

# Army Industrial Hygiene News and Regulatory Summary

February 2012, Issue 8

## Hazardous Substances

### OSHA Reminds Employers to Post Injury/Illness Summaries Beginning Feb. 1

OSHA's Form 300  
Summary of Work-Related Injuries and Illnesses

Year 2011  
U.S. Department of Labor

**Number of Cases**

OSHA Recordable Injuries and Illnesses	Total Number of Injuries and Illnesses	Total Number of Days Lost	Total Number of Restricted Workdays
100	100	100	100

**Number of Days Lost**

Total number of days lost	Total number of days of Restricted Work
100	100

**Injury and Illness Types**

OSHA Recordable Injuries and Illnesses	All Recordable Injuries and Illnesses
100	100

**Establishment Information**

Establishment Name: \_\_\_\_\_  
Address: \_\_\_\_\_  
City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_  
Employer: \_\_\_\_\_  
Employer Title: \_\_\_\_\_  
Employer Phone: \_\_\_\_\_  
Employer Email: \_\_\_\_\_  
Employer Website: \_\_\_\_\_  
Employer DUNS Number: \_\_\_\_\_  
Employer SIC Code: \_\_\_\_\_  
Employer NAICS Code: \_\_\_\_\_  
Employer NAICS Description: \_\_\_\_\_  
Employer NAICS Code (2-Digit): \_\_\_\_\_  
Employer NAICS Code (3-Digit): \_\_\_\_\_  
Employer NAICS Code (4-Digit): \_\_\_\_\_  
Employer NAICS Code (5-Digit): \_\_\_\_\_  
Employer NAICS Code (6-Digit): \_\_\_\_\_  
Employer NAICS Code (7-Digit): \_\_\_\_\_  
Employer NAICS Code (8-Digit): \_\_\_\_\_  
Employer NAICS Code (9-Digit): \_\_\_\_\_  
Employer NAICS Code (10-Digit): \_\_\_\_\_  
Employer NAICS Code (11-Digit): \_\_\_\_\_  
Employer NAICS Code (12-Digit): \_\_\_\_\_  
Employer NAICS Code (13-Digit): \_\_\_\_\_  
Employer NAICS Code (14-Digit): \_\_\_\_\_  
Employer NAICS Code (15-Digit): \_\_\_\_\_  
Employer NAICS Code (16-Digit): \_\_\_\_\_  
Employer NAICS Code (17-Digit): \_\_\_\_\_  
Employer NAICS Code (18-Digit): \_\_\_\_\_  
Employer NAICS Code (19-Digit): \_\_\_\_\_  
Employer NAICS Code (20-Digit): \_\_\_\_\_

common area wherever notices to workers are usually posted.

The summary must list the total numbers of job-related injuries and illnesses that occurred in 2011. All establishment summaries must be certified by a company executive.

Read more:

[http://www.osha.gov/as/opa/quicktakes/qt\\_02012012.html#2](http://www.osha.gov/as/opa/quicktakes/qt_02012012.html#2)

Beginning Feb. 1, employers who are required to keep the OSHA Form 300 Injury and Illness log must post a summary of the log. Employers must post OSHA's Form 300A from Feb. 1 to April 30, 2012 in a

### Carbon Monoxide Exposures during Rescue Operations

HHE Program investigators evaluated carbon monoxide exposures from personal watercraft used by fire rescue department personnel during rescue operations. Investigators determined that personal watercraft can create hazardous levels of carbon monoxide, finding the highest levels when the personal watercraft was stationary or moving at slower speeds. Some firefighters' exposures to carbon monoxide were above the peak occupational exposure limits.



Read more:

<http://www.cdc.gov/niosh/eneews/newsV9N10.html>

#### Special Interest Articles:

- [300 Log](#)
- [Diet is an Occupational Hazard](#)
- [Bat Flu](#)
- [IH Mentorship](#)
- [DOEHS-IH Super Stars](#)

Contents:



- [Hazardous Substance.....1](#)
- [PPE..... 5](#)
- [Radiation..... 6](#)
- [Noise..... 7](#)
- [Preventive Medicine..... 8](#)
- [Environmental Health.....11](#)
- [Ergonomics..12](#)
- [Safety..... 13](#)
- [Emergency Preparedness & Response...15](#)
- [Deployment Health.....17](#)
- [Nanotech.....18](#)
- [Regulatory Research & IH News. ....19](#)
- [Training..... 23](#)

## EPA Dioxin Assessment Raises Red Flag for Some



Nearly three decades in the making, the EPA recently announced its landmark dioxin assessment with the conclusion: “Generally, over a person’s lifetime, current exposure to dioxins does not pose a significant health risk.”

