Reuss, Vicki A. (CDC/NIOSH/EID)

From: Watson Michael [MWatson@teamster.org]
Sent: Friday, December 28, 2007 12:12 PM
To: NIOSH Docket Office (CDC)
Subject: 110 - NIOSH Truck Driver Survey
Attachments: NIOSH Truck Driver Survey Comments.pdf

Docket Officer:

Please accept the attached comments on the proposed truck driver health and safety survey. The International Brotherhood of Teamsters commends NIOSH for undertaking this effort to evaluate health, safety, and lifestyle factors among truck drivers and appreciates the opportunity to comment on the proposed survey.

Michael W. Watson, CIH, CSP
International Brotherhood of Teamsters
25 Louisiana Avenue, NW
Washington DC 20001
(202)624-6960

THE INTERNATIONAL BROTHERHOOD OF TEAMSTERS

COMMENTS

ON

THE PROPOSED SURVEY OF TRUCK DRIVER SAFETY AND HEALTH

DEPARTMENT OF HEALTH AND HUMAN SERVICES
THE CENTERS FOR DISEASE CONTROL AND PREVENTION
NATIONAL INSTITUTES FOR OCCUPATIONAL SAFETY AND HEALTH

DECEMBER 2007

PREPARED BY
LAMONT BYRD, CIH, DIRECTOR
MICHAEL W. WATSON, CIH, CSP
AZITA MASHAYEKHI, MHS
SAFETY AND HEALTH DEPARTMENT

COMMENTS OF THE INTERNATIONAL BROTHERHOOD OF TEAMSTERS

REGARDING THE PROPOSED SURVEY OF TRUCK DRIVER SAFETY AND HEALTH

The International Brotherhood of Teamsters (IBT) is a labor organization whose members include hundreds of thousands of persons, mostly drivers, employed by motor carriers. Because of the large number of its members that are involved in motor transportation, the IBT has a strong interest in ensuring that the proposed survey of truck driver safety and health is developed in such a way that would adequately and appropriately evaluate the issues faced by our members, and that it does not adversely affect the economic well-being or privacy of our members.

A. NIOSH has not adequately evaluated the existing literature.

It is clearly evident that NIOSH has failed to adequately evaluate the existing literature in preparing for the proposed truck driver health and safety survey. During the November 1, 2007 stakeholder meeting in Chicago, Illinois, several stakeholders raised concerns that the information NIOSH is seeking to obtain through the proposed survey may already be readily available in the literature, along with methods for conducting the research. This is puzzling considering the fact that NIOSH recently published a document titled "Truck Driver Occupational Safety and Health: 2003 Conference Report and Selective Literature Review", which contains more than 150 references to studies that address truck driver occupational safety and health, fatigue, shift work, and socioeconomic issues in the less-than-truckload (LTL) and truckload (TL) sectors.

Representatives from the following organizations stated that they have developed methods for, or have experience conducting, the type of research that NIOSH is currently proposing: Center for Truck and Bus Safety, Virginia Tech Transportation Institute; Channing Laboratory, Brigham and Women's Hospital, Harvard Medical School; Krueger Ergonomics Consultants; Kentucky Occupational Injury and Illness Surveillance Program, Kentucky Injury Prevention and Research Center, University of Kentucky; American Transportation Research Institute; Insurance Institute for Highway Safety; Safety and Health Assessment and Research for Prevention (SHARP), Washington State Department of Labor and Industries; and the University of Michigan Transportation Research Institute.

According to the 2003 conference report, participants agreed that while several existing data systems collect detailed information on highway crashes and on-the-job fatalities, significant data gaps remain, especially in the areas of fatigue, occupational stress and violence, and chronic disease. It is therefore the IBT's recommendation that NIOSH focus their research efforts on these 4 areas – fatigue, occupational stress, violence, and chronic disease – and consult with organizations or researchers who have experience in these focus areas. With regard to fatigue, NIOSH has cited more than 50 studies in its literature review which address driver fatigue, fatigue-related accidents, and driver rest and sleep. NIOSH also cites several studies which address truck driver occupational stress, especially as it relates to shift work. There is a definite need for research in the areas of chronic disease and violence in trucking. Eric Garshick, MD of the Channing Laboratory, Brigham and Women's Hospital, Harvard Medical School is currently studying exposure to diesel and other exhaust particles and lung cancer

mortality among Teamster members who are employed in the trucking industry. In addition, Marmot et al[1] have conducted research in the area of job-related coronary heart disease and Hedberg et al[2] have conducted research in the area of risk indicators for heart disease among professional drivers. Debra G. Anderson, Ph.D. at the College of Nursing, University of Kentucky has extensive knowledge and experience in workplace violence. Her recent study, "Violence and Stress Experienced by Female Long-Haul Truckers,"[3] provided pilot data for a three-year R01 study funded by NIOSH on workplace violence among both male and female long-haul truckers.[4]

