

**Board of Scientific Counselors**  
**395 Patriots Plaza, SW**  
**Washington, DC 20201**  
**September 5, 2014**

**Personnel and Organizational Announcements**

- New coordinator for Prevention through Design (PtD): To further the continuation and advancement of the PtD initiative, NIOSH is pleased to announce the appointment of Jonathan Bach, CSP, CIH, PE, as the new coordinator of PtD. Mr. Bach comes to NIOSH from the U.S. Army Corps of Engineers, where he served as the occupational safety and health manager for Europe. Mr. Bach has an extensive background in industrial hygiene and designing for safety and was responsible for managing safety and occupational health programs for construction projects in Europe, Israel, Turkey, and former Soviet nations.

**Budget**

- NIOSH expects to be operating under one or more continuing resolutions into the 2015 fiscal year, beginning October 1, 2014.

**Currently Available for Public Review and Comment**

- The NIOSH Fire Fighter Fatality Program is currently seeking stakeholder input on the progress and future directions of the program. NIOSH periodically seeks input on this program to ensure that it is meeting the needs and expectations of the U.S. fire service, and to identify ways in which the program can be improved to increase its impact on the safety and health of fire fighters across the United States. Comments are being accepted through October 20. For more information, see <http://www.cdc.gov/niosh/fire/>
- NIOSH, in accordance with a final rule recently published by the Department of Labor's Mine Safety and Health Administration (MSHA), is amending its regulations to establish standards for the approval of facilities that conduct spirometry examinations and to require that all coal mine operators submit a plan for the provision of spirometry and X-ray examinations to all surface and underground coal miners. Comments are being accepted through October 3, 2014. For more information, see <http://www.cdc.gov/niosh/docket/review/docket276/default.html>
- The National Institute for Occupational Safety and Health (NIOSH) is seeking public comment on a draft Current Intelligence Bulletin (CIB), *Promoting Health and Preventing Disease and Injury*

*through Workplace Tobacco Policies*. The public comment period is open for 30 days, closing on September 15, 2014. Occupational safety and health practitioners, healthcare professionals and the general public are encouraged to review the document and provide comments by visiting <https://federalregister.gov/a/2014-19384>.

## **New Programs and Initiatives**

### *Expansion of the Coal Workers' Health Surveillance Program*

- The National Institute for Occupational Safety and Health (NIOSH) is taking an important step in expanding the Coal Workers' Health Surveillance Program with the August 4, 2014 publication of an interim final rule in the Federal Register (<https://federalregister.gov/a/2014-18336>).
- This Interim Final Rule, "Specifications for Medical Examinations of Coal Miners", provides a national program of medical surveillance to surface coal miners and adds spirometry and respiratory symptom assessment to the current x-ray surveillance program that was formerly available only to underground coal miners.
- The action to expand the program is in response to new requirements for health surveillance in the Mine Safety and Health Administration (MSHA) final rule for controlling coal mine dust exposure.
- Miners will now be provided with spirometry and chest x-ray testing when they first enter into mining and then periodically after that. The health surveillance program is a longstanding NIOSH responsibility under the Federal Mine Safety and Health Act. Miners who have evidence of coal workers' pneumoconiosis can request special measures to decrease their future dust exposure.

### *Heat Stress*

- NIOSH has been instrumental in many activities complementing OSHA's *Campaign to Prevent Heat Illness in Outdoor Workers*. This year's efforts focused on the importance of acclimatization (getting the body accustomed to heat). A *Morbidity and Mortality Weekly Report (MMWR)* coauthored by NIOSH and OSHA, [Heat Illness and Death Among Workers — United States, 2012–2013](#) was published on August 8th. The article describes the results from OSHA's review of heat illness and fatality cases over a recent 2-year period, finding that the "employers' failure to support acclimatization appears to be the most common deficiency and the factor most clearly associated with death". The publication resulted in news articles, LinkedIn discussions, and blog postings.
- NIOSH led a social media messaging campaign the first two weeks of July that included Facebook and Twitter messages targeting heat stress, heat-related illnesses, prevention, and acclimatization. A NIOSH Science Blog, [Adjusting to Work in the Heat: Why Acclimatization Matters](#), stressed the importance of acclimatization, rest and fluids. A new infographic, [Protect Your Workers from Heat Stress](#), was shared via social media, the NIOSH Science blog, and the web topic page.
- The NIOSH criteria document, *Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments* document, is being revised to address final external reviewer comments. The document is expected to be published at the end of calendar year 2014.