Read more:

[http://thechart.blogs.cnn.com/2012/02/22/epa-dioxin-assessment-raises-red-flag-for-some/?hpt=he\\_c2](http://thechart.blogs.cnn.com/2012/02/22/epa-dioxin-assessment-raises-red-flag-for-some/?hpt=he_c2)

## Investigation Links Deaths to Paint-Stripping Chemical

The deaths of at least 13 workers who were refinishing bathtubs have been linked to a chemical used in products to strip surfaces of paint and other finishes. An investigation started by researchers at Michigan State University in 2011 has found that 13 deaths since 2000 -- including three in Michigan -- involved the use of paint-stripping products containing methylene chloride, a highly volatile, colorless and toxic chemical that is widely used as a degreaser and paint stripper.



Read more:

<http://www.sciencedaily.com/releases/2012/02/120223133210.htm>

## **OSHA Investigating Sand-Blasting Hazards**



For years, the wastes from burning coal and producing copper have enjoyed a second life, used in sand-blasting to remove paint, rust and grime from ship's hulls, storage tanks, bridge trusses and other surfaces. Painting contractors, shipyard workers and thousands of others in Baltimore and across

the country are said to use the black, gritty material called slag.

Now, though, questions have been raised about whether those who do blasting with ground-up coal or copper slag may be unwittingly exposing themselves to toxic contaminants that could damage their health.

*Read more:*

<http://www.baltimoresun.com/health/bs-gr-slag-beryllium-20120226,0,2854812.story>

## **Solvent Exposure May Increase Risk of Parkinson's Disease.**

Even relatively limited exposure to some common chemical solvents at work or through hobbies may increase the risk of having Parkinson's disease (PD), report researchers who found a higher risk regardless of the number of exposures, their duration or lifetime totals. They also found that the first symptoms of the disease – the second most common neurodegenerative disease in the United States – may not surface until decades after exposure.

*Read more:*

<http://www.environmentalhealthnews.org/ehs/newscience/2011/12/2012-0220-solvent-increases-parkinsons-risk/>



## **Diet of Shift Workers is Considered by Some an Occupational Hazard**

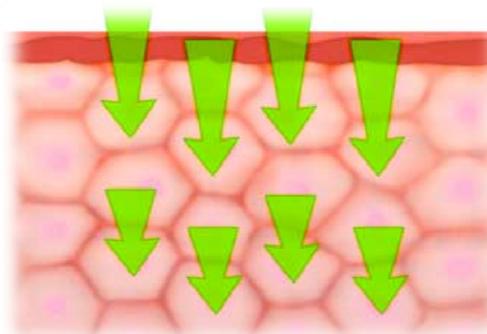


The editors of the journal PLoS Medicine recommend that occupational health and safety practitioners consider workers' diet—especially that of shift workers—to be an occupational hazard.

*Read more: The Synergist, February 2012  
(Available with AIHA membership)*

## **Updated NIOSH Skin Permeation Calculator**

Many models have been developed to calculate the steady-state permeability from an aqueous solution of infinite volume. These do not, however, correspond to a typical occupational exposure scenario. But this calculator estimates fluxes, skin concentrations, and amounts absorbed from any size dose applied to partially or fully hydrated skin.



*Read more:*

<http://www.cdc.gov/niosh/topics/skin/finiteskinpercalc.html>

## **Is Cadmium as Dangerous for Children as Lead?**



It's a heavy metal. It's linked to learning problems in school children. And every child is exposed. Sounds like lead? It's cadmium. Signs are emerging that cadmium – a widespread contaminant that gets little attention from health experts and regulators – could be the new lead. Children with higher cadmium levels are three times more likely to have learning disabilities and

## Army Industrial Hygiene News and Regulatory Summary

participate in special education, according to a new study led by Harvard University researchers.

Read more:

<http://www.scientificamerican.com/article.cfm?id=is-cadmium-as-dangerous-for-children-lead>

### PPE

#### New Escape Respirator

NIOSH has approved a new escape respirator with carbon dioxide protection. This respirator is the only one of its kind that meets the stringent NIOSH standards for an escape respirator that can be used with 30 minute duration for CBRN and Carbon Monoxide protection.

Read more:

<http://www.marketwatch.com/story/photo-release-ilc-dover-receives-niosh-approval-on-unique-escape-mask-2012-02-28>



*CBRN Agent Approved*

See Instructions for Required Component Part Numbers, Accessories, and Additional Cautions and Limitations of Use

#### Minor Lapses in Handling Chemicals Can Cause Major Problems



The director of the Pesticide Safety Education Program at Montana State University, said that there are problems with proper handling of pesticides and chemicals that he sees over and over again. Though the handling problems may seem minor, they can have serious consequences.