B. Confidentiality of medical information.

NIOSH is debating whether the surveys should be anonymous, or whether they should conduct confidential interviews using a signed informed consent form. Our concern with the confidential/informed consent scenario is that medical information can be linked directly to an individual. It is the IBT's recommendation that any proposed truck driver survey, including medical history and disease screening, be conducted anonymously or through informed consent; however, regardless of how the survey is conducted, all results must be kept personal and confidential and should not be released to anyone other than the driver.

---

[1] Marmot MG, Bosma H, Hemingway H, et al. Contribution of Job Control and Other Risk Factors to Social Variations in Coronary Heart Disease Incidence. *The Lancet*, Vol. 350, No. 9073, July 26, 1997, pp. 235-239.

[2] Hedberg GE, Wikstrom-Frisen L, Janlert U. Comparison between Two Programmes for Reducing the Levels of Risk Indicators of Heart Diseases among Male Professional Drivers. *Occupational and Environmental Medicine*, Vol. 55, No. 8, August 1998, pp. 554-561.

[3] Anderson, DG, Westneat, S. & Reed, D. B. (2005). Workplace violence against female long-haul truckers. *Security Journal, 18*(2), 31-38.

[4] Anderson, DG. (2004). Workplace violence in long-haul trucking: Occupational health nursing update. *AAOHN Journal, 52*(1), 23-27.

NIOSH is confronted with an ethical dilemma with respect to medical screening results obtained from the proposed survey. NIOSH has already proposed including sleep apnea screening as a component of the study. During the November 1, 2007 stakeholder meeting, several stakeholders recommended the inclusion of additional medical screens such as hypertension and blood screens. The IBT has concerns about the inclusion of these medical screens in a voluntary survey, outside of the biannual DOT physical examination that the drivers must undergo to obtain a medical certificate. According to §391.43 of the FMCSRs, the examining physician performing the medical examination must "be knowledgeable of the specific physical and mental demands associated with operating a commercial motor vehicle and the requirements of [the rule], including the medical advisory criteria prepared by the FMCSA as guidelines to aid the medical examiner in making the qualification determination." The researchers who will conduct the proposed medical screens do not meet the requirements set forth in §391.43, yet the information obtained may be used by a licensed physician, many of whom are under contract with motor carriers, in making a determination about the medical qualification of a driver. According to §391.45 of the FMCSRs, "[a]ny driver whose ability to perform his/her normal duties has been impaired by a physical or mental injury or disease" must be medically examined and certified by a licensed physician. NIOSH must decide how they will communicate the results of the medical screen(s) to the driver, if they decide to do so. NIOSH may be liable for withholding this information from the driver if the survey is conducted anonymously, because the driver may be at risk for developing a serious medical condition covered under §391.41. However, if this information is communicated to the driver, the driver will have knowledge of a potentially disqualifying medical

condition and then be faced with the possibility of not being able to work; or taking no action to report the condition and possibly exacerbate the medical condition. This seems to be much more than an ethical dilemma, and may constitute a legal dilemma for NIOSH. It is the IBT's recommendation that NIOSH pursue legal guidance on the issue, in addition to the ethical guidance provided by the Institutional Review Board (IRB).

During the sleep apnea breakout session at the November 1, 2007 stakeholder meeting, Dr. Natalie Hartenbaum of OccuMedix, Inc. made the assertion that the diagnosis of sleep apnea is not an automatically disqualifying medical condition. While she is technically correct in her assertion from a regulatory standpoint, in reality a diagnosis of sleep apnea effectively removes the driver from service. A driver who is removed from performing safety-sensitive functions must be treated for the medical condition, and the driver may not return to driving until the condition is successfully treated. There are costs associated with treating the condition, and the driver may experience a loss in compensation in the interim, while the condition is being treated. As a practical matter, several medical conditions may not be automatically disqualifying (cardiovascular, pulmonary, musculoskeletal, and neurological conditions), however, the diagnosis of medical conditions covered under §391.41 of the Federal Motor Carrier Safety Regulations attract added scrutiny from the carrier, and in many circumstances, the driver may be removed from the road. In some cases, the driver may be removed from the road for an interim period, while additional medical testing is conducted. Consider, for example, the case of a driver who must seek treatment for sleep apnea. It is very costly and time consuming for a driver to seek a diagnosis and treatment for sleep apnea. Therefore, drivers are not likely to volunteer for participation in the survey with this in mind. Consequently, there is the possibility that

