A novel personal sampler was designed to measure inorganic acid mists and gases for determining human exposure levels to these acids in workplaces. This sampler consists of (1) a parallel impactor for classifying aerosol by size following the ISO/CEN/ACGIH defined human thoracic fraction, (2) a cellulose filter to collect the residual acid mist but allowing penetration of sulfur dioxide gas, and (3) an accordion-shaped porous membrane denuder (aPMD) for adsorbing the penetrating sulfur dioxide gas. Acid-resistant PTFE was chosen as the housing material to minimize sampling interference.

To test the performance of the parallel impactor, monodisperse aerosol was created by a vibrating orifice aerosol generator. The results showed that the penetration curve of the impactor run at 2 LPM flow rate agreed well with the defined thoracic fraction. Almost all sampling biases were within 10% for particle size distributions with MMAD between 1 – 25 µm and GSD between 1.75 – 4, which meets the criteria of the EN 13205 standard. To evaluate the performance of the aPMDs, sulfur dioxide gas was sourced directly from a cylinder. The aPMDs maintained a gas collection efficiency greater than 95% for 4 hours when sampling 8.6 ppm of sulfur dioxide gas. While the aPMD had similar performance to the commonly adopted annular or honeycomb denuders made of glass, this shatterproof aPMD is only half of the volume and 1/25th the weight of the honeycomb denuder. Testing of the entire sampler with a mixture of sulfuric acid mist and sulfur dioxide gas showed the system could sample both with negligible interference. All the test results illustrate that the new sampler, which is flat, lightweight and portable, is suitable for personal use and is capable of a more accurate assessment of human exposure to inorganic acid mist and SO2 gas.

Read more: Journal of Occupational and Environmental Hygiene
Accepted author version posted online: 20 Apr 2017 (Available with an AIHA membership)
A Framework for Hazard Banding

The guidance document explains that, as it is currently practiced, hazard banding requires significant technical expertise in industrial hygiene. And so, to address that limitation, the NIOSH process provides a three-tiered assessment process that allows the technique to be applied with traditional occupational hygiene expertise, as well as the option of more in-depth processes done in consultation with specialists in occupational medicine and toxicology. The three tiers in the process are described this way:

Read more:

Research Suggests Link between Work-Related Styrene Exposure and Lung Disease

With more plastic-based products on the market than ever before, concern about the work-related risks of the chemicals used to make them is increasing. One of these chemicals is styrene, a compound used extensively in plastic and rubber for cars, food packaging, boats, and many other products.
Scientific studies have linked work-related styrene exposure to asthma and an irreversible lung disease known as obliterative bronchiolitis. This rare lung disease causes scar tissue and inflammation in the small airways, which eventually makes it difficult to breathe. NIOSH recommends a styrene exposure limit of 50 ppm, or parts per million, over an 8-hour workday to prevent adverse health effects.

Read more: https://www.cdc.gov/niosh/research-rounds/resroundsv2n11.html

The Reciprocal Calculation Procedure for Setting Occupational Exposure Limits for Hydrocarbon Solvents: An Update

Hydrocarbon solvents are liquid hydrocarbon fractions, often with complex compositions. Due to the potential for human exposure, primarily to the more volatile solvents, substantial effort has been directed towards the development of occupational exposure recommendations. Because of the complex and variable nature of these substances, a proposed approach is to calculate occupational exposure levels (OELs) using an adaptation of the mixture formula developed by the ACGIH® in which “group guidance values” are assigned to similar constituents. This approach is supported by the results of toxicological studies of hydrocarbon solvents and their constituents which have shown that, with a few, well characterized exceptions, these substances have similar toxicological properties and produce additive effects. The objective of the present document is to summarize recommended revisions to the earlier proposals; these recommendations take into account recent toxicological information and changes in regulatory advice. Practical demonstrations on how to use these recommendations to develop occupational exposure advice in different situations (from simple complex solvents to blends of complex solvents) are also provided. Finally, a quantitative ideal gas method is proposed as a means of calculating occupational exposure limits for solvent blends in which, because the blended components have differing vapor pressures, there may be substantial
Evaluation of Personal Inhalable Aerosol Samplers with Different Filters for Use during Anthrax Responses