One of the oft-repeated problems he sees is that producers fail to read the pesticide product label when they make a new purchase. The written requirements change from year to year. The safety guidelines of last year may not be the new

## Army Industrial Hygiene News and Regulatory Summary

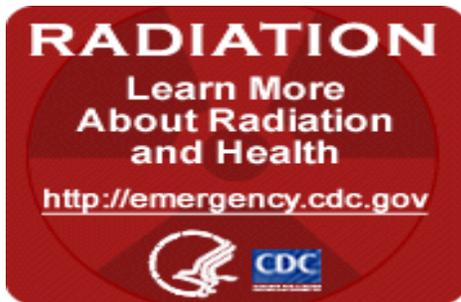
safety guidelines for this year. Allowed sites may have changed; potency may have changed or safety advice may have changed.

*Read more:*

[http://www.thepraiestar.com/news/regional/minor-lapses-in-handling-chemicals-can-cause-major-problems/article\\_293436f2-5e51-11e1-a9e0-001871e3ce6c.html](http://www.thepraiestar.com/news/regional/minor-lapses-in-handling-chemicals-can-cause-major-problems/article_293436f2-5e51-11e1-a9e0-001871e3ce6c.html)

### Radiation

#### Radiation Detected 400 Miles off Japan Coast



Radioactive contamination from the Fukushima power plant disaster has been detected as far as almost 400 miles off Japan in the Pacific Ocean, with water showing readings of up to 1,000 times more than prior levels, scientists reported.

*Read more:*

<http://www.time.com/time/health/article/0,8599,2107353,00.html#ixzz1nbOcG7NV>

#### Navy's New Weapon: Electromagnetic Railgun

The Office of Naval Research's (ONR) Electromagnetic (EM) Railgun program will take an important step forward in the coming weeks when the first industry railgun prototype launcher is tested at a facility in Dahlgren, Va.

The EM Railgun launcher is a long-range weapon that fires projectiles using electricity instead of chemical propellants. Magnetic fields created by high electrical currents accelerate a sliding metal conductor, or armature, between two rails



to launch projectiles at 4,500 miles per hour to 5,600 miles per hour.

# Army Industrial Hygiene News and Regulatory Summary

Read more:

[http://www.navy.mil/search/display.asp?story\\_id=65193](http://www.navy.mil/search/display.asp?story_id=65193)

## Noise

### Hearing Loss Triples Risk of Falling: Study

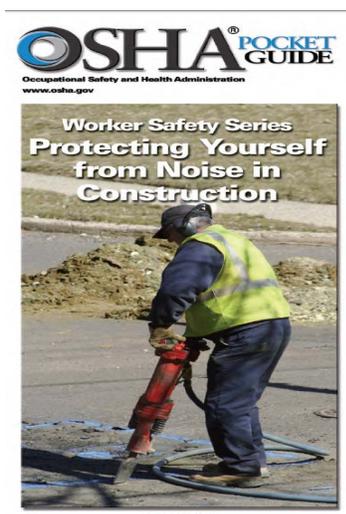
Hearing loss is associated with an increased risk of falling, according to a new study. Johns Hopkins researchers analyzed data from more than 2,000 people ages 40 to 69 who took part in the U.S. National Health and Nutrition Examination Survey from 2001 to 2004. The participants had their hearing tested and answered questions about whether they had had a fall in the past year.

The study found that people with a 25-decibel hearing loss (classified as mild) were nearly three times more likely to have a history of falling than those with no hearing loss. Every additional 10 decibels of hearing loss meant an increased 1.4-fold risk of falling.

Read more

<http://health.yahoo.net/news/s/hsn/hearing-loss-triples-risk-of-falling-study>

### New OSHA Worker Educational Publication on Protection from Noise in Construction



OSHA published a new educational publication for construction workers, *Protecting Yourself from Noise in Construction*. The booklet, written for workers and

employers, provides information on the hazards of loud noise in construction, how noise levels are measured, and how to find out if noise on the job site or from tools is loud enough to cause hearing loss. It also gives examples of administrative and engineering controls employers can use to reduce worker exposure to noise, as well as information on the proper selection and use of personal hearing protection.

Read more:

<http://www.osha.gov/as/opa/quicktakes/qt02012012.html#15>

## Preventive Medicine

### Bat Flu: Human Risk Unclear

For the first time, scientists have found evidence of flu in bats, reporting a never-before-seen virus whose risk to humans is unclear. The surprising discovery of genetic fragments of a flu virus is the first well-documented report of it in the winged mammals. So far, scientists haven't been able to grow it, and it's not clear if - or how well - it spreads.