### *NIOSH Safe-Skilled-Ready Workforce Initiative (SSRWI):*

(Introduced at the September 18, 2013 BSC meeting)

- NIOSH has published the new and updated NIOSH *Youth@Work-Talking Safety* curriculum that teaches foundational workplace safety and health skills to young people before they enter the workforce. The curriculum is free of charge, available for download from the NIOSH website, and will be customized for all U.S. states and territories. New versions are being posted to the NIOSH website as they are completed. A Spanish language version is also being created. For more information, see <http://www.cdc.gov/niosh/talkingsafety/>
- An online assessment tool has been completed to measure student knowledge/skills acquisition under the new *Talking Safety* curriculum. The SSRWI team traveled to Ada, Oklahoma at the end of August to pilot the assessment with 200 high school students.
- NIOSH collaborated with the American Federation of teachers (AFT) on a three-day train-the-trainer program for the *Talking Safety* curriculum, held July 23-26 in New Brunswick, N.J. AFT trained approximately 20 school staff (teachers and/or school-related personnel) and community members who each commit to training at least 30 young workers in two short workshops in 2014. AFT has also posted the curriculum to their Share My Lesson website, the largest resource of its kind for teachers across the country. The site has more than 500,000 registered users; 5.5 million downloads, with an average 10,000 each day; and includes 300,500 total resources, of which 31,000 are aligned with the Common Core State Standards, including *Talking Safety*.

### *Disaster Science Research Initiative (DSRI):*

(Introduced at the June 5, 2014 BSC meeting)

- NIOSH held a workshop on July 10<sup>th</sup> regarding disaster research, focusing on the types of research that are most needed and feasible. As part of the discussions, the appropriate roles for NIOSH and the extramural community were discussed.
- The DSRI will focus on conducting timely, scalable, scientifically sound research for the safety and health of responders. One of the goals is to develop a framework that allows for research to be started quickly in the time before, during, and after response to a large scale disaster.
- Participants were supportive of the overall initiative and offered suggestions for moving forward.
- RAND is developing a paper summarizing the major trends and themes that emerged during the meeting. This paper will be available by the end of the year.

### *Ebola Response*

- The NIOSH Emergency Preparedness and Response Office is participating in the CDC response to Ebola.
- NIOSH has been providing input on worker-related infection control guidance and disinfection guidance being prepared by CDC.

- A new topic page on the NIOSH web, “Ebola and Other Emerging Infectious Diseases,” provides a concise, well-organized portal to the relevant NIOSH resources, saving readers time and effort in finding needed information and guidance. For more information, see <http://www.cdc.gov/niosh/topics/EmergInfectDiseases/>

### *On-line Training for Emergency Responders*

- FREE ONLINE TRAINING for the Emergency Responder Health Monitoring and Surveillance (ERHMS) System is now available and offers continuing education credits. For more information, please go to the NIOSH ERHMS web page at [www.cdc.gov/niosh/topics/erhms](http://www.cdc.gov/niosh/topics/erhms).
- ERHMS is a health monitoring and surveillance framework that includes recommendations and tools specific to protect emergency responders during all phases of a response, including pre-deployment, deployment, and post-deployment phases.
- ERHMS is intended to address all aspects of protecting emergency responders and is applicable over the full range of emergency types and settings.

### *Institute of Medicine (IOM) Meeting on Powered Air Purifying Respirators*

- NIOSH’s National Personal Protective Technology Laboratory (NPPTL) is exploring performance requirements for powered air-purifying respirators (PAPRs) for healthcare workers to determine how these requirements may impact future standards. See the following for more information: <http://www.cdc.gov/niosh/docket/review/docket129A/>
- To obtain stakeholder input, NIOSH supported the Institute of Medicine’s public workshop on PAPRs held August 8 and 9. Panel discussion topics included Employee/Worker Experience in Using Powered Air Purifying Respirators in Health Care Settings, Use of PAPRs in Emergency Preparedness Planning and Response, Improving PAPRs for Use in Health Care Settings, and How Can NIOSH’s PAPR Standards Evolve to Meet the Needs of the Health Care Workforce. See the following for more information: <http://www.iom.edu/Activities/PublicHealth/PPEinWorkplace/2014-AUG-07.aspx>
- The results of this workshop will enable NIOSH to effectively identify requirements as the PAPR standards module is further developed.

