

Hazardous Substances



DoD, VA Gather to Study Airborne Health Hazards

At least 1,000 veterans have fallen ill with mysterious symptoms they say were caused by poisonous pollutants from open-air burn pits, fires and clean-up operations in Iraq and Afghanistan.

veterans and service members,” according to the symposium agenda.

Now, the Defense and Veterans Affairs departments are hoping to widen their understanding of war-zone toxins and ultimately help suffering troops. The departments are holding closed-door meetings in Washington to discuss and debate deployment-related airborne pollution. Organizers hope the Joint VA-DoD Airborne Hazards Symposium will “inform current practices and improve future efforts in environmental exposure assessment, clinical surveillance, medical testing and research, ultimately improving the health of



Read more:
<http://www.armytimes.com/news/2012/08/military-VA-DoD-airborne-health-hazards-symposium-082212w/>

Limiting Worker Exposures to Vermiculite Insulation



Program recently published information for workers who the department believes may be exposed to asbestos-containing vermiculite insulation during renovation activities.

Read more:
<http://www.cdc.gov/niosh/eneews/newsV10N4.html#news>

The Connecticut Department of Public Health’s Occupational Health

Special Interest Articles:

- [Direct Reading Monitors](#)
- [Pain Killers & Hearing Loss](#)
- [New Ergo Video](#)
- [Chemical Weapons Detector](#)
- [New IH Courses](#)

DOEHRS Super Star

NIOSH Publishes Criteria for Evaluating Direct-Reading Monitors

NIOSH has issued a new guidance document that describes procedures for estimating and evaluating the accuracy of direct-reading monitors for gases and vapors. The document is intended for use by both manufacturers and users of these instruments.

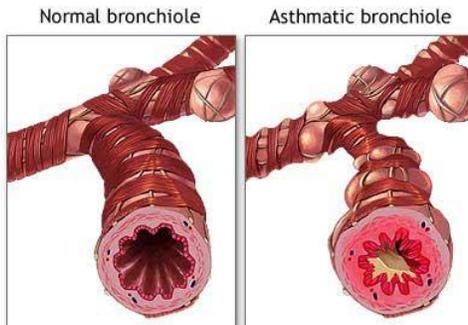


Read more:

<http://www.aiha.org/news-pubs/synergist/newswatch/Pages/NIOSHPublishesCriteriaforEvaluatingDirect-readingMonitors.aspx>

The NIOSH document includes information on operational, physical, and performance characteristics for electrochemical monitors, spectrochemical monitors, thermochemical monitors, gas chromatographic monitors, and mass spectrometers

Reports Puts Lens on Built Environment Link to Asthma



in building materials and products. The report, "Healthy Environments: A Compilation of Substances Linked to Asthma," identifies 374 substances common in the built environment that are known or suspected asthmagens.

Read more:

<http://ohsonline.com/articles/2012/08/08/report-puts-lens-on->

A design firm has released what it calls the first-ever report on asthmagens and asthma triggers

Contents:



- [Hazardous Substance... 1](#)
- [Radiation..... 4](#)
- [Ventilation.....6](#)
- [PPE.....6](#)
- [Noise.....7](#)
- [Preventive Medicine.....8](#)
- [Environmental Health.....12](#)
- [Ergonomics....14](#)
- [Safety.....15](#)
- [Emergency Preparedness & Response.....19](#)
- [Deployment Health.....21](#)
- [Nanotech.....23](#)
- [Regulatory Research & IH News.24](#)
- [Training.....29](#)

built-environment-link-to-asthma.aspx?admgarea=news

Welding Fumes Exposures and Controls: Do We Know Enough?

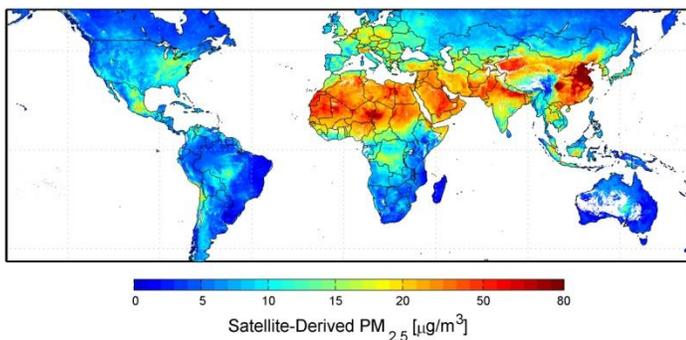
Welding in the workplace can present significant health hazards unless the potential (and actual) exposures to welding fumes are properly identified, evaluated, and controlled. The sheer numbers of the types of exposure, both acute and chronic, justify a thorough review of the possibilities, the hazards of exposure, and potential controls. This article, while not covering all of these possibilities, may at least prompt environmental, health, and safety professionals to consider these exposures, evaluate actual exposures, and implement appropriate protective measures.



Read more:

<http://ohsonline.com/articles/2012/09/01/welding-fume-exposures-and-controls.aspx?admgarea=ht.IndustrialHygiene>

The Temporal Lag Structure of Short-term Associations of Fine Particulate Matter Chemical Constituents and Cardiovascular and Respiratory Hospitalizations



Researchers explored the lag structure for hospital admissions using daily PM_{2.5} chemical constituent data for 5 years in the Denver Aerosol Sources and Health (DASH) study. They measured PM_{2.5} constituents, including elemental carbon, organic carbon, sulfate, and nitrate, at a central residential site from 2003 through 2007 and linked these daily pollution data to daily hospital admission counts in the five-county Denver

Army Industrial Hygiene News and Regulatory Summary

metropolitan area. Total hospital admissions and subcategories of respiratory and cardiovascular admissions were examined.