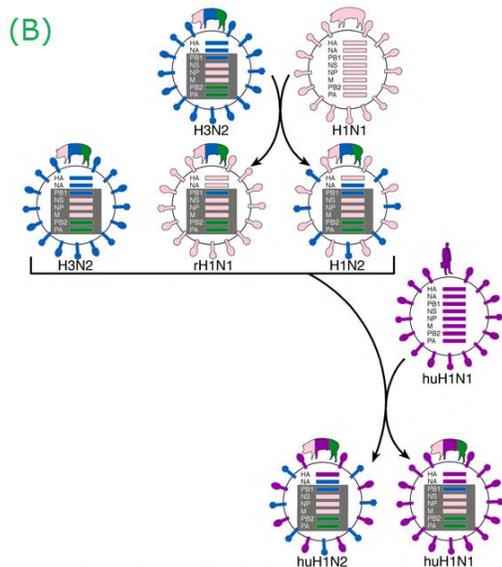


Flu bugs are common in humans, birds and pigs and have even been seen in dogs, horses, seals and whales, among others. About five years ago, Russian virologists claimed finding flu in bats, but they never offered evidence.

Read more:

<http://www.foxnews.com/health/2012/02/28/bird-flu-pig-flu-now-bat-flu-human-risk-unclear/#ixzz1ngv2HHMZ>

### H3N2V Pandemic Potential



A new study says flu viruses of swine origin that caused a dozen infections in the U.S. in the 2nd half of last year [2011] appear to have pandemic potential. And the work, by scientists at the U.S. Centers for Disease Control, seems to suggest that the fact the viruses haven't taken off in people may have more to do with human immunity than the viruses themselves. The findings are based on a transmission study in ferrets, work which is somewhat similar to the studies that sparked the ongoing controversy over lab-made H5N1 viruses.

# Army Industrial Hygiene News and Regulatory Summary

Read more:

<http://www.promedmail.org/direct.php?id=20120222.1049306>

## ECDC Launches Toolkit for Foodborne, Waterborne Outbreaks

The European Centre for Disease Prevention and Control (ECDC) launched a toolkit to help member states identify, investigate, and control food- and waterborne disease (FWD) outbreaks. The toolkit includes checklists, templates, guidelines, explanatory texts, and applications using EpiData, software developed for field epidemiologic investigations. On the toolkit home page, the ECDC says, "The primary purpose is to provide material that can be helpful when coordinating European FWD outbreak investigations." The home page says the toolkit could also be useful for investigating country-level outbreaks.



Read more:

<http://www.cidrap.umn.edu/cidrap/content/fs/food-disease/news/feb2212newsscan.html>

## Attitude Found to Correlate to Long-Term Health



medications, and any current health issues. Some questionnaires even ask you to rate your own health, a seemingly subjective question. Researchers at The University of Zurich have noted that how you answer this question is actually a good indication of your probability of survival and death.

Read more: <http://blog.enn.com/?p=1882>

If you've ever been to the doctor, you surely are familiar with the questionnaires given to you when you first arrive – those which ask about your medical history,

## **Work Related Factors That Affect Heart Health**

Although most people don't think of heart disease as an occupational hazard, certain characteristics of your job may be upping your risk for heart attacks and other problems.

Some work-related factors—such as sitting long hours at a desk, stress, irregular work hours, and exposure to certain chemicals or pollution—could also harm your heart.



*Read more:*

<http://www.health.com/health/gallery/0,,20571051,00.html>

## **'Universal' Vaccines Could Finally Allow for Wide-Scale Flu Prevention**



An emerging class of long-lasting flu vaccines could do more than just save people the trouble of an annual flu shot. Princeton University-based researchers

have found that the "universal" vaccine could for the first time allow for the effective, wide-scale prevention of flu by limiting the influenza virus' ability to spread and mutate. Universal, or cross-protective, vaccines -- so named for their effectiveness against several flu strains -- are being developed in various labs worldwide and some are already in clinical trials.

*Read more:*

<http://www.sciencedaily.com/releases/2012/02/120227111536.htm>

***Environmental Health***

**Army Unveils World's First Military Fleet of Fuel Cell Vehicles**

U.S. Army, Pacific, unveiled a fleet of 16 hydrogen fuel cell vehicles that the military services in Hawaii are testing in an effort to research efficient, clean and renewable energy sources, and reduce the U.S. military's dependence on petroleum.