### *Memorandum of Understanding (MOU) with the United States Forest Service*

- The U.S. Forest Service Technology and Development Centers signed an MOU with NIOSH to coordinate, communicate, and consult effectively and efficiently to advance worker safety and health among wildland fire fighters. NIOSH also has a data use agreement with the USFS and are working with the agency on a number of projects involving wildland fire fighters. For more information, see <http://www.cdc.gov/niosh/topics/firefighting/>

### *Updated Reproductive Health and the Workplace topic page*

- The NIOSH internet Reproductive Health web pages have been updated in conjunction with release of the CDC's National Action Plan on Fertility in July 2014. See <http://www.cdc.gov/niosh/topics/repro/>. The plan was created in consultation with many governmental and nongovernmental partners.
- NIOSH contributed to this Action Plan, specifically related to reducing exposures to occupational agents that can harm reproductive health and fertility in women and men. The release was supported by a NIOSH Science Blog: [Workplace Exposures and the National Action Plan for Infertility](#).

### *N95 Day*

- Today, September 5, 2014, NIOSH observes its third annual N95 Day campaign. N95 Day recognizes the importance of respiratory protection in the workplace and seeks to familiarize employers and workers with the resources available to help them make informed decisions when selecting and wearing a respirator.
- As part of the N95 Day activities, NIOSH NPPTL today offered a webinar on *Respirator Preparedness in Healthcare: Where Technology Meets Good Practices*. For more information about this webinar please see: <http://www.cdc.gov/niosh/npptl/resources/pressrel/letters/ltr-09052014.html> For more information about upcoming N95 Day activities, including the general industry Twitter Chat (#N95Chat), please see the N95 Day web page: <http://is.gd/N95Day2014>

### *Shrimp Boat Winch Guards*

The NIOSH Alaska Pacific Office engineering team has installed a prototype shrimp winch guard on a test vessel in the Gulf of Mexico. The shrimpers will test the winch guard at sea during fishing operations. Additional guards will soon be installed on several additional vessels. Feedback will be used to produce the final version of the winch guard, which will then be made available for manufacturers to produce.

### *Buy Quiet*

NIOSH recommends preventing hazardous noise through controls for noise exposure and encourages business owners to create *Buy Quiet* programs as a first step. Buy Quiet is a prevention initiative, which encourages companies to purchase or rent quieter machinery and tools to reduce worker noise exposure. The initiative provides information on equipment noise levels, so companies can buy quieter products that make the workplace safer; and encourages manufacturers to design quieter equipment by creating a demand for quieter products. The Buy Quiet initiative was supported by a NIOSH Science Blog: <http://blogs.cdc.gov/niosh-science-blog/category/hearing-loss/>.

### **Social Presence Statistics**

NIOSH continues to expand its presence on social networks.

- **eNews** subscribers: 51,087 as of 7/31/14.
- **Total Worker Health** newsletter subscribers: 54,813 as of 7/31/14.
- **Science Blog:** 1,188,786 cumulative views since the introduction of the blog in November 2006.
- **Facebook Postings:** 1456 times (since July 2011); 45,880 “likes” for our organizational page
- **Pinterest** pins: We have pinned 33 items to CDC’s Workplace Safety and Health Board, which has 1,990 followers.
- **Flickr:** 210 images in our Flickr photostream.
- **You Tube videos:** 125 posted videos and 221,370 downloads.
- **Twitter:** We have 15 Twitter accounts, with more than 277,777 followers, combined. One ranking from Twitaholic.com reports that NIOSH is in the top 10 of all Twitter sites among followers in Washington, D.C.

## Science Blog Topics

August 20, 2014: Preliminary Field Studies on Worker Exposures to Volatile Chemicals during Oil and Gas Extraction Flowback and Production Testing Operations

August 13, 2014: Preventing Skin Cancer

August 5, 2014: Buy Quiet Update

July 29, 2014: Free Online Emergency Responder Health Monitoring and Surveillance Training

July 15, 2014: 200 and Counting!