Read more:

<http://ehp03.niehs.nih.gov/article/fetchArticle.action;jsessionid=971F181E0EF54EE1EF51BDBA5443E319?articleURI=info%3Adoi%2F10.1289%2Fehp.1104721>

Even Low Blood Lead Levels Linked to Gout Risk

Even relatively low levels of lead in the blood may be linked to an increased risk of gout, a painful form of arthritis, researchers reported Monday.

Researchers have known that heavy lead exposure is linked to the condition - a form of arthritis in which the joints periodically become swollen, red and hot. Gout most often affects the big toe, though it can also strike the feet, ankles, knees, hands and wrists.

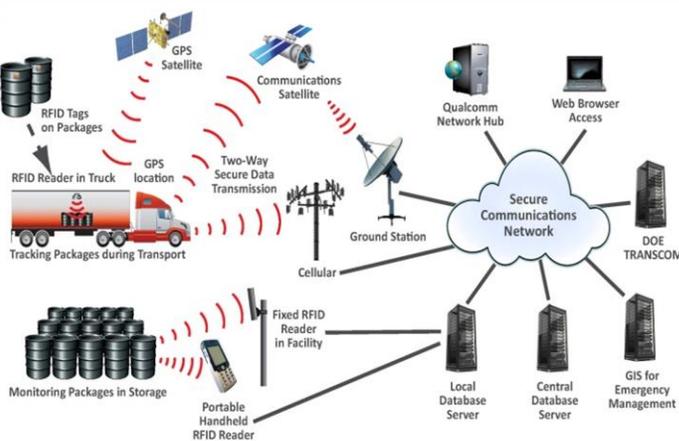


Read more:

http://www.nlm.nih.gov/medlineplus/news/fullstory_128439.html

Radiation

IAEA Adds Mobile Website for Nuclear Information System



Recognizing the explosive growth of mobile devices, the International Atomic Energy Agency is making its International Nuclear Information System (INIS) accessible by launching a mobile version of its website. Operated by IAEA in collaboration with more than 150 member countries, INIS hosts one of the world's largest collections of published

Army Industrial Hygiene News and Regulatory Summary

information on the peaceful uses of nuclear science and technology.

It contains some 3.4 million bibliographic records and 440,000 full-text documents are available online. The information is used by governments, academic and research institutions, and private companies

Read more:

<http://ohsonline.com/articles/2012/08/06/iaea-adds-mobile-website-for-nuclear-information-system.aspx?admgarea=news>

Washington State: Possible Radioactive Leak at Hanford Tank Farm

As part of the biggest, costliest environmental cleanup project in the nation's history—disposing of 53 million gallons of radioactive waste at the Hanford Nuclear Reservation in Washington state—one thing was supposed to be sure: Waste stored in the sturdy, double-wall steel tanks that hold part of the toxic ooze wasn't going anywhere.

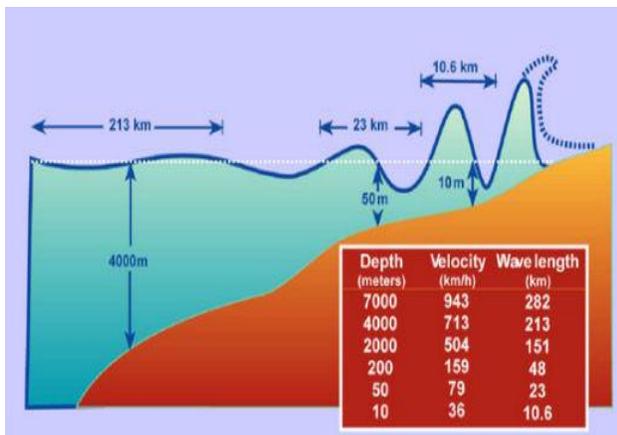
But that reassurance has been thrown into question with the discovery of a 3-foot-long piece of radioactive material between the inner and outer steel walls of one of the storage tanks, prompting new worries at the troubled cleanup site.



Read more:

<http://www.latimes.com/news/nation/nationnow/la-na-nn-hanford-tank-leak-20120821,0,2831821.story>

23 Nuclear Plants in Tsunami Risk Zones, Study Finds



In March 2011, a devastating earthquake and tsunami set off a partial meltdown at the Fukushima nuclear plant on Japan's coast. A recent study led by European researchers found Fukushima is not alone, as 22 other plants around the world may be similarly susceptible to destructive tsunami

waves, with most of them in east and southeast regions of Asia.

Read more:

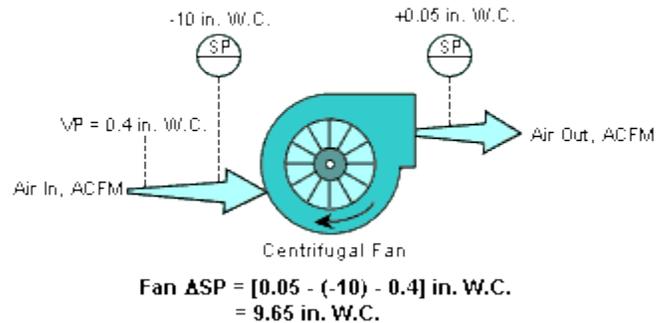
<http://www.enn.comenergy/article/44994>

Ventilation

Minimizing Fan Energy

In recent years, great strides have been made in the reduction of HVAC-system energy consumption. Chillers have become much more efficient at both part and full load. Low-flow, high-delta-T chilled- and condenser-water systems have optimized overall chilled-water-plant efficiency. Energy-recovery devices have become more mainstream. Terminal conditioning approaches are more efficient than ever. With these improvements, fan energy consumption has become a bigger part of overall system energy consumption. If the impressive trend in energy-use reduction is

Figure 1. Static Pressure Rise (Δ SP) Across a Fan



to continue, we must focus on minimizing fan energy.

