

Abstracts
Wednesday, October 19, 2011
POSTER SOCIAL
Waterfront Place Hotel
Grand Exhibit Hall, Salon B

LIST OF FEATURED POSTERS

Surveillance

P01

Title: *Toxicology Testing in Fatally Injured Workers: A Review of Five Years of Iowa FACE Program Cases*

Authors: Sullivan R, Ramirez M, Kraemer J, Peek-Asa C, Gergely R

Presenter: Ryan Sullivan, M.P.H.

Objectives: An estimated 4,300 fatal workplace related injuries occurred in the United States in 2009. The state of Iowa alone experiences an average of 80 cases of occupational fatalities annually. While much is known about the risk factors for occupational injury, little is known about the prevalence of substance use surrounding these fatal events. To address this gap, we examined the prevalence of positive toxicology testing in fatal occupational injuries occurring in the state of Iowa.

Methods: We conducted a retrospective study of the Fatality Assessment Control and Evaluation (FACE) reports of workplace related fatalities in Iowa from 2005 to 2009. Reviewed documents included medical examiner reports, autopsy and pathology reports, police and department of transportation reports, and toxicology laboratory reports. In Iowa, workplace fatalities require a medical examiner's examination, frequently including toxicology analysis. Positive tests were determined to be those that detected any substance on either a Drugs of Abuse screen or Comprehensive Drug Panel. Exclusions included cases with caffeine only or with incomplete/missing records.

Results: A total of 429 cases were examined from 2005 to 2009. Of these, 42 cases were excluded due to incomplete or missing records. Of the remaining 387 cases, 77 or 19.9% were found to have positive toxicology testing. Commonly identified drug classes included Cannabinoids (19 cases), Alcohols (15 cases), Amphetamines (8 cases), among others. Further analysis will include descriptive statistics and models predicting which occupations

and industries have the highest prevalence of positively tested drugs involved in traumatic deaths.

Conclusions: A substantial portion of fatally injured workers in the state of Iowa were found to be positive on toxicology testing. These results highlight the significant role that substance use plays as a potential contributor to fatal occupational injuries. These results identify an area in need of further research efforts and a potential target for injury prevention strategies.

Emergency Responder Safety

P02

Title: *Work-related Injuries among Firefighters*

Authors: Hong OS, Chin DL, Vogel S, Feld J

Presenter: Oi-Saeng Hong, Ph.D., R.N.

Background: Firefighters (FFs) are exposed to various occupational hazards that may result in injuries, illnesses and diseases while at work. Little is known about factors associated multiple (more than two) injuries among firefighters. The purpose of the present study was to assess the type of occupational injuries as well as demographic and work-related characteristics that may affect multiple injuries among firefighters.

Methods: The study included a total of 305 FFs from California, Illinois, and Indiana, who completed the pretest survey as a part of ongoing hearing protection and cardiovascular disease prevention interventions. The data were collected through internet-based self-administered survey since November 2009.

Results: The participants were predominantly middle aged Caucasian males (mean age = 44.5 years, Caucasian or White = 84.7%, male = 92.7%) with an average of 17 years of work in fire services. About 65% (197/305) of the participants had experienced work-related injuries and about 47% (143/305) reported multiple (more than two) injuries. The most common type of injury was muscle strain/sprain (75.6%). Most frequent reported injuries were upper or lower extremity injury (59.4%), back injury (56.9%), burns (24.4%) and hazardous chemicals exposure (14.2%). Significant numbers of firefighters reported that they had been on no-duty (56.3%) or

October 2011

NOIRS 2011 Participants,

I would like to welcome you to the 2011 National Occupational Injury Research Symposium (NOIRS 2011). We are proud of the high quality slate of research and plenary sessions supporting this year's symposium theme, *Future Directions in Occupational Injury Prevention Research*. The conference agenda includes a broad and diverse range of cutting-edge occupational injury research from leading national and international scientists. NOIRS 2011 is the only forum exclusively dedicated to the presentation and discussion of the latest methods, findings, and translation activities related to traumatic occupational injury research and prevention. The multidisciplinary nature of occupational injury research makes it essential for NIOSH and its partners to bring together epidemiologists, engineers, statisticians, economists, health practitioners, safety specialists, and other scientists and professionals committed to the prevention of occupational injuries.

NOIRS would not be possible without the support of our co-sponsors: the National Safety Council and the Liberty Mutual Research Institute for Safety. I would like to recognize and thank each of these co-sponsors, not only for supporting NOIRS, but also for their continued support of NIOSH research and prevention programs.

As with the previous National Occupational Injury Research Symposia, this year's program promises to deliver an exciting agenda that represents the breadth and diversity of occupational injury research. NIOSH continues our emphasis on moving the results of research into preventive actions through our Research to Practice Initiative, and NOIRS 2011 will highlight numerous successes in transferring research to the workplace for prevention. Through the NOIRS, NIOSH continues to provide a forum for the presentation of state-of-the-art occupational injury research, and the opportunity to develop and foster partnerships and collaborations among various researchers, industry, labor, and other partners who share a common interest in the prevention of occupational injuries. Progress is being made in reducing the toll of workplace injury and death; however, it will take our sustained, collective efforts to further reduce the devastating impact that traumatic injuries have on workers, their families, and their employers. It is my hope that NOIRS 2011 will once again revitalize our energies to ensure all workers return home safely each day.

I offer my best wishes for a productive interchange of science and prevention strategies as we work toward our common goal to prevent traumatic injuries and fatalities in the workplace.

Enjoy the NOIRS 2011 Symposium!



John Howard
Director