July 14, 2014: Adjusting to Work in the Heat: Why Acclimatization Matters

July 7, 2014: A Wrench in the Gear: Lockout/Tagout in the Food Industry

June 10, 2014: Remarks by J. Howard at ASSE Professional Development Conference

## Highlights from the NIOSH Divisions and Offices: Program and Research Pipeline

### NIOSH Office of Extramural Programs

Highlights from Fiscal year 2014:

- Published the largest number of new Funding Opportunity Announcements;
- Largest number of new Cooperative Research Agreements in the last several years – this is a research integration effort;
- 17 scientific review meetings convened this year, also the largest number;
- Partnership with Fogarty International Center expands our 20 year history with new funding opportunity announcement for 5-year global environmental and occupational hubs – paired awards with US and foreign institutions.

Eleven targeted Funding Opportunity Announcements were developed in Fiscal year 2014. Nine of these were cooperative agreements.

- Agricultural, Forestry and Fishing Safety and Health Research (Cooperative Agreement)
- National Center of Excellence for the Prevention of Childhood Agricultural Injury (Cooperative Agreement)
- Assessment of Elastomeric Respirators in Healthcare Environments
- State Occupational Health and Safety Surveillance Program (Cooperative Agreement)
- Conference and Scientific Meeting Cooperative Agreements
- Conference and Scientific Meeting Grants
- Miner Safety and Health Training Program - Western United States (Cooperative Agreement)
- National Mesothelioma Virtual Bank for Translational Research (Cooperative Agreement)
- Oregon Center of Excellence to Promote a Healthier Workforce (Cooperative Agreement)
- Implementing World Health Assembly Resolution 60.26 Global Plan of Action for Workers Health 2008-2017 with the World Health Organization (Cooperative Agreement)
- Workers Compensation Surveillance (Cooperative Agreement)

#### Workers' Compensation Surveillance Funding Opportunity:

- Cooperative agreement will provide state health and Workers' Compensation (WC) agencies the resources to initiate or expand state-based WC surveillance and intervention activities.
- NIOSH intends to commit \$5.4 million over a period of six years to fund up to 9 states/grantees for three consecutive years per state. An applicant state may request up to \$200,000 in total costs per 12-month budget period.
- Has generated much interest and first due date for applications is August 29, 2014.  
<http://grants.nih.gov/grants/guide/pa-files/PAR-14-227.html>

## Education and Information Division

### *Nanotechnology*

- A June 2014 new progress report issued by the National Nanotechnology Initiative, through the President's National Science and Technology Council, cites NIOSH's leadership in coordinated federal research that furthers the safe and responsible development of nanotechnology.  
[http://www.nano.gov/sites/default/files/pub\\_resource/2014\\_nni\\_ehs\\_progress\\_review.pdf](http://www.nano.gov/sites/default/files/pub_resource/2014_nni_ehs_progress_review.pdf)
- NIOSH's partnership with the College of Nanoscale Science and Engineering, State University of New York (SUNY) is noted in a June 24 SUNY announcement about the contribution of the partners' nanotechnology research to NIOSH's PtD progress report detailing ways to design safer work environments. [http://www.sunycnse.com/Newsroom/NewsReleases/Details/14-06-25/Newly\\_Merged\\_SUNY\\_CNSE\\_SUNYIT\\_in\\_Partnership\\_with\\_the\\_National\\_Institute\\_for\\_Occupational\\_Safety\\_and\\_Health\\_Developing\\_Workplace\\_Strategies\\_for\\_the\\_Safe\\_Use\\_of\\_Nanomaterials.aspx](http://www.sunycnse.com/Newsroom/NewsReleases/Details/14-06-25/Newly_Merged_SUNY_CNSE_SUNYIT_in_Partnership_with_the_National_Institute_for_Occupational_Safety_and_Health_Developing_Workplace_Strategies_for_the_Safe_Use_of_Nanomaterials.aspx)