punitive action may be implemented should carriers obtain the information. In other cases, the driver may be removed from the road and placed inside, performing work at the loading dock, or other non-driving tasks for which they may experience a reduction in compensation. In many cases, such work may not be available to the displaced driver. In these cases, if the driver is not medically qualified, the driver is out of work and may experience a loss in compensation and benefits until he/she can return to driving functions. In summary, the IBT is concerned that the driver may volunteer to participate in the survey not knowing that their participation may result in reduced compensation, or in extreme cases, complete loss of qualification to operate a CMV, albeit in certain cases such loss may only be temporary.

NIOSH has stated that any proposal to conduct a survey involving human subjects must undergo extensive review and approval by an Institutional Review Board (IRB). The IRB is a group that has been formally designated to approve, monitor, and review biomedical and behavioral research involving humans with the aim to protect the rights and welfare of the subjects. While the IRB may seek to protect the rights and welfare of participating drivers, the Board may not be familiar with the specific medical qualification requirements set forth in the FMCSRs or the recommendations contained in the Medical Conference Reports. Since the IRB will be reviewing a proposal that includes a vulnerable population, the IRB should have members who are familiar with this group. The IBT recommends that the IRB solicit participation from employee representatives to ensure that the rights and welfare of the drivers is protected.

C. There are concerns about using truck stops to administer the surveys.

Stakeholders are not confident that NIOSH can obtain a representative sample of drivers from privately-run truck stops. There are also concerns about the security of researchers conducting the surveys at truck stops. Many over-the-road drivers do not frequent privately-run truck stops- as they make direct "point-to-point" runs from their work reporting location to a drop-off point. They may refuel at the drop-off point and make a direct run back to their work reporting location. Some drivers may make stops at public rest stops, and refueling facilities, along with required stops at weigh stations. However, an increasing number of drivers are using weigh-in-motion detection equipment and do not make required stops at weigh stations. NIOSH should work with the American Trucking Association (ATA), the Owner-Operator Independent Drivers Association (OOIDA), and the International Brotherhood of Teamsters (IBT) to identify motor carriers who may be interested in participating. However, participating motor carriers should be advised that any information obtained from drivers will be held in strict confidence and not communicated to the motor carrier, as this may affect their willingness to participate.

D. Physicians raised concerns about the sleep apnea monitors that will be used on 300 individuals to screen for sleep apnea.

According to physicians present at the stakeholder meeting, the proposed monitors have never been used as a screening tool, and they are concerned that NIOSH will underestimate the prevalence of sleep apnea among drivers. These monitors are usually used in high risk populations, not as screening tools. Drivers cannot be assumed to be a high risk population based solely upon demographics. According to the American Sleep Apnea Association, the typical individual who is likely to have obstructive sleep apnea syndrome is obese, with particular heaviness at the face and neck. One of the breakout group moderators suggested that the sleep monitors would only be

used on volunteers who fit the description of a "high risk individual." The IBT is concerned that monitoring only high risk individuals would serve to bias the study in such a way that sleep apnea would be overestimated for the targeted population.

According to the American Sleep Apnea Association, and physicians present at the stakeholder meeting, obstructive sleep apnea is usually diagnosed through a sleep test called a polysomnograph. Standard sleep studies usually use the overnight polysomnograph. While an overnight polysomnograph may help in the diagnosis of obstructive sleep apnea, there may exist night-to-night variability in some individuals. Also, according to Armon et al[5], "although diagnosing a sleep problem on the basis of a recording over a single night is common practice, some authorities caution that more than one night of recording may be necessary so the patient can become comfortable with unfamiliar surroundings and sleep more naturally." Also, patient preparation is of significant importance, because the researcher must ensure that the patient sleeps as naturally as possible. Patients should be instructed to avoid caffeine, alcohol, strenuous exercise, and certain foods prior to participating in the study. According to Madani et al[6], "although a single-night PSG is usually adequate to determine if patients suffer from apnea, many variables may affect the final results. Variables include, but are not limited to equipment, scoring technique, interscorer reliability, and, most importantly, how efficiently the patient slept during the night."

In summary, it is the IBT's position that sleep apnea studies are too complex to be conducted using a device that has never been used as a screening tool in a situation where there is no medical observation. These studies, whether screens or comprehensive sleep

---

[5] Armon, C., Roy, A., and Nowack, WJ. "Polysomnography: Overview and Clinical Application" *Neurology* 30 March 2007. < http://www.emedicine.com/neuro/topic566.htm >.