Read more: <http://hvac.com/ventilation-iaq/minimizing-fan-energy-0912/>

PPE

Safety Alert on SCBA Facepiece Lenses



The National Fire Protection Association issued a safety alert that included a recommendation that fire departments, fire academies, and emergency service organizations inspect all self-contained breathing apparatus (SCBA) facepiece lenses before and after each use. Any SCBA facepiece lens found to have cracks, crazing, bubbling, deformation, discoloring, gaps, or holes should be immediately removed from service and a replacement issued. The alert

Army Industrial Hygiene News and Regulatory Summary

came after several NIOSH Fire Fighter Fatality investigations and additional research found SCBA facepiece lenses may undergo thermal degradation when exposed to intense heat.

Read more:

<http://www.cdc.gov/niosh/eneews/eneewsV1ON4.html#a>

NIOSH Begins Certifying Wildfire Respirators

Under the terms of a new agreement between NIOSH and the Safety Equipment Institute (SEI), both organizations began coordinating programs to certify wildland fire-fighting respirators. All respirator applications for certification must be submitted concurrently to NIOSH and SEI and include a completed application package for each wildland respirator model for which approval is requested.



Read more:

<http://www.cdc.gov/niosh/eneews/eneewsV1ON4.html#e>

Noise

Research Could Help Stem Hearing Loss, Especially For Troops



An audiologist grew frustrated with the lack of treatments for people with hearing loss caused by excessive and loud noise.

More than one-third of service men and women have some degree of hearing loss when they retire from the military. In addition to disadvantages in the field caused by hearing loss, it can also lead to post-traumatic stress disorder, anxiety and depression.

Army Industrial Hygiene News and Regulatory Summary

Read more:

<http://www.stltoday.com/lifestyles/health-med-fit/fitness/research-could-help-stem-hearing-loss-especially-for->

troops/article_c8102fda-72f4-5643-94a8-f938e2014303.html

Popular Pain-Relieving Medicines Linked to Hearing Loss in Women

Headache? Back pain? At the first sign of pain, you might reach for a pain-relieving medicine to sooth your bodily woes. Analgesics are the most frequently used medications in the United States and are commonly used to treat a variety of medical conditions. But although popping a pill may make the pain go away, it may do some damage to your ears.

According to a study by researchers at Brigham and Women's Hospital (BWH), women who took ibuprofen or acetaminophen two or more days per week had an increased risk of hearing loss. The more often a woman took either of these medications, the higher her risk for hearing loss. Also, the link between these medicines

and hearing loss tended to be greater in women younger than 50 years old, especially for those who took ibuprofen six or more days per week. There was no association between aspirin use and hearing loss.



Read more:

http://www.eurekalert.org/pub_releases/2012-09/bawh-pp091212.php

Preventive Medicine

New Virus Tied to Ticks Poses Puzzle for Doctors



For a year and a half, scientists have been swarming over a 100-acre farm in northwestern Missouri, catching

ticks and drawing blood from raccoons, possums, turkeys and deer.

The scientists have been trying to find out how this farmer and another unfortunate Missouri man contracted a severe viral disease — a new one, never seen before. It put both men in the hospital for more than

Army Industrial Hygiene News and Regulatory Summary

a week with high fevers, diarrhea, nausea, muscle pain, low blood cell counts and liver abnormalities.

Read more:

<http://www.nytimes.com/2012/09/04/health/research/new-tick-borne-heartland-virus-has-scientists-puzzled.html?ref=science>

Household Molds Linked to Childhood Asthma

Three specific species of mold were more common in the homes of babies who later developed asthma. The finding highlights the importance of preventing water damage and mold growth in households with infants.

More than 6 million children in the U.S. have asthma. Genes are known to play a role, and so does the home environment. Childhood asthma has been linked to indoor mold growing in a child's home as a result of moisture problems such as water leaks. The connection between mold and asthma, however, is complicated and not fully understood. Asthma is often associated with allergies, and molds spread by releasing tiny spores into the air, which can cause allergic reactions.



Read more:

<http://www.nih.gov/researchmatters/august2012/08202012molds.htm>

Experimental Disinfectant Shown Effective against Spore-Forming Bacteria

A new disinfectant that works at extremely low concentrations could be used in healthcare settings to help control spore-forming bacteria, according to a study in the *Journal of Medical Microbiology*.

Researchers from the Universite de Saint-Boniface in Winnipeg tested the compound, Akwaton, against *Bacillus subtilis*, whose spores attach to surfaces and are heat-tolerant and difficult to destroy.

Army Industrial Hygiene News and Regulatory Summary



Akwaton destroyed *B subtilis* spores, both suspended in water and attached to stainless steel or glass surfaces, at concentrations well below 1% after just 90

seconds. It was equally effective at concentrations below 0.1% if left to act longer. Most chemical disinfectants control or prevent spore growth but don't destroy spores, according to a press release from the Society for General Microbiology (SGM), which publishes the journal. The disinfectant, described as nontoxic to humans at low concentrations, may also be used to help control persistent hospital-acquired infections from such spore-forming bacteria as *Clostridium difficile*, according to the release.

