest total cases rate at 9.8, had the highest lost workday case incidence rate of 5.6; construction ranked second with a rate of 4.2.

#### Public Sector Results

New Jersey's public sector total cases incidence rate for 1993 was 14.4 per 100 full-time employees. One out of every seven state, local or volunteer workers experienced a job-related injury or illness during calendar year 1993, nearly double the rate experienced by private sector workers.

Of the 53,000 total cases recorded, 46 percent of these injuries and illnesses were classified as lost workday cases, an incidence rate of 6.6. There were 2,400 public sector occupational illness cases reported in 1993; lost workday illness cases constituted about 33 percent of this category.

State governmental workers suffered 15,400 injuries and illnesses during 1993, an incidence rate of 14.5. The total lost workday cases rate for all of State government was 7.1.

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Social Services had the highest lost workday cases incidence rate among all major groups (14.9), followed by Transportation Services with a rate of 13.9.

Local governmental units, which include county, city and local paid and volunteer fire fighters, had a slightly lower total injury and illness incidence rate (14.3) than state facilities. The total injury and illness lost workday case rate differed significantly between local and state agencies. The rate of 6.4 for local was about 10 percent less than that of the state.

With 37,700 total cases during 1993, local government workers experiencing the highest incidence of injuries and illnesses, at 24.7, were the public utilities, consisting primarily of water and sanitary services workers. This group also had the highest total lost workday cases rate, 13.5 per 100 full-time workers. Justice, public order and safety, which includes police, paid and volunteer fire fighters, and correctional institutions, ranked second with a rate of 12.7 for local government.

*Note: Caution must be exercised when comparing private and public sector rates and when comparing the overall rate in any one state with the national rates. Many public sector workers perform in high-risk activities such as supplying police protection, guarding correctional institutions, providing paid and volunteer fire protection, as well as caring for patients in State psychiatric hospitals and residential care facilities.*

(more)

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These facilities have historically produced incidence rates that greatly exceeded the overall incidence rates measured by the Public Employees Occupational Safety and Health (PEOSH) Survey since 1988. Further differences between states' experiences with private sector workers as a whole may be skewed by the mix of workers and industries, which differ from one state to another, and the overall composition of the nation.

For more detailed information, contact Thomas Pompei, Division of Program Planning, Analysis and Evaluation at (609) 292-8998.

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**NEW JERSEY OCCUPATIONAL SAFETY AND HEALTH SURVEY**

Number Of Nonfatal Occupational Injury And Illness Cases And  
Incidence Rates Per 100 Full-Time Workers By Industry  
1993

Industry	Incidence Rate		Total Number of Cases (000s)
	Total Cases	Lost Workday Cases*	
All industries including state and local government	8.3	3.8	230.4
Private industry	7.4	3.4	177.3
Agriculture, forestry and fishing	7.0	3.7	1.3
Mining	5.8	3.9	0.1
Construction	10.1	4.2	10.3
Manufacturing	8.5	3.6	41.5
Durable goods	9.8	3.9	18.9
Nondurable goods	7.6	3.5	22.7
Transportation and public utilities	9.8	5.6	21.9
Wholesale and retail trade	7.7	3.5	50.9
Wholesale trade	6.5	3.2	16.2
Retail trade	8.5	3.7	34.7
Finance, insurance, and real estate Services	2.8	1.2	4.7
State and local government	14.4	6.6	53.1
State government	14.5	7.1	15.4
Transportation and public utilities Services	20.3	11.6	1.7
Public administration	18.4	8.7	10.4
Local government	6.9	3.2	2.7
Local government	14.3	6.4	37.7
Transportation and public utilities Services	24.2	13.2	1.0
Public administration	10.9	4.2	15.4
Public administration	17.9	8.9	20.9

\*Total includes cases involving restricted work activity only in addition to days-away-from-work cases with or without restricted work activity.

Table 1. Nonfatal occupational injury and illness incidence rates per 100 full-time workers <sup>1</sup>, by industry division, 1993

New Jersey

Industry division	Total cases	Lost workday cases		Cases without lost workdays
		Total <sup>2</sup>	With days away from work <sup>3</sup>	
All industries including State and local government <sup>4</sup> .....	8.3	3.8	3.5	4.5
Private industry <sup>4</sup> .....	7.4	3.4	3.0	4.0
Agriculture, forestry, and fishing <sup>4</sup> .....	7.0	3.7	3.1	3.3
Mining <sup>5</sup> .....	5.8	3.9	3.0	2.0
Construction .....	10.1	4.2	4.0	5.9
Manufacturing .....	8.5	3.6	2.9	4.9
Durable goods .....	9.8	3.9	3.2	6.0
Nondurable goods .....	7.6	3.5	2.8	4.2
Transportation and public utilities <sup>5</sup> .....	9.8	5.6	4.7	4.2
Wholesale and retail trade .....	7.7	3.5	3.3	4.2
Wholesale trade .....	6.5	3.2	2.9	3.3
Retail trade .....	8.5	3.7	3.6	4.8
Finance, insurance, and real estate .....	2.8	1.2	1.1	1.7
Services .....	6.2	2.8	2.7	3.4
State and local government .....	14.4	6.6	6.3	7.7
State government .....	14.5	7.1	6.7	7.4
Transportation and public utilities .....	20.3	11.6	11.0	8.7
Services .....	18.4	8.7	8.5	9.6
Public administration .....	6.9	3.2	3.0	3.7
Local government .....	14.3	6.4	6.2	7.8
Transportation and public utilities .....	24.2	13.2	12.1	11.0
Services .....	10.9	4.2	3.9	6.7
Public administration .....	17.9	8.9	8.7	8.9