*Read more:*

[http://www.army.mil/article/74304/Army\\_unveils\\_world\\_s\\_first\\_military\\_fleet\\_of\\_fuel\\_cell\\_vehicles/](http://www.army.mil/article/74304/Army_unveils_world_s_first_military_fleet_of_fuel_cell_vehicles/)



**Harnessing Wind Power**



Engineers and designers from the Defense Intelligence Agency's

Engineering and Logistics Services Division are putting the wind to work for them. In January 2012, DIA engineers installed an approximately nine-foot tall vertical blade wind turbine on top of the parking garage at DIA's headquarters building on Joint Base Anacostia-Bolling in Washington, D.C.

*Read more:* <http://www.dia.mil/public-affairs/news/2012-02-09.html>

**Eleven States Sue U.S. EPA to Force Stricter Soot Standards**

Leading a coalition of 11 states, New York State Attorney General filed a lawsuit to compel the EPA to revise national air quality

standards for soot. The coalition took legal action after the EPA failed to meet an October 2011 deadline for revising the

## Army Industrial Hygiene News and Regulatory Summary

existing standards, as required by the federal Clean Air Act.

The lawsuit, filed in federal district court in Manhattan, asks the court to order the EPA to adopt new air pollution standards promptly and by a date certain.

Read more: <http://www.ens-newswire.com/ens/feb2012/2012-02-14-091.html>



### Ergonomics

#### NIOSH Releases Fact Sheet on Preventing Musculoskeletal



NIOSH has released a new fact sheet on preventing musculoskeletal disorders for health care workers. A work-related musculoskeletal disorder is an injury of the muscles, tendons, ligaments, nerves, joints, cartilage, bones, or blood vessels in the arms, legs, head, neck, or back that is

caused or aggravated by work tasks such as lifting, pushing, and pulling. Symptoms include pain, stiffness, swelling, numbness, and tingling.

Lifting and moving clients create a high risk for back injury and other musculoskeletal disorders for home health care workers.

Read more: <http://ohsonline.com/articles/2012/02/15/niosh-releases-fact-sheet-on-preventing-musculoskeletal-disorders.aspx?admgarea=news>

#### Yoga and Stretching Both Ease Chronic Back Pain

Weekly yoga classes eased pain and improved functioning in some people with chronic lower back pain – but the yoga sessions weren't any better than regular



## Army Industrial Hygiene News and Regulatory Summary

stretching classes, according to a new study.

*Read more:*

<http://www.foxnews.com/topics/health/illness/back-pain.htm>

### Safety

#### Work –Life Balance Key Factors in Workplace Safety



Companies that run in a smooth and effective manner and have minimal constraints on worker performance can decrease injuries by 38% as worker opinions improve, according to survey results.

According to a recent University of Georgia study, a worker's perception of safety in the workplace and the work-life balance established by businesses has a significant effect on on-the-job injury.

*Read more:*

<http://ohsonline.com/articles/2012/02/21/perception-worklife-balance-key-factors-in-workplace-safety-study-says.aspx?admgarea=news>

#### ACEOM Release Guidance on Managing Workplace Fatigue

Implementing a comprehensive fatigue risk management system could improve workplace safety and efficiency, according to a new guidance paper released by the American College of Occupational and Environmental Medicine.

Safety and productivity in the workplace are directly related to worker health, reports the paper, titled, "Fatigue Risk Management in the Workplace." A workplace may have chemical, physical, biological, and/or psychosocial hazards that



## Army Industrial Hygiene News and Regulatory Summary

have the potential to impact physical and psychological well-being.

*Read more:*

<http://ohsonline.com/articles/2012/02/20/acoem-releases-guidance-on-managing-workplace-fatigue.aspx?admgarea=news>

### Needlestick Law Linked to Decrease in Health Care Worker Injuries



A federal law enacted to protect health care workers from being stuck by needles has reduced the number of such injuries, decreasing the possibility for exposure to bloodborne diseases, according to research conducted by the University of Virginia School of Medicine.

The Needlestick Safety and Prevention Act (NSPA) requires employers to provide safety-engineered devices to employees who are at risk for exposure to bloodborne pathogens and to let frontline workers have a say in selecting these devices.