Read more:

<http://www.cidrap.umn.edu/cidrap/content/other/news/aug0912newsscan.html>

Widely Used Pesticide Seems To Harm Boys' Brains More Than Girls'

A widely used pesticide – banned in homes but still commonly used on farms – appears to harm boys' developing brains more than girls', according to a new study of children in New York City. In boys, exposure to chlorpyrifos in the womb was associated with lower scores on short-term memory tests compared with girls exposed to similar amounts.

The study is the first to find gender differences in how the insecticide harms prenatal development. Scientists say the finding adds to evidence that boys' brains may be more. The 335 pairs of mothers and children were part of a large group of Latino and African American children from



New York City's low-income neighborhoods that have been studied by Columbia University scientists since they were born.

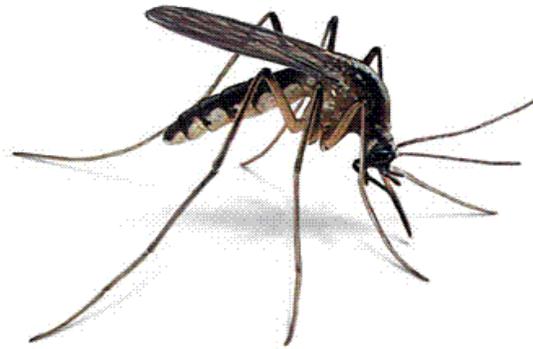
Read more:

<http://www.environmentalhealthnews.org/ehs/news/2012/boys-and-chlorpyrifos>

West Nile Is Spreading Farther and Faster This Season, CDC Says

Aerial mosquito spraying is underway in Dallas County and Houston to prevent the spread of West Nile virus while the disease spreads farther, faster and earlier in the season than ever before, according to the U.S. Centers for Disease Control and Prevention.

Only 29 cases were reported a month ago. Now, the CDC is reporting 1,118 cases spread across 47 states, with 41 deaths. Seventy-five percent of the cases have been reported from five states: Texas, Mississippi, Louisiana, Oklahoma and Illinois. Texas appears to be the hardest hit, with 586 reported cases in total. The death toll in Texas was 21 as of Wednesday, with



Dallas County hit hardest, for a total of 270 cases and 11 deaths.

Read more:

<http://abcnews.go.com/US/west-nile-spreading-farther-faster-season-cdc/story?id=17062832>

New Microbial Risk Assessment Guideline Promotes Consistency among Federal Agencies



A new microbial risk assessment guideline aims to promote consistency in approaches

and methods and improve transparency in the way the Food Safety and Inspection Service (FSIS) and EPA conduct microbial risk assessments. The document focuses primarily on pathogenic micro-organisms found in food and water and is intended to cover the “full range” of microbial risk assessment topics, including hazard identification and characterization, dose-response assessment, exposure assessment and risk management and communication.

Read more: <http://www.aiha.org/news-pubs/synergist/newswatch/Pages/NewMicr>

Army Industrial Hygiene News and Regulatory Summary

analyzed traffic-related air pollution levels and unemployment rates in four separate regions of California for which extensive air monitoring data was available: San Francisco Bay, Sacramento Valley, San Joaquin Valley, and the south-central coast between 1980 and 2000.

Read more:

http://www.eurekaalert.org/pub_releases/2012-09/tu-nmc091212.php

50-Year Decline Found in Some Los Angeles Vehicle-Related Pollutants

In California's Los Angeles Basin, levels of some vehicle-related air pollutants have decreased by about 98 % since the 1960s, even as area residents now burn three times as much gasoline and diesel fuel. Between 2002 and 2010 alone, the concentration of air pollutants called volatile organic compounds (VOCs) dropped by half, according to a new study by NOAA scientists and colleagues, published in the Journal of Geophysical Research.



Read more:

<http://eponline.com/articles/2012/08/13/50-year-decline-found-in-some-los-angeles->

vehiclerelated-pollutants.aspx?admgarea=ht.air

Pine Trees One of Biggest Contributors to Air Pollution



Pine trees are one of the biggest contributors to air pollution. They give off

gases that react with airborne chemicals -- many of which are produced by human activity -- creating tiny, invisible particles that muddy the air. New research from a Carnegie Mellon University's shows that the biogenic particles formed from pine tree emissions are much more chemically interesting and dynamic than previously thought. The study provides the first experimental evidence that such compounds are chemically transformed by

Army Industrial Hygiene News and Regulatory Summary

free radicals, the same compounds that age our skin, after they are first formed in the atmosphere.

Read more:

<http://eponline.com/articles/2012/08/10/pine-trees-one-of-biggest-contributors-to-air-pollution.aspx?admgarea=ht.air>

Ergonomics

Workers Counselled on Back Pain Return to Job Sooner

Workers on medical leave because of lower back pain are more likely to return to work if they receive reassurance and medical advice on how to stay active, according to a new study.

People with nonspecific lower back pain who avoid activity could delay their recovery, say researchers Dr. Marc Du Bois and Peter Donceel, at KU Leuven, a university in Belgium.

Their study involved more than 500 workers -- mostly blue-collar -- on sick leave because of low back pain. Workers who had



symptoms of a serious back problem were not included.