## *Prevention through Design (PtD)*

- NIOSH and its partners have just reported on our shared progress on the initiative in *The State of the National Initiative on Prevention through Design* (<http://www.cdc.gov/niosh/docs/2014-123/>). As the new report highlights, the initiative builds on a rich history of addressing safety in designs and is the result of extensive partnering with numerous people and organizations. NIOSH appreciates the hard work and contributions of these partners. Significant progress has been made in minimizing worker risks through four areas in the initiative: research, practice, education, and policy. Through research, the Initiative benchmarked the PtD role of the designer, following legislation in the United Kingdom, and investigated employer concerns to further PtD in the United States. Incorporating PtD concepts into the corporate safety culture begins with a policy statement to indicate management support.
- NIOSH commissioned work to develop examples of policy statements and various tools and checklists (see Renshaw FM [2013]. *Methods for implementing PTD accident investigation*. *Prof Safety* 58(3):50–55) that could be useful to companies. PtD concepts are now included in 10 engineering textbooks and are in 25 consensus standards, including the 2011 American National Standards Institute (ANSI)/American Society of Safety Engineers (ASSE) standard Z590.3 *Prevention through Design: Guidelines for Addressing Occupational Risks in Design and Redesign Process*.
- While much progress has been made, there is still more to do, and NIOSH intends to obtain additional stakeholder input on the focus of the PtD initiative and continue the initiative for another 5 years.
- As stated previously, NIOSH is pleased to announce the appointment of Jonathan Bach, CSP, CIH, PE, as the new coordinator of PtD.

## Health Effects Laboratory Division

- HELD published a study on vibration-reducing (VR) gloves that tested the ability of seven models of VR gloves to lessen vibrations generated by powered hand tools. The tests, conducted on gloves worn by seven adult men, found that the VR gloves were more effective at reducing vibrations along the forearm than across the hand and fingers. The results provide useful information on the effectiveness of typical VR gloves and can be used to help select appropriate gloves to operate powered hand tools, to help perform risk assessment of the vibration exposure, and to help design better VR gloves.
- HELD is continuing to use and develop its world class inhalation exposure facility. An impressive number of inhalation toxicology studies have been developed and run including nanoparticles, biologics (fungi), diisocyanates, welding fume, wood dust, silica, crude oil vapor, butter flavoring, and cobalt oxide. Engineers in the inhalation core have developed 12 different aerosol and vapor exposure systems that are supporting 22 projects in FY14. New exposure systems in development, which provide reproducible exposure to occupationally relevant chemical and biological control

test atmospheres in a laboratory setting, include: diesel exhaust, nanocellulose, crude oil vapor and nano-titanium sun screen particulate.

### Division of Respiratory Disease Studies:

- (See information above on the Interim Final Rule, “Specifications for Medical Examinations of Coal Miners.”)
- [Published data](#) suggesting that flavorings manufacturing workers are at increased risk to develop low diffusing capacity, adding to information about the potential spectrum of disease associated with flavorings exposures.
- [Published data](#) characterizing volatile organic compound exposures in healthcare settings
- [Published data](#) from the National Health Interview Survey evaluating gender differences in smoking among working U.S. adults. Women had lower prevalence of smoking than men, yet women who smoked were more likely than men to have adverse health outcomes, including self-rated poorer physical and emotional health.

### Division of Surveillance, Hazard Evaluations, and Field Studies

- The Health Hazard Evaluation Program released a report of a telephone survey of 47 randomly selected **e-scrap recyclers**, a rapidly growing and changing industry ([http://www.cdc.gov/niosh/hhe/reports/pdfs/e-scrap\\_survey\\_report.pdf](http://www.cdc.gov/niosh/hhe/reports/pdfs/e-scrap_survey_report.pdf)) Although the response rate was low (17%), limiting the ability to determine whether the findings are generalizable across all facilities, the results nevertheless are informative regarding health and safety programs in the industry, where a variety of hazards exist, particularly with manual processes. For example, we learned that some facilities are not monitoring blood lead levels, are using compressed air for cleaning clothing and equipment, and not conducting medical clearance or fit testing for respirator use.
- The Center for Workers’ Compensation Studies (CWCS): A NIOSH-Ohio Bureau of Workers’ Compensation study compared 468 employers before/ after safety intervention from 2003-2009, and found workers' compensation outcomes for affected employees (claim frequency, cost per employee and cost per claim) decreased significantly with interventions. The study paper has just been accepted by AJIM. In part due to the effectiveness, OH BWC increased the annual SIG budget from \$4 to \$12 million in summer 2013. It is hoped that the SIG model could be adopted by other state-based and commercial insurers to further widen impact.
- NIOSH Firefighter Cancer Study
  - The first phase of the NIOSH Fire Fighter Cancer Study (published in October 2013) compared deaths and cancer diagnoses among career fire fighters to those found in the general population. We found certain cancers were modestly increased in our fire fighters. In May 2014 a study (from researchers in Finland) of Nordic fire fighters published similar

findings (included cancer diagnoses among 16,422 male fire fighters from five Nordic countries). Together, the NIOSH study and the Finnish study strengthen evidence of a relation between firefighting exposures and cancer.