Risk of inhalation exposure to viable Bacillus anthracis (B. anthracis) spores has primarily been assessed using short-term, stationary sampling methods which may not accurately characterize the concentration of inhalable-sized spores reaching a person’s breathing zone. While a variety of aerosol sampling methods have been utilized during previous anthrax responses, no consensus has yet been established for personal air sampling. The goal of this study was to determine the best sampler-filter combination(s) for the collection and extraction of B. anthracis spores. The study was designed to 1) evaluate the performance of four filter types [one mixed cellulose ester, MCE (pore size = 3 µm), two polytetrafluoroethylene, PTFE (1 and 3 µm), and one polycarbonate, PC (3 µm)], and 2) evaluate the best performing filters in two commercially-available inhalable aerosol samplers (IOM and Button). Bacillus thuringiensis kurstaki [Bt(k)], a simulant for B. anthracis, served as the aerosol challenge. The filters were assessed based on criteria such as ability to maintain low pressure drop over an extended sampling period, filter integrity under various environmental conditions, spore collection and extraction efficiencies, ease of loading and unloading the filters into the samplers, cost, and availability. Three of four tested collection filters – except MCE – were found suitable for efficient collection and recovery of Bt(k) spores sampled from dry and humid as well as dusty and clean air environments for up to 8 h. The PC (3 µm) filter was identified as the best performing filter in this study. The PTFE (3 µm) demonstrated a comparable performance, but it is more costly. Slightly higher concentrations were measured with the IOM inhalable sampler which is the preferred sampler's performance criterion when detecting a highly pathogenic agent with no established “safe” inhalation exposure level. Additional studies are needed to address the effects of environmental conditions and spore concentration. The data obtained in this investigation are crucial for future efforts on the development and optimization of a
method for assessing inhalation exposure to B. anthracis. 

Read more: Journal of Occupational and Environmental Hygiene, Accepted author version posted online: 16 May 2017 (Available with an AIHA membership)

Identifying Thermal Breakdown Products of Thermoplastics

Polymers processed to produce plastic articles are subjected to temperatures between 150°C and 450°C or more during overheated processing and breakdowns. Heat-based processing of this nature can lead to emission of volatile organic compounds (VOCs) into the thermoplastic processing shop. In this study, laboratory experiments, qualitative and quantitative emissions measurement in thermoplastic factories were carried out. The first step was to identify the compounds released depending on the thermoplastic nature, the temperature and the type of process. Then a thermal degradation protocol that can extrapolate the laboratory results to industry scenarios was developed. The influence of three parameters on released thermal breakdown products was studied: the sample preparation methods - manual cutting, ambient or cold grinding - the heating rate during thermal degradation - 5, 10 20 and 50°C/min - and the decomposition method - thermogravimetric analysis and pyrolysis. Laboratory results were compared to atmospheric measurements taken at 13 companies to validate the protocol and thereby ensure its representativeness of industrial thermal processing. This protocol was applied to most commonly used thermoplastics to determine their thermal breakdown products and their thermal behaviour. Emissions data collected by personal exposure monitoring and sampling at the process emission area show airborne concentrations of detected compounds to be in the range of 0–3 mg/m³ under normal operating conditions. Laser cutting or purging operations generate higher pollution levels in particular formaldehyde which was found in some cases at a concentration above the workplace exposure limit.

Read more: Journal of Occupational and Environmental Hygiene Accepted author version posted online: 20 Apr 2017 (Available with an AIHA membership)
Hanford Tunnel Collapses, No Radiation Released

The U.S. Department of Energy Richland Operations Office declared an emergency at the Hanford Nuclear Reservation at 8:30 this morning after a cave-in of a 20-foot section of a tunnel hundreds of feet long that is used to store contaminated materials.

A former plutonium and nuclear weapons production site on the Columbia River in central Washington State, Hanford is the most contaminated nuclear site in the United States and the target of the nation’s largest environmental cleanup.