[6] Madani, M., Frank, M., Lloyd, R., Dimitrova, D., Madani, F. (2007) Polysomnography Versus Home Sleep Study: Overview and Clinical Application. *Atlas of the Oral and Maxillofacial Surgery Clinics of North America*, Vol 15, 101-109.

studies, should only be conducted upon the recommendation, and under the supervision, of a qualified, licensed physician with experience in conducting sleep studies.

E. There are fundamental flaws in traditional self-assessment questionnaires.

According to the Center for Technology in Government, there are several fundamental flaws in self-assessment questionnaires - i.e., hard to validate, distorted results, badly designed, inherent bias, administrator bias. Self-assessment questionnaires are difficult to validate. The fact that they produce a measurement or evaluation result does not mean that it is accurate or meaningful. Interpretation must be done with careful attention to the validity of the instrument and how it is used. Self-assessment survey results can be distorted in several ways. Subjects may deliberately provide false or misleading information. Their memories and/or perceptions may be inaccurate or flawed. The self-assessment questionnaire may be badly designed or insufficiently tested.[7]

NIOSH has stated that the length of the survey is planned at 30 minutes, however, stakeholders have raised concerns that a 30 minute survey is too long, and may affect the participation rate. Stakeholders have recommended that the survey should take no longer than 8-10 minutes to complete. The time it takes to complete the survey may be reduced by using survey software and a laptop computer or PDA. NIOSH should consult with researchers who have previously conducted similar research. There were several stakeholders at the November 1, 2007 meeting, who indicated that they have used software programs to conduct surveys and these programs significantly reduced the length of time required to administer the survey.

---

[7] Strategic Planning Process Self-Assessment Questionnaire for Federal/Government Agencies. www.strategicfutures.com/articles/stratpln/gov/quesgov.htm. Retrieved December 2007.

F. Incentives.

NIOSH stated that they plan to use incentives to increase participation in the survey, but with a limited budget, they do not have a plan for what would constitute an adequate incentive. Christine Grady of the National Institutes of Health (NIH) explored the concept of undue influence in her analysis of incentives and informed consent.[8] Grady asks the question: "How much compensation may be offered to subjects without creating an undue inducement." Latterman and Merz performed a review of all studies published during 1997-1998 in ten journals-indicating usage of payment or incentive.[9] A total of 126 studies were identified, 56 of which included details about time and incentives. The authors found that subjects were paid on average about $9.50 per hour plus $12.00 for each separable task. The mean cash payment for participation in a survey was $13.00 (ranged from $1.00-$25.00); the mean cash payment for participation in an interview was $24.00 (ranged from $10.00-$100.00); and the mean cash payment for focus group participation was $25.00. It is the IBT's suggestion that cash incentives ranging from $25.00 to $35.00 for participation in the survey would be most appropriate. Additional incentives may be necessary in order to solicit participation in separate tasks, outside of participation in the questionnaire.

G. Work Organization and Stress

It is our understanding that another proposed NIOSH research project, "Work Organization Influence of Fatigue in Truck Drivers" (2004-2008) will be incorporated over into the proposed NIOSH Survey of Truck Driver Safety and Health. It is important

---

[8] Grady, C. (2001) Money for Research Participation: Does it Jeopardize Informed Consent? *American Journal of Bioethics*, Vol. 1(2), 40-44.

[9] Latterman, J., and Merz, J. (2001) How Much are Subjects Paid to Participate in Research? *American Journal of Bioethics*, Vol. 1(2), 45-46.

that the new project will also "examine the influence of organizational and industry factors, including, but not limited to, "scheduling practices, economic pressure [including alternative forms of compensation, such as 'activity-based' compensation, or piece rate], competition and types of freight, on fatigue and safety in commercial motor vehicle operators." These questions would help characterize how work organization risk factors, which encompass the drivers' working conditions, may be associated with injury, health status and behaviors among them. NIOSH's proposal does not describe which of the four component questionnaires (injury; health and well-being; fatigue; sleep disorder) would include such questions.

CONCLUSION

In closing, the International Brotherhood of Teamsters commends NIOSH for undertaking this effort to evaluate health, safety, and lifestyle factors among truck drivers and appreciates the opportunity to comment on the proposed survey. Although the IBT supports NIOSH's efforts, NIOSH must ensure that the economic well-being and privacy rights of the participating drivers are protected. The IBT is available to discuss any of our concerns more in depth and to answer any questions regarding these comments.