*Read more:*

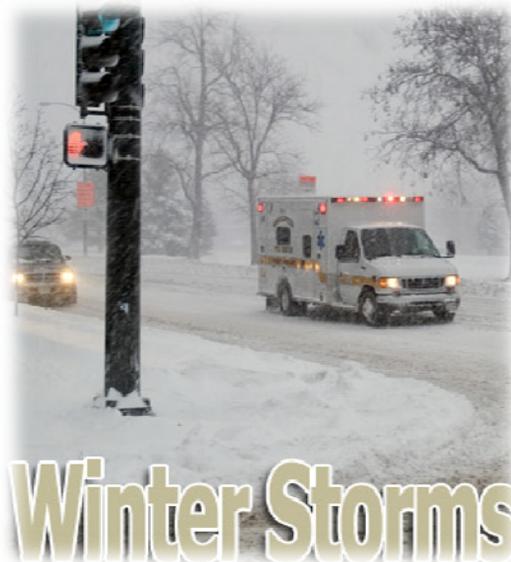
<http://ohsonline.com/articles/2012/02/18/needlestick-law-linked-to-decrease-in-health-care-worker-injuries.aspx?admgarea=news>

### OSHA Guidance on Winter Storms

Winter storms create a variety of hazards and can have lingering impacts on everyday tasks and work activities. According to the National Weather Service, about 70% of injuries during winter storms result from vehicle accidents, and about 25% of injuries result from being caught out in the storm. Learning about how to prepare for a winter storm and avoid hazards when one occurs will help keep you safe during the winter season.

*Read more:*

<http://www.osha.gov/dts/weather/winter-storm/index.html>



## **New Driver Style Predicts Crash Risk**



Newly licensed drivers who make sharp turns and come to sudden screeching stops are nerve-wracking. And now there's evidence to confirm that erratic driving by

teens predicts their odds of accidents.

Researchers installed computer and camera equipment on the cars of 42 newly licensed drivers to measure what they called "elevated *g*-force events," like quick turns and jamming on the brakes.

*Read more:*

<http://www.scientificamerican.com/podcasts/episode.cfm?id=new-driver-style-predicts-crash-ris-12-02-24>

## **Emergency Preparedness**

### **Meth Fills Hospitals with Burn Patients**

A crude new method of making methamphetamine poses a risk even to Americans who never get anywhere near the drug: It is filling hospitals with thousands of uninsured burn patients requiring millions of dollars in advanced treatment—a burden so costly that it's contributing to the closure of some burn units.

So-called shake-and-bake meth is produced by combining raw, unstable ingredients in a 2-liter soda bottle. But if the person mixing the noxious brew makes the slightest error, such as removing the cap too soon or accidentally perforating the plastic, the concoction can explode, searing flesh and

causing permanent disfigurement, blindness or even death.

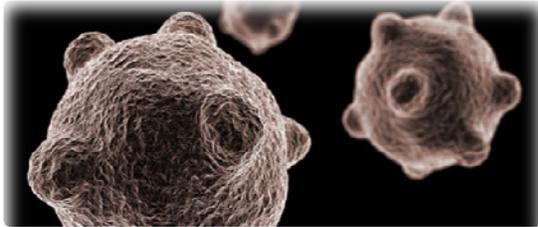


Crystal Methamphetamine (Ice) - Schedule II

*Read more:*

<http://www.usnews.com/science/articles/2012/01/23/meth-fills-hospitals-with-burn-patients>

## National Biosurveillance System Has Long Way to Go



Biosurveillance

The goal of an integrated national biosurveillance system to detect threats to human and animal health, called for in a presidential directive in 2004, is still a long way from reality and faces complex obstacles, according to a workshop summary recently published by the Institute of Medicine (IOM).

Participants in the workshop cited a range of problems that face the Department of Homeland Security's (DHS's) National Biosurveillance Information System (NBIS), from a lack of built-in authority to misinterpretation of the major obstacles and a lack of trust between the system and other agencies that generate relevant data.

*Read more:*

<http://www.cidrap.umn.edu/cidrap/content/biosecurity/food-biosec/news/feb1412surveill.html>

## Genetic Study Finds Varied Susceptibility to Anthrax Toxin

Humans vary in their sensitivity to anthrax toxin, according to a genetic study from Stanford University researchers that appeared in the Feb 6 issue of *Proceedings of the National Academy of Sciences*. Their discovery came from an analysis of lymphocytic blastoid cells from 234 people of African, European, and Asian ancestry who were part of a HapMap Project.

The genetic variation involved capillary morphogenesis gene 2 (CMG-2), which encodes a host membrane protein that the anthrax toxin can exploit as a receptor. Researchers found that sensitivity varied by a factor of 250 in 99% of the cohort and was an inherited trait that correlated with the

abundance of CMG-2 messenger RNA in cells. The authors suggest that testing human cell populations may reveal clues about the effects of genetic variation on infectious disease susceptibility.



*Read more:*

<http://www.cidrap.umn.edu/cidrap/content/bt/anthrax/news/feb0812newsscan-br.html>

## **New Method Detects Chemicals -- Even If Enclosed in Containers -- Over Long Distances**



Technology, a new method has now been developed to detect chemicals inside a container over a distance of more than a hundred meters. Laser light is scattered in a very specific way by different substances. Using this light, the contents of a nontransparent container can be analyzed without opening it.