During a routine surveillance of the tunnel area this morning, a 20-foot-wide hole in the roof of the tunnel was observed,


IARC: Welding Fumes, UV Radiation from Welding Are Carcinogenic

The International Agency for Research on Cancer (IARC) has classified welding fumes and UV radiation from welding as Group 1 carcinogens, the agency’s designation for agents that carry sufficient evidence of carcinogenicity in humans. When IARC previously assessed the carcinogenicity of welding fumes in 1989, the agency classified them in Group 2B as “possibly carcinogenic to humans.” At the time, IARC based its classification on “limited evidence in human beings” and “inadequate
evidence” in experimental animals. According to the agency, its new classification for welding fumes is based on “substantial new evidence” from observational and experimental studies. UV radiation from welding was previously classified as a Group 1 carcinogen in an IARC monograph published in 2012.

Read more:

**Ventilation**

**Clearing the Air: The Importance of Filter Replacement for Welding Fume Extraction Systems**

The purpose of a filter in a welding fume extraction system is to capture and remove airborne particulates from the workplace environment. Mechanical filters incorporate a filtering medium made from microscopic fibers (fiberglass, cellulose, or polyester fibers, etc.) woven in sheets and typically pleated in a "V" pattern. The pleating of the material increases the surface area of the filter providing an increased capture surface. This white paper discusses several important factors about filter replacement for a welding fume extraction system.

Read more:

**PPE**

**An Improved Experimental Methodology to Evaluate the Effectiveness of Protective Gloves against Nanoparticles in Suspension**

Recent studies underline the potential health risks associated to the “nano” revolution, particularly for the workers who
handle engineered nanoparticles (ENPs) that can be found in the formulation of several commercial products. Although many Health & Safety agencies recommend the use of protective gloves against chemicals, few studies have investigated the effectiveness of these gloves towards nanoparticle suspensions. Moreover, the data that are available are often contradictory. This study was designed to evaluate the effectiveness of protective gloves against nanoparticles in suspension. For this purpose, a new methodology was developed in order to take into account parameters encountered in the workplace such as mechanical deformations (MD) that simulate hand flexion and sweat. The effects of the precise experimental protocol on the concentrations of nanoparticles that were detected in the sampling suspension were assessed. Several samples of nitrile rubber gloves (73 μm thick), taken from different boxes, were brought into contact with gold nanoparticles (5 nm) in water. During their exposure to ENPs, the glove samples submitted systematic mechanical deformations and were placed in contact with a physiological solution simulating human sweat. Under these conditions, results obtained by inductively coupled plasma mass spectrometry (ICPMS) showed that the 5 nm gold nanoparticles passed through the protective gloves. This result was acquired, in spite of the observation of significant losses during the sampling phase that will be important for future experiments evaluating the effectiveness of these materials.

Read more: Journal of Occupational and Environmental Hygiene Accepted author version posted online: 21 Feb 2017 (Available with an AIHA membership)

Beyond Compliance: Specifying Reliable Flame Resistant Workwear

Every day, workers in electrical maintenance, utility, oil and gas, petrochemical, and steel industries work in hazardous environments. Unexpected and highly dangerous arc flash and flash fire events can occur without warning and may result in severe or fatal burn injuries.

In the United States, there are an estimated five to 10 arc flash explosions every day in electrical equipment.1 Include the inherent danger of working around highly flammable materials, such as those within oil and gas industries, and the need for effective personal protective equipment (PPE)
through flame resistant (FR) apparel cannot be ignored.


**Noise**

**May is Better Hearing and Speech Month: For 45 Years NIOSH Helps Prevent Occupational Hearing Loss**

Back in 1927, when an organization then known as the American Society for the Study of Disorders of Speech first promoted May as “Better Hearing and Speech Month,” very little was known about occupational noise-induced hearing loss. But for more than 45 years, NIOSH has been researching ways to prevent it. Occupational hearing loss (OHL) is one of the most common work-related illnesses in the United States. Each year, about 22 million U.S. workers are exposed to hazardous noise levels at work. OHL is permanent and has a personal, social, and economic price. It is also nearly always preventable.