Read more:

http://www.nlm.nih.gov/medlineplus/news/fullstory_128099.html

New DVD Available Of Hand-Arm Vibration Syndrome



The Naval Safety Center and Defense Safety Oversight Council's (DSOC) Acquisition and Technology Task Force are pleased to announce a new DVD that updates the 1980s National Institute for Occupational Safety and Health (NIOSH) video on hand-arm vibration syndrome (HAVS). The new version includes details on measurement, exposure evaluation, and approaches to obtaining relevant controls and suitable

Army Industrial Hygiene News and Regulatory Summary

protective equipment through the supply and logistics system.

Read more:

DoD Ergonomics Working Group NEWS
http://phc.amedd.army.mil/Periodical%20Library/DoDEWGNewsHandArmVibrationDVDIssue129_SEP_OCT12.pdf

Back Injury Prevention for Childcare Providers

If you are taking care of infants and toddlers, you need to take care of your back. The U.S. Department of Labor found that the injury history for childcare providers is similar to workers in industrial settings. According to the Bureau of Labor Statistics (BLS), childcare workers accrued over 1,100 musculoskeletal lost-time injuries, with a median of 30 lost days away from work, in 2010.1 Childcare workers have musculoskeletal injury rates comparable to industrial truck and tractor operators, construction equipment operators, and shipping and receiving clerks.

In fact, childcare workers have an injury rate so high that national safety organizations track their rates of injury.



Read more:

DoD Ergonomics Working Group NEWS
<http://phc.amedd.army.mil/Periodical%20Library/128DoDEWG%20NewsChildcareProvidersandBackInjuryIssue128JULAUG12.pdf>

Safety

OSHA Etool Helps Employers Prevent Shock and Electrocution Hazards



To provide assistance to employers in complying with OSHA's Subpart S Electrical Standards for General Industry electrical installation standard, the agency has developed the new "Subpart S eTool" (eTools are "stand-alone," interactive, Web-

Army Industrial Hygiene News and Regulatory Summary

based training tools on occupational safety and health topics).

The eTool shows employers all of the Subpart S installation requirements that apply based on the time period in which an installation was built or last modified. Users select a requirement category and date range from a matrix, and the eTool displays

the requirements applicable to an installation built or modified during that range.

Read more:

<http://www.osha.gov/as/opa/quicktakes/qt081512012.html#9>

Using the Proper Firestop

A new public service video co-produced by the International Firestop Council, a not-for-profit trade association, and Underwriters Laboratories shows how proper and improper firestop systems perform to contain smoke and flame during building fires.

The "Close Enough, Is Not Good Enough: A Demonstration of Proper Vs. Improper Firestopping" video from Fort Collins, Colo.-based IFC lasts six minutes and is streamed from its website.

Read more:

<http://ohsonline.com/articles/2012/09/26/f>



[irestop-video-released.aspx?admngarea=news](http://www.firestop.com/irestop-video-released.aspx?admngarea=news)

Australian Report Confirms Higher Injury Rates for Temporary Workers

A new Australian report found work-related injuries were 50 % higher in 2009-10 among temporary workers — the term for them is casual workers in Australia — than the rate among full-time workers. Female casual workers also had a higher injury rate than

males in that category, according to the report. The research behind the report was funded by Safe Work Australia, which posted the document July 30.

Army Industrial Hygiene News and Regulatory Summary



It is based on analysis of almost 640,000 work-related injury reports in 2009-10. Males' injuries were 19 lower than the number reported in 2005-06, but the number for females was 11 % higher. The rate for casual workers was 54 injuries per million hours worked compared with a rate

of 35 for non-casual workers. Shift workers and part-time workers also had higher rates of injury. According to Safe Work Australia, half of all female workers worked part time in 2009-10, and for each hour worked, females had a 28 % higher risk of injury than did male workers. High injury rates were recorded in the hospitality and food services industries.

Read more:

<http://ohsonline.com/articles/2012/08/06/australian-report-confirms-higher-injury-rates-for-temp-workers.aspx?admgarea=news>

PHMSA Aligning Hazmat Regs with International Standards

The Pipeline and Hazardous Materials Safety Administration, a DOT agency, has published a proposed rule to align some of the Hazardous Materials Regulations to match international standards, including the International Maritime Dangerous Goods Code, ICAO's Technical Instructions for the Safe Transport of Dangerous Goods by Air, and the UN Recommendations on the Transport of Dangerous Goods – Model Regulations.

Read more:

<http://ohsonline.com/articles/2012/08/15/phmsa-aligning-hazmat-regs-with-international-standards.aspx?admgarea=news>



OSHA Tools Cover Fluorescent Bulbs' Mercury Hazards



OSHA has issued two new educational resources to help protect workers from mercury exposure. Fluorescent bulbs can

release mercury and may expose workers when they are broken accidentally or crushed as part of the routine disposal or recycling process.

A new OSHA QuickCard alerts employers and workers to the hazards of mercury and provides information on how to properly clean up accidentally broken fluorescent bulbs to minimize workers' exposures to mercury. In addition, a new fact sheet (PDF*) explains how workers may be exposed, what kinds of engineering controls and personal protective equipment they need, and how to use these controls and equipment properly.

Read more:

<http://www.osha.gov/as/opa/quicktakes/qt08012012.html#14>

All-terrain Vehicle (ATV) Safety at Work Fact Sheet

ATVs were first introduced in the U.S. for agricultural use in the early 1980s. Over the past thirty years, ATVs have grown increasingly popular recreationally and more recently, have become a valuable asset at work. With more than 10 million in use, it is important to know the hazards associated with ATVs and how to operate them safely.