- NIOSH researchers are now focusing attention on the second phase of the study comparing the health effects among higher-exposed fire fighters to those less exposed (“dose-response” analysis). The “dose” being assessed is an estimate of exposures to cancer-causing agents found in firefighting based on employment history and other department records. We anticipate finishing the exposure assessment by fall and plan to publish the results from phase II of the NIOSH study early in 2015.

## Division of Applied Research and Technology

- New Acoustical Chamber and Instrumentation: NIOSH investigators will incorporate a new acoustical chamber transferred from NASA into its ongoing hearing loss prevention research program. The chamber will be used to conduct hearing protector evaluations and other acoustic testing. Initially, NIOSH investigators will use the new chamber in a project to evaluate auditory localization (the ability to tell where a sound is coming from, which can be very important for safety in many work settings). People have different localization abilities and some hearing protectors seem to interfere with localization more than others.
- The 2014 NIOSH Hazardous Drug List was recently published.  
<http://www.cdc.gov/niosh/docs/2014-138/pdfs/2014-138.pdf>
  - For this update 27 new drugs were added and tetracycline was removed. Additionally, 12 drugs from the original 2004 NIOSH Alert were removed. See <http://www.cdc.gov/niosh/docs/2004-165/> for the original 2004 Alert.
  - The format for the NIOSH Hazardous Drug List has been modified such that drugs are listed in three separate tables, antineoplastic, non-antineoplastic and reproductive hazards. This change was made at the request of various stakeholders to make it easier to determine which drugs were relevant for their facilities. A table was also added that expanded recommendations for personal protective equipment and engineering controls.
  - To date, three states (Washington, California, and North Carolina) have adopted all or parts of the Alert into state regulation to protect their healthcare workers.
- NIOSH staff are working with the Institut National de Recherche et de Securite (INRS) on a working group that will put NIOSH engineering control guidelines for pavers into an ISO standard to protect highway construction workers worldwide from exposure to asphalt fumes. NIOSH is also working with French INRS engineers to review their tracer gas test equipment and test procedures used to evaluate engineering controls on pavers in France. The goal is to understand the design differences between U.S. and French paving equipment and how the

test procedures for the ISO standard would need to be modified to accommodate these differences.

### *National Personal Protective Equipment Laboratory*

- The National Institute for Occupational Safety and Health (NIOSH) has issued the first approval for a respirator that complies with the new requirements for Closed-Circuit Escape Respirators (CCERs). The new requirements are intended to strengthen emergency respiratory protection for workers relying on these devices during escape from unexpected and life-threatening situations.
- The new requirements set by NIOSH for testing and certification of closed-circuit escape respirators include the following:
  - Improved performance measures to ensure that closed-circuit escape respirators are reasonably rugged, because the devices are used in relatively harsh environments.
  - A new capacity-rating system in which devices will be tested and certified on the volume of usable oxygen they supply. Under previous rules, the devices were tested and certified on the duration of time they were expected to provide oxygen. In an actual emergency escape, a user may use up the oxygen supply in a shorter time than someone using the device in a test under laboratory conditions.
  - New design requirements that will allow NIOSH, in field evaluations, to check units to determine whether harsh working conditions or harsh treatment have diminished the performance of the units. Units showing defects or damage would be removed from service.
  - Upgraded testing standards with more stringent verification of the quality and quantity of breathing gas supplied by devices. The upgraded standards will establish a more reliable testing process using a mechanical breathing simulator rather than human subjects.

### Division of Safety Research

- DSR partnered with the NIOSH Construction and Prevention-through-Design programs on a new Workplace Design Solutions, ***Preventing Falls from Heights through the Design of Embedded Safety Features***. This 4-page easy-to-understand document provides recommendations that building owners and designers can use to incorporate fall prevention features into buildings during retrofits, renovations or new construction. Embedded safety features a connecting point or a terminating component of a fall protection system or rescue system capable of safely supporting the impact forces applied by a fall protection system or anchorage subsystem. For many types of commercial and institutional buildings, equipment could be permanently embedded into steel or concrete parts of a building and used to set up fall protection systems.