Read more: https://blogs.cdc.gov/niosh-science-blog/2017/05/15/niosh-noise/

**How to Choose the Most Effective Hearing Protection?**

Selecting the right hearing protection is not always an easy task. One of the most important duties that a safety manager has is to choose the right protection, one that employees will wear 100 percent of the time they are exposed to noise. Factoring in cost and usage is also important; most
companies spend on average 30 cents per person per day on hearing devices, such as disposable ear plugs. Investing in a more cost-effective and efficient form of hearing protection is ideal.

Read more: https://ohsonline.com/articles/2017/05/01/how-to-choose-the-most-effective-hearing-protection.aspx?admgarea=ht.PPE

Preventive Medicine

Mosquitoes That Spread Zika Virus Could Simultaneously Transmit Other Viruses

A new study led by Colorado State University researchers found that Aedes aegypti, the primary mosquito that carries Zika virus, might also transmit chikungunya and dengue viruses with one bite. The findings shed new light on what's known as a co-infection, which scientists said is not yet fully understood and may be fairly common in areas experiencing outbreaks.

"A mosquito, in theory, could give you multiple viruses at once," said Claudia Ruckert, post-doctoral researcher in CSU's Arthropod-borne and Infectious Diseases Laboratory.


Blue-Blocking Lenses Help Warfighters, Shift-Workers Get Sleep

We love our technology: phones, computers and televisions. You've probably heard that they give off a blue light that can impact our sleep.

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We love our technology: phones, computers and televisions. You've probably heard that they give off a blue light that can impact our sleep.
Right now, the military's working on a blue-light-blocking lens, like in eyeglasses, that could make a difference not only for warfighters, but also for our sleep.


**Study Finds Race, Male Sex Associated With MRSA Bacteremia**

A multicenter study of patients with MRSA bloodstream infections caused by a community-associated strain of the pathogen has identified race as a primary association, researchers reported yesterday in the *Journal of Infectious Diseases*. For the study, researchers retrospectively evaluated hospital-onset methicillin-resistant *Staphylococcus aureus* (HO-MRSA) and hospital-onset methicillin-susceptible *S aureus* (HO-MSSA) bloodstream infections diagnosed at a large public hospital and a large academic medical center in Chicago. The objective was to determine whether sex and racial disparities exist for *S aureus* bacteremia and to use whole-genome sequencing (WGS) to characterize transmission pathways associated with USA300, a common community-associated MRSA strain.


**Incorporating Environmental Health into Nursing Practice: A Case Study on Indoor Air Quality**

More than one-quarter of the global disease burden is attributable to environmental exposures, with children bearing a disproportionate amount of risk. Physiologically and behaviorally, children have unique characteristics that make them vulnerable to environmental contaminants. In particular, indoor environmental exposures, such as carbon monoxide, mold,
and radon, have an impact on children's health and well being. A case study based on the experiences of nurses working on the Environmental Risk Reduction through Nursing Intervention and Education study is presented to illustrate multiple exposures children may face in the home environment and the role nurses play in prevention and response. Nurses can improve children's environmental health by providing risk assessments, environmental health education, and referrals to community health nurses and environmental health specialists. Resources on indoor air quality and maintaining a healthy home are provided.


Lyme Disease in Dogs: Forecast Map Created

As the rate of Lyme disease grows rapidly across the United States, new research offers veterinarians a forecasting map that tells them which parts of the country are most at risk of Lyme disease infections in dogs, which could also help track and predict Lyme disease in people. The forecast map, created by Michael Yabsley, a parasitologist at the University of Georgia, and Christopher McMahan, an assistant professor of mathematical sciences at Clemson University, shows the predicted Lyme disease prevalence—the percentage of dogs who are likely to test positive—by county in each of the 48 contiguous states. It draws on monthly test data from veterinarians, providing the most timely picture of Lyme disease cases available.

Read more: http://outbreaknewstoday.com/lyme-disease-dogs-forecast-map-created-51983/

Warm Weather Increases the Incidence of Serious Surgical Site Infections

Surgical site infections, a common healthcare-associated infection, are seasonal – increasing in the summer and decreasing in the winter–according to new
research published online in Infection Control & Hospital Epidemiology. Temperatures above 90 degrees F were associated with 28.9 percent increased odds for hospitalization with a surgical site infection (SSI) compared to temperatures less than 40 degrees F.

