



# The National Institute for Occupational Safety and Health (NIOSH)



## NIOSH eNews

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### From the Director's Desk

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### Exporting OSH Policy Success

[NIOSH is proud of its role as an international partner in preventing work-related injury, illness, and death. One such collaboration recently involved the participation of Dr. Anita L. Schill, NIOSH's Associate Director for Science. I asked Dr. Schill to join me this month as guest columnist to discuss this example of NIOSH's interaction with colleagues abroad in building internationally on a signal success here in the U.S. I look forward to sharing similar accounts of other international partnerships in future installments of this column. In the meantime, I am delighted to present Dr. Schill. – John Howard]

The Needlestick Safety and Prevention Act (Public Law 106-430) [2000] and the public health policy accomplishments that paved the way for this historic piece of legislation make one of the best occupational safety and health (OSH) success stories. As a result of these accomplishments, occupationally acquired hepatitis B virus has been dramatically reduced and sharps with engineered sharps injury protection have been mandated by law. While there is still much to be done to fully realize the protections promised to healthcare workers by these efforts, the United States has a solid framework upon which to build.

This is not necessarily the case in many developing countries where risks to healthcare workers from exposures to bloodborne pathogens may be even greater than in the United States. Several factors that contribute to these increased risks include higher prevalence of

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bloodborne pathogens in the population, more severe disease in patients with whom healthcare workers have contact, difficult or challenging working conditions, limited access to basic supplies, unsafe work practices, more frequent use of injections for treatment, and use of needles and other equipment associated with higher risks of exposure [Lee 2009; Sagoe-Moses et al. 2001]. Although some progress has been made toward recognition of the problem on both international and national levels, the overall response of policymakers has been slow [Lee 2009].

In an effort to stimulate policy development, the Malaysian Society of Infectious Diseases and Chemotherapy and the Aesculap Academy organized a Safety in Health Care Conference, "Why fight the symptoms if we can fight the cause?," in Kuala Lumpur, Malaysia, April 15-16, 2010. The Conference, endorsed by the Malaysian Ministry of Health, was the first of its kind. It attracted 185 key decision makers from 12 additional countries, including India, China, Indonesia, Philippines, Pakistan, and Singapore.

NIOSH is proud to have been an invited participant in this historic event. I represented NIOSH and spoke about the many public health and OSH policy accomplishments in the United States that paved the way for the Needlestick Safety and Prevention Act of 2000. Beginning in 1987 with the publication of "Recommendations for Prevention of HIV Transmission in Health-Care Settings" in the U.S. Centers for Disease Control and Prevention's (CDC) Morbidity & Mortality Weekly Report, CDC and NIOSH provided critical policy components [CDC 1987].

In the late 1990s, NIOSH issued guidelines for selecting, evaluating, and using sharps disposal containers [NIOSH 1998] and published the NIOSH Alert, Preventing Needlestick Injuries in Health Care Settings [NIOSH 1999]. In 1999, NIOSH participated with the Occupational Safety and Health Administration (OSHA) and the Food and Drug Administration in a joint safety advisory about the potential risks of injury and infection from bloodborne pathogens due to accidental breakage of glass capillary tubes [OSHA 1999]. Based on the accumulating evidence of adverse health effects from needlestick injuries, these efforts, along with those of other federal agencies (most notably OSHA), supported state and local activities and the eventual passing of national legislation.

The United States story is a powerful one and captured the interest of conference participants. While the policy development process will most certainly differ for other countries, the United States example provides a model from which to start local discussions. In fact, many of the participants have already begun making plans for conferences in their own countries. In post-conference evaluation feedback, many participants expressed their motivation to do more at a national level to protect healthcare workers.

Healthcare is a global industry. Medical tourism and international recruitment of healthcare workers are integral components of the business model. For those with OSH policy-making responsibilities, starting from scratch can be overwhelming and sometimes even paralyzing. By exporting policy successes, both nationally and internationally, time-to-protection is decreased and health and safety conditions for workers are improved.

– Anita L. Schill, Ph.D.

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## NIOSH Focusing on Oil Clean-Up Workers

NIOSH is providing technical assistance to the Occupational Safety and Health Administration, the National Institute of Environmental Health Sciences, other divisions of the U.S. Centers for Disease Control and Prevention, and others responding to the Deepwater Horizon oil spill. NIOSH is implementing a system for compiling a roster of workers involved

in the clean-up effort, with basic identifier information for each worker, job duties and locations, training, and personal protective equipment used. NIOSH oil spill response resources are available at <https://www.cdc.gov/niosh/topics/oilspillresponse/>.