<sup>1</sup> The incidence rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as: (N/EH) x 200,000, where

N = number of injuries and illnesses  
 EH = total hours worked by all employees during the calendar year  
 200,000 = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

<sup>2</sup> Total includes cases involving restricted work activity only in addition to days-away-from-work cases with or without restricted work activity.

<sup>3</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>4</sup> Excludes farms with fewer than 11 employees.

<sup>5</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

NOTE: Because of rounding, components may not add to the totals.

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Table 2. Number of nonfatal occupational injuries and illnesses, by industry division, 1993

New Jersey

Industry division	Total cases (000's)	Lost workday cases		Cases without lost workdays (000's)
		Total <sup>1</sup> (000's)	With days away from work <sup>2</sup> (000's)	
<b>INJURIES AND ILLNESSES</b>				
All industries including State and local government <sup>3</sup> .....	230.4	105.9	96.8	124.5
Private industry <sup>3</sup> .....	177.3	81.3	73.3	98.0
Agriculture, forestry, and fishing <sup>3</sup> ....	1.3	0.7	0.6	0.6
Mining <sup>4</sup> .....	0.1	0.1	0.1	( <sup>5</sup> )
Construction .....	10.3	4.2	4.1	6.1
Manufacturing .....	41.5	17.8	14.2	23.8
Durable goods .....	18.9	7.4	6.0	11.4
Nondurable goods .....	22.7	10.4	8.2	12.3
Transportation and public utilities <sup>4</sup> ..	21.9	12.4	10.4	9.4
Wholesale and retail trade .....	50.9	23.2	21.7	27.7
Wholesale trade .....	16.2	8.0	7.1	8.2
Retail trade .....	34.7	15.3	14.7	19.5
Finance, insurance, and real estate	4.7	1.9	1.9	2.8
Services .....	46.5	21.0	20.4	25.6
State and local government .....	53.1	24.5	23.5	28.6
State government .....	15.4	7.5	7.2	7.9
Transportation and public utilities ....	1.7	1.0	0.9	0.7
Services .....	10.4	4.9	4.8	5.4
Public administration .....	2.7	1.2	1.2	1.4
Local government .....	37.7	17.0	16.3	20.7
Transportation and public utilities ....	1.0	0.6	0.5	0.5
Services .....	15.4	5.9	5.5	9.5
Public administration .....	20.9	10.5	10.2	10.5
<b>INJURIES</b>				
All industries including State and local government <sup>3</sup> .....	217.1	99.2	90.7	117.9
Private industry <sup>3</sup> .....	166.4	75.5	68.0	91.0
Agriculture, forestry, and fishing <sup>3</sup> ....	1.3	0.7	0.6	0.6
Mining <sup>4</sup> .....	0.1	0.1	0.1	( <sup>5</sup> )
Construction .....	10.0	4.2	4.0	5.8
Manufacturing .....	38.3	16.7	13.6	21.6
Durable goods .....	17.0	6.8	5.8	10.2
Nondurable goods .....	21.3	9.8	7.8	11.4
Transportation and public utilities <sup>4</sup> ..	21.5	12.3	10.3	9.1
Wholesale and retail trade .....	47.3	19.9	18.4	27.4
Wholesale trade .....	15.9	7.7	6.9	8.1
Retail trade .....	31.4	12.1	11.5	19.3
Finance, insurance, and real estate	4.5	1.7	1.7	2.7
Services .....	43.6	19.9	19.4	23.6
State and local government .....	50.7	23.7	22.7	27.0
State government .....	14.7	7.3	7.0	7.5
Transportation and public utilities ....	1.7	1.0	0.9	0.7
Services .....	10.0	4.8	4.6	5.2
Public administration .....	2.5	1.2	1.1	1.4

See footnotes at end of table.