Read more:

**Environmental Health**

### There Are Disease Hidden In Ice, and They Are Waking Up

Long-dormant bacteria and viruses, trapped in ice and permafrost for centuries, are reviving as Earth's climate warms. Throughout history, humans have existed side-by-side with bacteria and viruses. From the bubonic plague to smallpox, we have evolved to resist them, and in response they have developed new ways of infecting us.

We have had antibiotics for almost a century, ever since Alexander Fleming discovered penicillin. In response, bacteria have responded by evolving antibiotic resistance. The battle is endless: because we spend so much time with pathogens, we sometimes develop a kind of natural stalemate.

Read more:

### Will Climate Change Help Ticks and Mosquitoes Spread Disease?

Most creepy, crawly bugs are pretty much harmless when it comes to infectious diseases.

But there are two classes of little critters that cause big — and we’re talking big — problems: ticks and mosquitoes.

To learn how climate change could alter the course of tick- and mosquito-borne
diseases, we talked to two scientists who have devoted a major chunk of their careers to answering that question.

Let's start with the bloodsuckers that can stay on your skin for days.


Department of Defense Announces Winners of the 2017 Secretary of Defense Environmental Awards

The Department of Defense announces the winners for the 2017 Secretary of Defense Environmental Awards.

The awards recognize individuals, teams, and installations for their exceptional environmental achievements and innovative, cost-effective environmental practices. “The winners’ efforts strengthen the Department of Defense’s position as a resourceful environmental steward, both at home and abroad, and demonstrate our continued commitment to fulfilling mission needs through advanced environmental practices and technologies,” stated James A. MacStravic, performing the duties of the under secretary of defense for Acquisition, Technology and Logistics.

Read more: https://www.defense.gov/News/News-Releases/News-Release-View/Article/1158128/
Ergonomics

Ergonomics of Pipette Use and Handling

Lots of precision and concentration are needed while using pipettes in laboratories. Pipettes are usually used to perform reactions that involve chemical reagents. Working with chemicals always involves risks. Increased risk of hand and shoulder ailments is associated with long hours of using pipettes.

Safety factors such as the length and weight of the pipette, the force needed to operate it, and how it fits into the hand, have to be considered while using pipettes. Pipettes are commercially available in different makes and models. All of them have various features related to technical specification, ease of use, and price. Comfort and ease of use are influenced by the pipette features. This article focuses on the ergonomic aspects of pipette design and use.


Safety

Shortage of Properly Sterilized Instruments Leads Brooke Army Medical Center to Curtail Surgeries

Commanders at the Army health system's flagship Brooke Army Medical Center have shut more than half of the San Antonio hospital's 28 operating rooms and curtailed elective surgeries because of a shortage of properly sterilized instruments. The San Antonio Express-News reports the hospital famous for treating victims in its burn ward found 73 cases of improperly sterilized instruments last month, including 16 where organic material like bone or skin fragments or blood was left on surgical tools.
**Patient Safety in Action: Deploying a New Tool to Identify Adverse Events, Improve Patient Safety**

The Military Health System (MHS) will deploy a new patient safety monitoring tool and measurement strategy to support high reliability efforts enterprise-wide. Developed by the Institute for Healthcare Improvement (IHI), the Global Trigger Tool (GTT) will be fielded to military treatment facilities (MTFs).

**The Global Trigger Tool**

The GTT is a retrospective patient safety monitoring tool and measurement strategy that will supplement current reporting tools and strategies to identify adverse events and more accurately measure the rate of harm over time in the MHS. Analysis from the GTT will help MTFs understand harmful incidences, learn from past events, identify systemic issues that contribute to patient safety events, drive continuous improvement to eliminate patient harm, and deliver safe, reliable care for all patients.