## **New Screening Tool to Protect Workers from Skin Allergies**

NIOSH Scientists and colleagues reported the development of a simple, rapid, inexpensive test for chemicals that can cause allergic contact dermatitis. The new test has potential for use as a preliminary screening tool to determine whether chemicals used in consumer products and at workplaces might cause skin allergies in people. The full article is available at <http://pubs.acs.org/doi/abs/10.1021/tx100003w> 

## **Protecting Healthcare Staff from Risks Associated With Disinfectants and Cleaners**

Disinfectants and cleaners are essential products for preventing disease transmission in healthcare facilities, but they pose risks for work-related eye and respiratory irritation, sensitization, asthma-like symptoms, and respiratory distress for workers. A NIOSH study published in the May 14 Morbidity & Mortality Weekly Report provides the first multistate report on work-related symptoms among healthcare staff in three states, with recommendations for preventing illness and injury. <https://www.cdc.gov/mmwr/preview/mmwrhtml/mm5918a2.htm>

## **Asthma and Asthma-Like Symptoms among Soy Processing Workers**

Workers at a soy processing plant showed a higher-than-expected rate of asthma and asthma-like symptoms compared with the general population, a study by NIOSH researchers found. Asthma outcomes were significantly associated with immune reactivity to soy. The findings strengthen the association found in past studies between workplace exposures in soy processing and risk of occupational asthma and asthma-like effects and suggest that a precautionary approach should be followed in controlling exposures. The article was published online April 22 before print by the European Respiratory Journal. <http://erj.ersjournals.com/cgi/content/abstract/09031936.00151109v1> 

## **AIHce Presentation Highlights OSHA/NIOSH Relationship**

NIOSH Director Dr. John Howard and OSHA Assistant Secretary of Labor Dr. David Michaels gave a joint presentation at the American Industrial Hygiene Conference and Exposition (AIHce) meeting in May. They described a working relationship between their agencies and agreement by both agencies on many issues related to worker health and safety

## **NIOSH, UNITAR Agree to Expand Collaboration**

On April 30, NIOSH Director John Howard, M.D., and Craig Boljkovac, manager of chemicals and waste management for the United Nations Institute for Training and Research (UNITAR), signed an agreement to expand and formalize collaboration between the two groups. UNITAR gains access to NIOSH resources and world-class expertise in the area of occupational safety and health of nanotechnology, while NIOSH utilizes UNITAR's access to safety and health professionals in developing countries, achieving NIOSH's third strategic goal of enhancing international workplace safety and health through global collaborations.

## **NIOSH Establishes Independent Panel for Coal Mine Explosion Review**

On May 5, NIOSH announced an independent panel to evaluate the process and outcome of the Mine Safety and Health Administration's internal review in the wake of the Upper Big Branch coal mine explosion. NIOSH established the panel in response to a request by the U.S. Department of Labor. <https://www.cdc.gov/niosh/updates/upd-05-05-10.html>

## Testimony Raises Awareness of Risks to Healthcare Workers Lifting Patients

Dr. James Collins, a senior scientist in the NIOSH Division of Safety Research, testified as an expert witness before the Senate Subcommittee on Employment and Workplace Safety. The hearing aimed to raise awareness about the hazards of lifting patients for healthcare workers and the technology available to prevent injury. More on NIOSH resources for preventing musculoskeletal injuries in moving patients at <https://www.cdc.gov/niosh/docs/2006-117/>

## NIOSH Authors Receive “Paper of the Year” at Prestigious Society of Toxicology Meeting

A NIOSH paper, Influence of Cytokine Gene Variations on Immunization to Childhood Vaccines, was awarded Best Paper of the Year 2010 in the Immunotoxicology Specialty Section of the annual Society of Toxicology Meeting in March. NIOSH authors include Berran Yucesoy, Victor Johnson, Kara Fluharty, Michael Kashon, James Slaven, David Weissman, Raymond Biagini, and Michael Luster, as well as Nevin Wilson from University of Nevada and Dori Germolec from NIEHS. The article can be found in the journal *Vaccine* 27(50):6991-6997.