*Read more:*

<http://www.sciencedaily.com/releases/2012/02/120227093952.htm>

People like to keep a safe distance from explosive substances, but in order to analyze them, close contact is usually inevitable. At the Vienna University of

## ***Deployment Health***

### **EMT 'Rodeo' Sharpens Emergency Response Skills**

Being deployed overseas can sometimes be challenging for an emergency medical technician, especially since there could be situations that one wouldn't normally see on city streets in the U.S.

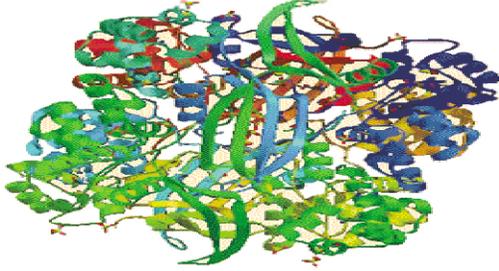
This is why the 386th Expeditionary Medical Group developed the EMT Rodeo, which creates various challenges EMTs might face in a deployed location, in an undisclosed location in Southwest Asia.



*Read more:*

<http://www.af.mil/news/story.asp?id=123290960>

## Custom-Designed Proteins Could Counteract Chemical Weapons



Custom-designed proteins made with the aid of computers could fight chemical weapons such as nerve gas and help decontaminate toxic-waste sites, scientists say.

In recent years, computer design of proteins has made great leaps forward, developing molecules with new kinds of structures and properties. However, few efforts have been made to incorporate metals into these computationally designed molecules. Metals are key, highly reactive parts of many proteins—for instance, the iron in the blood-protein hemoglobin helps it transport oxygen inside our bodies.

*Read more:*

<http://www.scientificamerican.com/article.cfm?id=custom-designed-proteins>

## Nanotechnology

### How to Innovate while Protecting Public Safety

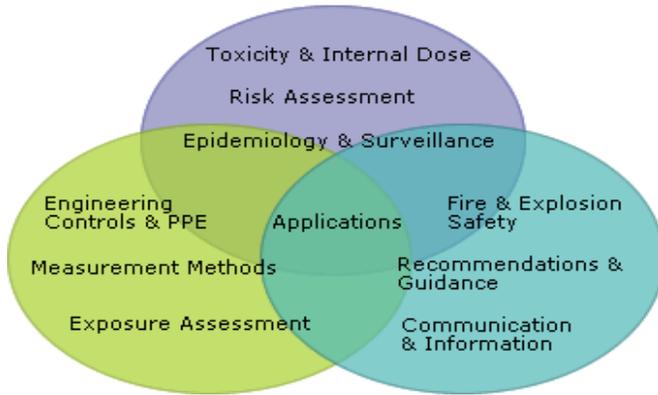
Joining a chorus of concern about the long-term implications of products that include super-small particles, an all-star National Academy of Sciences panel is pushing for prioritizing research on the health and environmental effects of nanomaterials.

*Read more:*

[http://www.newhavenindependent.org/index.php/archives/entry/panel\\_nano\\_risks\\_need\\_more\\_study/](http://www.newhavenindependent.org/index.php/archives/entry/panel_nano_risks_need_more_study/)



## **New Measuring Techniques Can Improve Efficiency, Safety of Nanoparticles**



researchers have gained eye-opening insights into the process of applying green chemistry to nanotechnology that results in high yields, improves efficiency and dramatically reduces waste and potential negative exposure to human health or the environment.

*Read more:*

<http://www.physorg.com/news/2012-02-techniques-efficiency-safety-nanoparticles.html>

Using high-precision microscopy and X-ray scattering techniques, University of Oregon

### *Regulatory Research & Industrial Hygiene Professional News*

**OSHA**

#### **Most Cited, and Most Necessary**

**RESPIRATORY PROTECTION**

For several years, OSHA's Respiratory Protection standard for general industry (29 CFR 1910.134) has been one of the agency's five most frequently cited standards. In fiscal year 2011, only the

standards for Scaffolding in construction, Fall Protection (construction), and Hazard Communication (general industry) were cited more than Respiratory Protection.

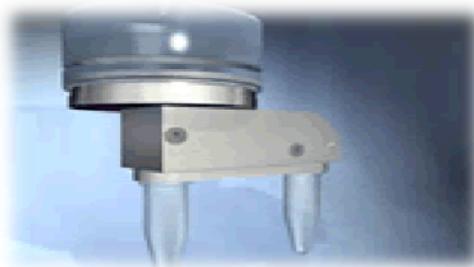
*Read more: The Synergist, February 2012  
(Available with AIHA membership)*

**NIOSH**

## NIOSH Develops a Bioaerosol Sampler

A NIOSH research study was showcased on the December 2011 cover of the *Journal of Environmental Monitoring*. The article discussed the development of an improved methodology for use of the NIOSH bioaerosol sampler to detect infectious airborne influenza virus.