Read more:

<http://www.cdc.gov/niosh/docs/2012-167/>



A Dozen Safety Plans Laboratories May Need



Workplace safety for laboratory employees goes beyond having everyone read a few manuals. Depending on the hazards present, safety plans that specifically address each hazard may need to be

developed and communicated. Because laboratories have different chemicals and equipment, the required safety plans for each location may vary. Having the right plans in place is the first step toward greater workplace safety.

Often, safety plans can be combined into one master plan with annexes for specific topics. This can help simplify plan management as well as training

Read more:

<http://ohsonline.com/articles/2012/08/01/a-dozen-safety-plans-laboratories-may-need.aspx?admgarea=ht.IndustrialHygiene>

Emergency Preparedness

New Tool for Measuring Public Health Impact of Disasters

A proposed measurement tool for the public health arsenal could aid in objectively and accurately identifying the scope and scale of critical needs and the relief priorities for populations experiencing complex humanitarian emergencies (CHEs), say the authors of a study published in *PLoS Currents: Disasters*.

Organizations and agencies responding to disasters use a variety of different assessment scales; the researchers' objective was to conceptualize a tool that would provide objective, quantitative, and cumulative measures of public health



parameters in emergency situations. The tool, named the Public Health Impact Severity Scale (PHISS), comprises 12 parameters—such as excess mortality,

Army Industrial Hygiene News and Regulatory Summary

number of children with malnutrition, and number of displaced persons—that fall within the four categories spelled out in the Minimum Standards for Disaster Response developed by the Sphere Project: health, shelter, food and nutrition, and water and

sanitation. PHISS scores can range from zero to 100.

Read more:

<http://www.cidrap.umn.edu/cidrap/content/fs/food/news/aug2212newsscan.html>

Army Looks to Chemical Weapons Detectors



investing tens of millions in chemical detectors and unveiling a new sniffer that "listens" for chemical weapons -- with a little help from the inventor of the telephone, Alexander Graham Bell.

Read more:

<http://www.foxnews.com/tech/2012/08/23/with-wary-eye-on-syria-army-boosts-chemical-weapon-detection/#ixzz25WkcGb8w>

The U.S. Army is taking steps that may protect troops from chemical warfare,

New Health Monitoring and Surveillance Tool for First Responders

Emergency responders have been called to duty over the past decade by an increasing number of natural and man-made disasters, as evidenced by 9/11 in 2001, Hurricane Katrina in 2005, and Deepwater Horizon oil spill in 2010. As each large-scale disaster occurred, the importance of how best to ensure the safety and health of professional and volunteer emergency responders before, during and after a disaster has grown.



Army Industrial Hygiene News and Regulatory Summary

While some guidance had been developed about how best to prepare response workers both before and during deployment, less attention had been placed on assessing responders' health after they complete their deployment.

Read more:

<http://www.cdc.gov/niosh/enevents/eneventsV1ON4.html#director>

Deployment Health

Soldiers Sharpen Disaster Response and Coordination Skills



In the aftermath of a natural or man-made disaster, first responders from a variety of places, Soldiers, law enforcement and other federal, state and local agencies, arrive on scene, participating in rescue and recovery

operations.

Coordinating these groups can be a challenge, as each may have different communications gear, equipment, command structure and even special jargon and acronyms.

U. S. Army North, U. S. Northern Command's joint force land component command, is hosting an exercise, Vibrant Response, across southern Indiana and Kentucky designed to coordinate a rapid and efficient disaster response. That exercise is focusing on a nuclear explosion scenario in the Midwest.

Read more:

http://www.army.mil/article/85043/Soldiers_sharpen_disaster_response_and_coordination_skills/

Face Paint Shields Soldiers' Skin from an Explosion's Heat

Camouflage makeup is getting a makeover. Chemists from the University of Southern Mississippi, Hattiesburg, have developed paint for the face and hands that can protect soldiers from the extreme temperatures of a bomb blast.

The greasy face and hand paint soldiers currently use to blend in with their surroundings proves to be a liability if they experience an explosion

Read more:

<http://cen.acs.org/articles/90/web/2012/0>



[8/Face-Paint-Shields-SoldiersSkin-Explosions.html](http://cen.acs.org/articles/90/web/2012/08/Face-Paint-Shields-SoldiersSkin-Explosions.html)

Can Nasal Spray Help Prevent Military Suicides?



Could the solution to increasing suicide and depression rates among members of the U.S. military lie in a nasal spray? The Army hopes so.

In the midst of a crisis that saw its highest rate of suicide in July, the Army has greenlighted a grant for an Indiana University of Medicine professor, to dig deeper into whether a nasal spray could be a safe and effective way to administer a specific antidepressive neurochemical to the brain and help calm suicidal thoughts.

Read more:

<http://news.blogs.cnn.com/2012/08/20/can-nasal-spray-help-prevent-military-suicides/>

Army Working On Blood Test to Detect TBI

The Army is expected to have an FDA-approved battlefield blood test for traumatic brain injuries in two years, according to an official spearheading the service's efforts.

The Army's trials of the blood test among troops in Afghanistan have proved promising, Col. Dallas Hack, a doctor and director of Combat Casualty Care at Medical Research and Materiel Command, Fort Detrick, Md., told reporters.