## Public Meeting Announcement

NIOSH will hold a second public meeting, concerning the proposed rule regarding the Total Inward Leakage Requirements for Half Mask Air-Purifying Particulate Respirators, on July 29, 2010 at the Marriott Inn and Conference Center in Hyattsville, MD. The purpose of this meeting is to allow stakeholders to make presentations to NIOSH; share results of any new research that may be available or in process regarding the area of filtering facepiece or other half mask respirator inward leakage measurement; and offer any additional comments on the anticipated economic impact of the proposed rule. This meeting will also be available via Live Meeting Conferencing. To register for this meeting please call 412-386-5200. Additional information is available at <https://www.cdc.gov/niosh/docket/archive/docket137.html>

## NIOSH Seeks Assistance

NIOSH is seeking assistance from commercial organizations that manufacture or use the two products listed below. NIOSH is looking to establish typical workplace exposure concentrations for possible future toxicological studies. Please e-mail [mharper@cdc.gov](mailto:mharper@cdc.gov) or call 304-285-6034.

Products containing ethylene glycol 2-ethylhexyl ether (EGEHE, CAS No.: 1559-35-9). EGEHE is used in ink-jet inks, gas supply pipe sealant, electrodeposition coatings for catalytic converters, lens manufacturing cleaning solutions, termite repellent, liquid bleach, dishwashing detergents, flower preservatives, and air fresheners.

Products containing 1-chloro-4-(trifluoromethyl) benzene, also known as parachlorobenzotrifluoride (PCBTF, CAS No.:98-56&-6). PCBTF is widely used as a solvent, specifically in automobile body coatings and parts cleaning, although it also has uses as an intermediate in the synthesis of dyes, pharmaceuticals, pesticides, insecticides, and herbicides.

## NIOSH Requests Comments/Review on the Following:

Proposed Rule on Total Inward Leakage Requirements for Respirators. Comment period extended through September 30. <https://www.cdc.gov/niosh/docket/archive/docket137.html>

## News from Our Partners

### AOEC Summer Internship Program— a Success!

In the latest report from its Amputation Surveillance System, the Michigan Department of Community Health and Michigan State University identified 708 work-related amputations in 2007 from hospital and emergency department medical records. This is four times as many amputations as in the employer based annual survey administered by the Bureau of Labor Statistics, the state said. This system identifies hazardous worksites that otherwise might go undetected and facilitates remediation at these worksites, the state added. Read the full report at <http://www.oem.msu.edu> (click on annual reports and then the newest amputation report).

### New Occupational Hygiene Training Available

A set of international training modules in occupational hygiene has been launched with the support of the International Occupational Hygiene Association (IOHA) and other national associations (<http://www.ohlearning.com/>). Courses are being held in 11 countries over the coming months. The IOHA and NIOSH are members of the WHO Global Network of Collaborating Centers. The Network members are working together to develop tools to assist countries to meet their commitments under the World Health Assembly Resolution 60.26, the Global Plan of Action for Workers Health.

### Award for Work on Hearing Loss Prevention in the Construction Sector

NIOSH, in partnership with the National Hearing Conservation Association, presented the New York City Department of Environmental Protection and Parsons Brinckerhoff, Inc., the 2010 Safe-in-Sound Award™ in the category for Innovation in Hearing Loss Prevention in the Construction Sector. The award was presented at the Building Trades Employers' Association Leadership dinner on May 18. <https://www.cdc.gov/niosh/updates/upd-05-17-10.html>.

## NORA

### Manufacturing Sector Council Fact Sheets

The NORA Manufacturing Sector Council recently released 10 fact sheets, each based on one of its 10 sector goals. Each fact sheet summarizes the current research needs and opportunities for reaching that goal and invites participation in research, intervention development, and efforts to have proven solutions adopted widely. Contact the NORA Coordinator with questions and suggestions. <https://www.cdc.gov/nora/sectors/manuf/>.

### NORA Liaison Committee Public Meeting Announced for June

The next NORA Liaison Committee meeting, Partnerships to Advance the National Occupational Research Agenda, will be held June 16 in Washington, D.C. Attendees can also participate online. Individuals and national organizations learn about and contribute to the progress of NORA. Details of the meeting have been published in the Federal Register.  
<http://edocket.access.gpo.gov/2010/2010-12743.htm>

## r2p Corner

The National Occupational Research Agenda (NORA) Manufacturing Sector Council is seeking partners to lead or contribute to its goals identified in the NORA National Manufacturing Agenda. This includes program priority areas such as contact with objects and equipment, falls, musculoskeletal disorders, hearing loss, cancer, health disparities, small businesses, and catastrophic incidents. For more information, visit the NIOSH Partnership Opportunities Web site

(<https://www.cdc.gov/niosh/r2p/partner.html>) or contact Greg Lotz, Program Manager, at (513) 533-8462 or Michael Baskett, Program Coordinator, at (513) 533-8153.