This new methodology makes the influenza virus more readily detectable, which could potentially save time in identifying and collecting infectious airborne viruses in studies involving the transmission and spread of influenza



Read more:

<http://www.cdc.gov/niosh/eneews/eneewsV9N10.html>

## New Meth Monitoring Methods for Law Enforcement

**NIOSH  
Method**

Three newly approved sampling and analytical methods (9106, 9109, 9111) for the determination of methamphetamines on surfaces have been posted on the *NIOSH Manual of Analytical Methods* at <http://www.cdc.gov/niosh/docs/2003->

[154/new.html](#). These methods provide tools that law enforcement officers can employ to detect the presence of surface methamphetamine contamination in suspected clandestine meth lab sites and may also be used to assess whether such areas are safe for human reoccupation.

Read more:

<http://www.cdc.gov/niosh/eneews/eneewsV9N10.html>

# Army Industrial Hygiene News and Regulatory Summary

USAPHC

## Army IH Mentoring Program



As the ranks of early career IH professionals grow in the Army, a commitment to advise and foster these individuals is important for retention and job satisfaction. The Army's Public Health Command is actively seeking Industrial Hygiene mentors and mentees.

- A one year commitment is required.
- Must interact at least quarterly.

- Assigned by regions.
- Based on common interests.

If you're interested in becoming either a mentor or mentee regardless of experience, please contact the [Industrial Hygiene Training Coordinator](#). You will be partnered with someone who will help hone your skill sets, provide career development, and build a network with your peers. Mentors get the satisfaction of personally advancing the IH profession with competent and prepared professionals. In the near future, ABIH CM points will be awarded.

Also, please see:

<http://phc.amedd.army.mil/topics/workplacehealth/ih/Pages/IHMentoring.aspx>

## February's DOEHRs-IH *Super Stars*



February's DOEHRs-IH Super Star designations go to the Fort Leonard Wood and Fort Bragg IH Program Offices. Fort Leonard Wood is recognized for its innovative use of MiFi (mobile WiFi) to capture DOEHR's data in the field. A hotspot is setup at the survey site so that data can be entered directly into the live database instead of the mobile staging server.

Fort Bragg will use similar technology with cellular broadband cards. A broadband card is a mobile modem that attaches to a laptop and provide internet access. These cards are purchased through a wireless provider. Fort Bragg has 16 purchase requests for broadband cards for their DOEHRs-IH tablets. Congratulations to this month's winners.

## Army Industrial Hygiene News and Regulatory Summary

### How to become a DOEHRS-IH Super Star

- ✓ Do feel like you use DOEHRS-IH more than other program offices?
- ✓ Do you feel unnoticed?
- ✓ Do you feel like you have done great IH things with DOEHRS-IH?
- ✓ Do you wear a unitard and cape under your clothes? (Don't answer this question please)

Email the [Industrial Hygiene Training Coordinator](#) a brief synopsis about a new idea, a faster way, or a milestone you just met. Your Program Office just may be nominated as the monthly DOEHRS-IH *Super Star*.



# Army Industrial Hygiene News and Regulatory Summary

## Training

For a list of USAPHC training opportunities, please visit our website training page at <http://phc.amedd.army.mil/Pages/Training.aspx>.

This monthly summary is published by the Industrial Hygiene and Medical Safety Management Program (IHMSMP) for the U.S. Army Public Health Command.

### POINTS OF CONTACT:

#### By Email:

[ihnews@amedd.army.mil](mailto:ihnews@amedd.army.mil)

#### By Phone or FAX:

Office: (410)436-3161

FAX: (410)436-8795

#### On the Web:

<http://phc.amedd.army.mil/topics/workplacehealth/ih/Pages/default.aspx>



## Defense Connect Online (DCO)

Looking for free or affordable IH related courses for points, credits, or a refresher? The Army Institute of Public Health (AIPH) offers on-demand, teleconference, and on-site training options. Please contact the [Industrial Hygiene Training Coordinator](#) for more information.

Articles appearing in this summary do not necessarily represent the opinions/views, policy, or guidance of the Department of the Army, Department of Defense, or the U. S. Government.

The appearance of external hyperlinks does not constitute endorsement by the U.S. Army for the information, products or services contained therein.

The use of trademarked names does not imply endorsement by the U.S. Army but is intended only to assist in identification of a specific product.