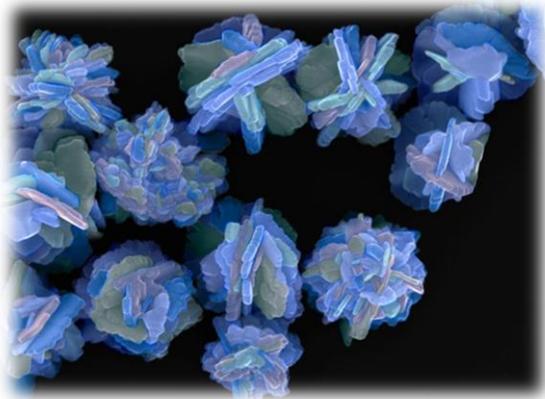


Read more:

http://www.armytimes.com/news/2012/08/army_brain_081512w/

Nanotechnology

Lessons Learned In Creating Biomedical Nanoparticles for Human Use



Over the past six years, the National Cancer Institute's (NCI) Nanotechnology Characterization Laboratory (NCL), a key component of the NCI's Alliance for

Nanotechnology in Cancer, has characterized more than 250 different nanomaterials developed by over 75 research groups. This extensive experience has given NCL staff a unique perspective on how to design safe and biocompatible nanomaterials for human use. In a paper published in the journal *Integrative Biology*, the NCL team shared some of the lessons they have learned.

Read more:

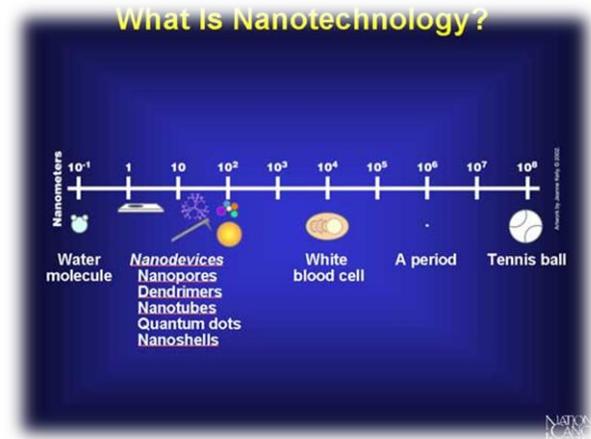
<http://phys.org/news/2012-08-lessons-biomedical-nanoparticles-human.html>

Army Industrial Hygiene News and Regulatory Summary

Insufficient Nanomaterial Risk Communication

A report from the European Agency for Safety and Health at Work (EU-OSHA) reveals a “serious gap” in the awareness of potential risks involved with handling nanomaterials at work and the way those risks are communicated to workplaces.

Nanomaterials, which measure one-billionth of a meter, can be used in biomedical applications, molecular switches, solar cells, textiles, electronics, sunscreen, paints, food, cosmetics, health and fitness products and more. EU-OSHA pointed out that nanomaterials are used in these products even though “health and environmental hazards have been demonstrated for some manufactured nanomaterials.”



Read more:

<http://ehstoday.com/industrial-hygiene/eu-osea-report-highlights-insufficient-nanomaterial-risk-communication>

Regulatory Research & Industrial Hygiene Professional News

AIHA

AIHA Backs Qualification Recommendations for GS-0018 Safety Specialists



In an Aug. 2 letter to the U.S. Office of Personnel Management (OPM), the AIHA expressed support for the recommendations made in the Federal Advisory Council on Occupational Safety and Health (FACOSH) Training Subcommittee report surrounding the educational qualifications in the GS-0018,

Army Industrial Hygiene News and Regulatory Summary

Safety and Occupational Health Management Job Series.

<http://ehstoday.com/industrial-hygiene/aiha-backs-qualification-recommendations-gs-0018-safety-specialists>

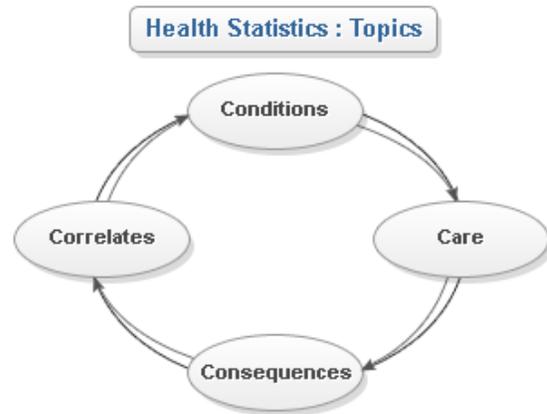
Read more:

NIOSH

NIOSH Pushes for Inclusion of Occupation among Key Health Measures

Thanks to the efforts of NIOSH researchers occupation and industry have been added to the list of key measures that the National Committee of Vital Health Statistics (NCVHS) is recommending the U.S. Department of Health and Human Services use to assess socioeconomic status in its surveys.

The NCVHS recommendation includes occupation and industry alongside income, education, and family size as the key components necessary for the measurement of socioeconomic status and its relationship to health.



Read more:

<http://www.cdc.gov/niosh/enevs/enevsV1ON4.html#h>

EPA

U.S. Navy Settles Hazardous Waste Violations at Facility in Virginia Beach, Va.

The U.S. Navy has agreed to pay a \$32,800 civil penalty to settle alleged violations of hazardous waste regulations and underground storage tank (UST) regulations at the Joint Expeditionary Base Little Creek-

Fort Story facility in Virginia Beach, Va. EPA cited the U.S. Navy for violating the Resource Conservation and Recovery Act (RCRA), the federal law governing the

Army Industrial Hygiene News and Regulatory Summary



treatment, storage, and disposal of hazardous waste.