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Table 2. Number of nonfatal occupational injuries and illnesses, by industry division, 1993 — Continued

New Jersey

Industry division	Total cases (000's)	Lost workday cases		Cases without lost workdays (000's)
		Total <sup>1</sup> (000's)	With days away from work <sup>2</sup> (000's)	
<b>INJURIES</b>				
Local government .....	35.9	16.4	15.8	19.5
Transportation and public utilities ....	0.9	0.5	0.5	0.4
Services .....	14.9	5.7	5.3	9.2
Public administration .....	19.7	10.2	9.9	9.6
<b>ILLNESSES</b>				
All industries including State and local government <sup>3</sup> .....	13.3	6.7	6.1	6.6
Private industry <sup>3</sup> .....	10.8	5.9	5.4	5.0
Agriculture, forestry, and fishing <sup>3</sup> ....	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Mining <sup>4</sup> .....	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Construction .....	0.3	( <sup>5</sup> )	( <sup>5</sup> )	-
Manufacturing .....	3.2	1.1	0.7	2.1
Durable goods .....	1.8	0.6	0.3	1.2
Nondurable goods .....	1.4	0.5	0.4	0.9
Transportation and public utilities <sup>4</sup> ..	0.4	0.1	0.1	0.3
Wholesale and retail trade .....	-	-	-	0.3
Wholesale trade .....	-	-	-	0.1
Retail trade .....	-	-	-	0.2
Finance, insurance, and real estate .....	0.3	0.2	0.2	( <sup>5</sup> )
Services .....	3.0	1.0	1.0	2.0
State and local government .....	2.4	0.8	0.8	1.6
State government .....	0.6	0.2	0.2	0.4
Transportation and public utilities ....	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Services .....	0.4	0.1	0.1	0.3
Public administration .....	0.1	0.1	( <sup>5</sup> )	0.1
Local government .....	1.8	0.6	0.6	1.2
Transportation and public utilities ....	0.1	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Services .....	0.5	0.2	0.2	0.3
Public administration .....	1.2	0.3	0.3	0.9

<sup>1</sup> Total includes cases involving restricted work activity only in addition to days-away-from-work cases with or without restricted work activity.

<sup>2</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>3</sup> Excludes farms with fewer than 11 employees.

<sup>4</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health

Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

<sup>5</sup> Fewer than 50 cases.

NOTE: Because of rounding, components may not add to the totals.

- Data not available.

Table 3. Nonfatal occupational injury incidence rates per 100 full-time workers<sup>1</sup>, by industry division and employment size—1993

New Jersey

Industry division	Establishment employment size (workers)							
	1 to 19	20 to 49	50 to 99	100 to 249	250 to 499	500 to 999	1,000 to 2,499	2,500 or more
All industries including State and local government <sup>2</sup> .....	2.8	6.1	9.1	10.4	10.1	8.7	10.2	9.0
Private industry <sup>2</sup> .....	2.8	5.6	8.5	10.0	9.1	7.4	7.7	8.6
Agriculture, forestry, and fishing <sup>2</sup> .....	4.1	8.3	-	-	-	-	-	-
Mining <sup>3</sup> .....	3.4	5.3	-	-	-	-	-	-
Construction .....	6.9	12.4	14.3	11.9	-	-	-	-
Manufacturing .....	4.1	8.1	9.5	10.4	8.1	5.7	5.6	4.7
Durable goods .....	-	9.3	10.5	11.9	7.8	-	8.2	-
Nondurable goods .....	-	7.0	8.8	9.6	8.4	5.7	4.3	-
Transportation and public utilities <sup>3</sup> .....	3.0	6.8	12.9	10.8	8.6	-	11.6	-
Wholesale and retail trade .....	2.8	5.1	8.5	12.3	11.1	8.7	-	-
Wholesale trade .....	4.0	5.9	9.0	8.1	8.3	2.6	-	-
Retail trade .....	2.1	4.7	8.2	14.5	12.8	12.8	23.6	-
Finance, insurance, and real estate .....	2.3	3.5	3.6	-	1.0	1.6	-	-
Services .....	1.4	3.0	4.5	8.5	-	10.4	7.8	8.7
State and local government .....	10.4	15.9	16.2	13.8	14.7	12.1	16.6	9.9
State government .....	-	-	5.0	10.5	13.5	11.8	21.9	8.4
Transportation and public utilities .....	-	-	-	15.8	18.0	-	-	-
Services .....	-	-	-	-	26.8	-	28.6	7.5
Public administration .....	-	-	4.1	8.1	6.7	10.2	4.3	3.1
Local government .....	-	-	16.9	14.1	15.1	12.2	12.3	11.5
Transportation and public utilities .....	14.3	-	-	-	-	-	-	-
Services .....	3.5	3.5	6.4	8.6	10.0	11.3	11.5	12.3
Public administration .....	-	18.1	19.4	18.8	21.4	-	13.2	9.8

<sup>1</sup> The incidence rates represent the number of injuries per 100 full-time workers and were calculated as:  $(N/EH) \times 200,000$ , where

- N = number of injuries
- EH = total hours worked by all employees during the calendar year
- 200,000 = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

<sup>2</sup> Excludes farms with fewer than 11 employees.

<sup>3</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor, and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

- Data not available.