- A recently published article, ***Minimum Requirements for Taxicab Security Cameras***, has added to NIOSH research on workplace violence prevention strategies for taxicab drivers, a high-risk population. This research, specifically requested by stakeholders, was published in the *Journal of Transportation Technologies* and will be presented at the annual meeting of the International Association of Transportation Regulators later this month. These minimum requirements will help taxicab regulators and fleets to identify effective taxicab-security cameras, and help taxicab security camera manufacturers to improve the camera facial identification capability. Philadelphia has already incorporated research findings into their regulations for taxicab security cameras.

## Alaska Pacific Office

- Wildland firefighter fatalities caused by aircraft crashes in the US: The project describes surveillance data on the risk of fatal aircraft crashes during wildland firefighting operations. (MMWR underway)
- Fatalities in the oil and gas industry: This project describes preliminary surveillance data for fatalities in the U.S. oil and gas industry. (MMWR underway)
- The Alaska Pacific Office is collaborating with a large fishing firm to help identify solutions to safety problems in their fleet of fishing vessels. The firm has offered to share their workplace injury and illness claims data with us for analysis and interpretation. There are 10 years of data with approximately 500 claims per year.
- In June the Alaska Pacific Office launched an innovative health communications partnership campaign in the Bristol Bay region of Alaska to increase the use of personal flotation devices among workers in the fishing industry. Baseline data were collected to enable evaluation of the campaign's effectiveness.

## Upcoming Conferences

### 6<sup>th</sup> National Occupational Injury Research Symposium

- DSR will be sponsoring the 6<sup>th</sup> National Occupational Injury Research Symposium on May 19-21, 2015 in Kingwood, WV. The meeting will be co-sponsored by the National Safety Council, American Society of Safety Engineers, Liberty Mutual Research Institute for Safety, and Society for Advancement of Violence and Injury Research.
- The theme for the symposium is "Advancing Occupational Injury Research through Integration and Partnership." For more information, see <http://www.cdc.gov/niosh/noirs/2015/default.html>

## Western States Occupational Network (WestON)

- The NIOSH Western States Office, in conjunction with the Council of State and Territorial Epidemiologists and the Mountain and Plains Education and Research Center, will host the seventh annual Western States Occupational Network (WestON) meeting for state occupational safety and health colleagues from the Western United States on September 11-12, 2014 in Golden, CO.
- Background: This meeting provides an opportunity for Western state and local public health officials to meet and share ideas for establishing and maintaining epidemiological capacity and collaborating with colleagues to expand on efforts to build a strong occupational safety and health network in the West. Attendees include state epidemiologists, state and local health department officials, statistics coordinators, NIOSH, OSHA, Education and Research Center/Agriculture Center representatives and others interested in occupational surveillance and occupational safety and health in the Western United States.

## 1<sup>st</sup> International Symposium to Advance Total Worker Health

- October 6–8, 2014, Natcher Conference Center, NIH, Bethesda
- This symposium will explore research, practices, programs and policies that advance the overall safety, health, and well-being of workers through the integration of health protection and health promotion.

## Respirator Manufacturers Meetings

- The NIOSH National Personal Protective Technology Laboratory (NPPTL) is convening two meetings for all respirator manufacturers. The first on August 27 addressed fee schedule implementation, and the second on October 22 will address updates to standard application procedures.

## Share Your Input on the National Total Worker Health Agenda

- The Office for Total Worker Health™ at NIOSH announces three town-hall opportunities to comment on priority areas of future workplace safety and health research in the first-ever National Total Worker Health Agenda.
- Town-hall meetings will be held at the Natcher Conference Center, National Institutes of Health in Bethesda, Maryland, on October 7 at the 1st International Symposium to Advance Total Worker Health (<http://www.eagleson.org/conferences/total-worker-health>) and on October 9 at the Healthier Federal Workers 2014 Conference (<http://www.eagleson.org/conferences/healthier-federal-workers-2014>). More information about the two conferences and how to register is available at [www.eagleson.org](http://www.eagleson.org).