RCRA is designed to protect public health and the environment, and avoid costly cleanups, by requiring the safe, environmentally sound storage and disposal of hazardous waste. In addition, RCRA regulates underground storage tanks with the emphasis on preventing releases from USTs which can cause serious contamination to our nation's groundwater.

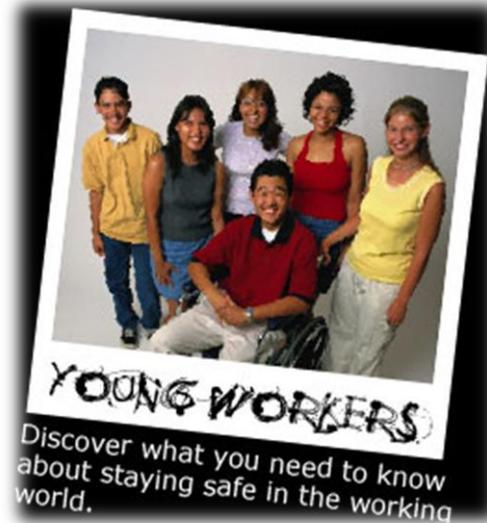
Read more:

<http://yosemite.epa.gov/opa/admpress.nsf/d0cf6618525a9efb85257359003fb69d/a0edda34c217f90085257a67004dbc4f!OpenDocument>

OSHA

OSHA to Educate the Public about Young Workers Safety

Roughly 18 million workers in the United States are 24 years old or younger and constitute almost 15% of the workforce. In 2009, 359 workers between the ages of 13 and 24 died from work-related injuries. In addition, there were over 800,000 non-fatal work-related injuries that required medical attention. The rate of emergency room treated occupational injuries is double for workers under the age of 25 in comparison to those 25 years and older. The higher injury rate may be connected to a lack of working experience, inadequate safety training, or even the physical demands of many types of employment for which young people are hired.



Army Industrial Hygiene News and Regulatory Summary

Read more:

<http://workersafetyhealth.challenge.gov/>

Congress

Chemical Safety Law Advances

Democrats in the U.S. Senate are forging ahead with efforts to break a decades-old logjam and reshape the federal law governing toxic chemicals.

The Senate Committee on Environment and Public Works approved an amended version of the Safe Chemicals Act, which would revamp a 1976 law, the Toxic Substances Control Act. The new bill, based on legislation pushed for several years by Sen. Frank Lautenberg, a New Jersey Democrat, would shift much of the burden of assuring the safety of chemicals from the Environmental Protection Agency to manufacturers.

If the legislation becomes law, it would dramatically increase the EPA's ability to oversee thousands of chemicals, including some types of nanomaterials, such as carbon nanotubes. Advocates for tighter controls on these cutting-edge, super-small materials have long lamented that the EPA has few avenues for getting there while TSCA is in its current form.

Read more:

http://www.newhavenindependent.org/index.php/archives/entry/changes_coming_to_chemicals_law/

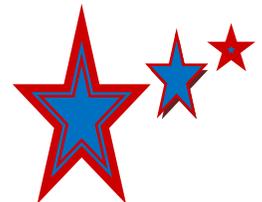
USAPHC

September's DOEHRs-IH ***SUPER STAR***

This month's DOEHRs-IH Super Star goes to the Industrial Hygiene Office at Fort Bliss. The IH team continues to strive to stay on the cutting edge. The IH office and the computer support staff is working together to reconfigure the DOEHRs-IH tablets to not only work off of wireless air cards and MiFi hotspots, they are also the first office to use voice recognition software while in the

field to populate DOEHRs-IH data into the tablets.

Fort Bliss forward thinking use of technology is paying off. Their ability to input their data into the DOEHRs data base in real time in such an efficient manner may become an Army IH best practice.



Army Industrial Hygiene News and Regulatory Summary

How to become a DOEHRS-IH Super Star

- ✓ Do you 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

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

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>



Upcoming Courses

- **Health Risk Communication** - This on-site course provides an understanding of the concepts, principles, and process of effective risk communication. Participants learn to strategically plan for effectively addressing public and/or worker concerns that affect mission success. The research-based risk communication principles presented are effective in planning for and addressing concerns related to health, environmental, deployment, Homeland Security, and occupational health issues. Courses scheduled for 24-25 October 2012 at Fort Hood
- **Industrial Hygiene, Occupational Health, and Safety Professionals: Making the Connection with Health Promotion - the Healthy Worker** - This Defense Connect Online Course is designed to provide participants with the knowledge, skills and tools necessary to assist in developing, implementing health promotion activities designed to eliminate or mitigate health risks in the workplace and to ensure that worker exposures documented by the IH are not unknowingly affected by confounders that may be potentiated. Live portion of the course scheduled for 2-4 October. Deadline for applications is 21 September 2012. Late applications will be not be considered..
- **Injury Prevention Through Leadership**- This online course will help you determine who is at risk for musculoskeletal injury, what the risk factors are, and what you can do to prevent these injuries.
- **Laboratory Design Review** - This 6-hour online course is provided using Blackboard and gives participants knowledge of the basic concepts of laboratory design review. Course scheduled for 8-19 October 2012. Deadline for applications is 1 October 2012. Late applications will not be considered.

To register for these courses visit the USAPHC portal <http://phc.amedd.army.mil/Pages/Training.aspx>.

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.