## What's new on the NIOSH Science Blog?

### Young Workers

What factors put young workers at risk of injury, illness, or death on the job, and what interventions are recommended? The May 4 NIOSH Science Blog notes latest research findings. <http://blogs.cdc.gov/niosh-science-blog/2010/05/04/youth-2/>

### Skin- Exposed

Workers, managers, and occupational safety and health professionals need to be aware of the significance of dermal risks. Share your thoughts or questions on dermal exposures, skin notation, use of engineering controls, or control banding on the current NIOSH Blog. <http://blogs.cdc.gov/niosh-science-blog/2010/05/20/skin-exposed/>

## Communication Products

### Document Provides Recommendations for Protecting First Responders

A new NIOSH workplace solutions document, Preventing Exposures to Bloodborne Pathogens Among Paramedics, provides practical recommendations aimed at protecting first responders. <http://www.cdc.gov/niosh/docs/wp-solutions/2010-139/>

### Reducing Illnesses at Indoor Waterparks

Lifeguards and patrons in the rapidly growing indoor waterpark industry can be exposed to numerous disinfection byproducts and microorganisms that can cause adverse health effects such as eye and respiratory irritation, skin rashes, and flu-like symptoms. A new NIOSH workplace solutions document, Reducing Illnesses at Indoor Waterparks, addresses issues that pool managers, designers, and public health officials should consider to reduce illness at indoor water parks. <http://www.cdc.gov/niosh/docs/wp-solutions/2010-138/>

### More...

To see other new NIOSH communication products, including documents and topic pages, go to the NIOSH "What's New" page. [/niosh/whatsnew/](http://niosh/whatsnew/)

# Call for Papers

## **National Safety Council's Annual Texas Safety Conference & Expo**

Call for presentations. Deadline for submission is August 6.

## **Ninth Symposium on Performance of Protective Clothing and Equipment: Emerging Issues and Technologies**

Call for abstracts. Deadline for submission is August 15.

# Upcoming Conferences & Workshops

**Migration and Occupational Health: Shining a Light on the Problem, June 14 at 10:00 am, Migration Policy Institute, Washington D.C.**

**American Society of Agricultural and Biological Engineers, June 20–23, Pittsburgh, PA**

<http://www.asabemeetings.org/> 

**Respirator Manufacturers Meeting, July 14, Pittsburgh, PA**

<http://www.cdc.gov/niosh/npptl/resources/pressrel/letters/ltr-07142010.html>

**Nanomaterials and Worker Health: Medical Surveillance, Exposure Registries, and Epidemiologic Research**

Cohosted by NIOSH and the Mountain and Plains Education and Research Center, July 21-23 in Keystone, CO.

**29th International Conference on Ground Control in Mining, July 26-29, Morgantown, WV**

**International Conference on the Health Status of Urban Transit Workers, Establishing an Agenda for Research, Policy Direction and Action**

July 27-29, 2010, New York, New York <http://www.twulocal100.org/> 

**138th Annual Meeting and Exposition of the American Public Health Association**

November 6-10, Denver, CO. <https://www.apha.org/events-and-meetings> 

**16th Annual National Ergonomics Conference and Exposition (ErgoExpo)**

November 30-December 3, Las Vegas, NV. <http://www.ergoexpo.com/> 

A comprehensive list of upcoming conferences can be found at </niosh/exhibits.html>.

## Word of the Month

**UNITAR** — This is the acronym for the United Nations Institute for Training and Research, an autonomous body within the United Nations with a mandate to enhance the effectiveness of the UN through training and research.

<http://www.unitar.org> 

Please send your comments and suggestions to us at [nioshnews@cdc.gov](mailto:nioshnews@cdc.gov).

This newsletter is published monthly via email by the National Institute for Occupational Safety and Health to inform members of the public health community as well as interested members of the general public of Institute related news, new publications, and updates on existing programs and initiatives.