## Recently Released NIOSH Publications and Website Highlights

- Quick Sleep Tips for Truck Drivers
- Observation-Based Posture Assessment: Review of Current Practice and Recommendations for Improvement
- Buy Quiet
- Buy Quiet: Hearing Loss Is Preventable
- Buy Quiet Process
- Preventing Worker Injuries and Deaths from Backing Construction Vehicles and Equipment at Roadway Construction Workers
- Commercial Fishing Morbidity and Mortality, U.S. Distant Water Tuna Fleet, 2006-2012
- Preventing Falls from Heights through the Design of Embedded Safety Features
- Guidelines for Performing a Helmet-Cam Respirable Dust Survey
- Enhanced Video Analysis of Dust Exposures (EVADE) Software

## Recently Published NIOSH Manual of Analytical Methods (NMAM):

- NMAM 7302, Elements by ICP (Microwave Digestion)
- NMAM 7304, Elements by ICP (Microwave Digestion)
- NMAM 7906, Particulate Fluorides and Hydrofluoric Acid by Ion Chromatography
- NMAM 7907, Volatile Acids by Ion Chromatography
- NMAM 7908, Non-Volatile Acids (Sulfuric Acid and Phosphoric Acid)
- NMAM 8326, S-Benzylmercapturic Acid and S-Phenylmercapturic acid in urine

## Other Recent NIOSH Authored Publications:

- *MMWR* Article: [Heat Illness and Death Among Workers — United States, 2012–2013](#) (August 8, 2014)
- *MMWR* Article: [Prevalence of Coronary Heart Disease or Stroke Among Workers Aged <55 Years — United States, 2008–2012: Morbidity & Mortality Weekly Report, Aug. 1, 2014](#)
- The Small Business program recently had a paper published in *Safety Science* that describes a series of case studies of the application of a model for delivering occupational safety and health to smaller businesses. The model that was developed is focused on the use of intermediary organizations to diffuse OSH interventions to smaller businesses in their networks. The paper is available online:

Cunningham, TR, & Sinclair, R. (2014). Application of a model for delivering occupational safety and health to smaller businesses: Case studies from the US. *Safety Science*, online publication ahead of print, Available at: <http://www.sciencedirect.com/science/article/pii/S0925753514001520#> .

- Prevalence of carpal tunnel syndrome among employees at a poultry processing plant.
- Evaluation of engineering controls for the mixing of flavorings containing diacetyl and other volatile ingredients.
- Analysis of mandatory and discretionary lane change behaviors for heavy trucks.
- Real-time analysis of the effects of toxic, therapeutic and sub-therapeutic concentrations of digitoxin on lung cancer cells.
- Exposure to volatile organic compounds in healthcare settings.
- Factors influencing the airborne capture of respirable charged particles by surfactants in water sprays.
- Exposures and cross-shift lung function declines in wildland firefighters.
- Recovery of vascular function after exposure to a single bout of segmental vibration.
- Coal bed reservoir simulation with geostatistical property realizations for simultaneous multi-well production history matching: a case study from Illinois Basin, Indiana, USA.
- Modeling the optical properties of combustion-generated fractal aggregates.
- Hospitalizations for respiratory disease among unaccompanied children from Central America - multiple states, June-July 2014.
- Heat illness and death among workers -- United States, 2012--2013.
- Characterizing adoption of precautionary risk management guidance for nanomaterials, an emerging occupational hazard.
- Sizing firefighters: method and implications.
- Efficacy of face shields against cough aerosol droplets from a cough simulator.
- Exposure to chlorpyrifos in gaseous and particulate form in greenhouses: a pilot study.
- Occupational risk factors for COPD phenotypes in the Multi-Ethnic Study of Atherosclerosis (MESA) lung study.
- Considerations for recommending extended use and limited reuse of filtering facepiece respirators in healthcare settings.
- Mortality among a cohort of U.S. commercial airline cockpit crew.

## Upcoming Publications

- Criteria for a Recommended Standard: Occupational Exposure to Heat and Hot Environments
- *Bacillus anthracis* Spore Sampling Training Modules
- Criteria for a Recommended Standard: Occupational Exposures to Diacetyl and 2, 3-pentanedione
- Criteria for a Recommended Standard: 1-Bromopropane
- Current Intelligence Bulletin: Neurological Effects of Manganese Exposure to Welders
- NIOSH Current Intelligence Bulletin: Update of NIOSH Carcinogen Classification and Target Risk Level Policy for Chemical Hazards in the Workplace
- NIOSH Skin Notation Profiles Group B (25 chemicals)
- NIOSH List of Antineoplastic and Other Hazardous Drugs in Healthcare Settings 2014