**NSC's Injury Facts 2017: 'Alarming Trends, Alarming Data'**

The National Safety Council's *Injury Facts 2017 Edition* is out, and it sheds new light on the impact of fatigue by industry. That's one of the new wrinkles in this edition, which also for the first time looks at preventable death rates by ethnic origin and race, correlations between recessions and motor vehicle deaths (deaths and death rates decline during them, it shows), as well as some encouraging early data (on page 119) from the Insurance Loss Data Institute.
Army Industrial Hygiene News and Regulatory Summary

on assistive vehicle technologies' impact on property damage and bodily injuries.


Lawn Mower Injuries Often Prove Severe

The buzz of lawn mowers signals the arrival of spring as much as singing birds and kids playing outside. Yet, it’s easy to forget that the machines can cause serious damage if not used safely.

In 2015, lawn mowers were responsible for sending more than 68,000 adults and about 13,000 children to emergency departments nationwide.


Crypto Outbreaks Linked to Swimming Have Doubled Since 2014

Outbreaks of a parasitic infection linked to swimming pools and water playgrounds are increasingly being reported to CDC, with twice as many outbreaks in 2016 as in 2014.

At least 32 outbreaks caused by Cryptosporidium (also known as “Crypto”) linked to swimming pools or water playgrounds in the United States were reported in 2016, compared with 16 outbreaks in 2014, according to preliminary data published today in CDC’s Morbidity and Mortality Weekly Report. The parasite can spread when people swallow something that has come into contact with the feces (poop) of a sick person, such as pool water contaminated with diarrhea.

Top 10 Summer Safety Tips

Every summer, approximately 2.7 million children in the US ages 14 and under are treated in emergency rooms for accidental injuries. Injury prevention experts at Spectrum Health in Grand Rapids, Michigan say more children are accidentally injured during the summer months than any other time of year.

Injury Prevention Specialist Jennifer Hoekstra shares the following tips for families kicking off the summer season:


Law Enforcement Officials Look to Drones as Way to Improve Public Safety

A growing interest among law enforcement and emergency medical providers in using unmanned aircraft systems has prompted an aviation technology group at N.C. State University to develop some best practices and spread the word about what is happening.

Airmen Dodge 30 Heat Stress Cases with USARIEM's ECTemp Algorithm

Temperatures are rising, and with warfighters operating in hot and humid conditions while wearing protective clothing or performing intense work, research to prevent heat illness from diminishing warfighter performance and posing significant health risks is on the rise, as well.

The military has long needed a non-invasive monitoring device that can track warfighters' physiological health during field operations and training. In this technological age when mission leaders and medics need to know the health status of their troops to make quick decisions, real-time guidance on heat illness prevention is more important than ever.

Read more: https://www.army.mil/article/186577/

The US Military Has a New Technology to Finally Solve the Concussion Crisis

The frequent use of explosive devices in the Iraq and Afghanistan wars has given birth to a new type of war injury that clinicians are now labeling the “invisible wound of war”: multiple mild traumatic brain injuries, or mTBI.

Recent research has shown that multiple exposures to explosions, even from a safe distance from flying shrapnel, may damage the brain. But we still have no idea how strong a blast needs to be to cause trauma. Now, researchers are working on advancing new technology that can accurately measure blast strength, and whether or not it causes an mTBI.
Study Looks at Ongoing Army, Marine Efforts to Lighten Body Armor, Troop Load

The Army and Marine Corps continue to work together to try and reduce the weight of troops' body armor, according to a recent government study.

The study by the Government Accountability Office noted joint efforts to reduce the weight of body armor and listed multiple options in the works to further decrease the load.

The report, released this month, evaluated work done by both the Army and Marines since 2003 to protective aspects of body armor while reducing the weight of the equipment. On average, body armor weighs about 27 pounds, according to the study by the Government Accountability Office.

Study Finds How Polluting Nanoparticles Get Into Blood and Damage Hearts

Inhaled nanoparticles like those pumped out in vehicle exhausts can work their way through the lungs and into the bloodstream where they can raise the risk of heart attack and stroke, scientists said on Wednesday. In experiments using harmless ultra-fine particles of gold, the scientists were able for the first time to track how such...
nanoparticles are breathed in, pass through the lungs and then gain access to the blood. Most worryingly, the researchers said at a briefing in London, the nanoparticles tend to build up in damaged blood vessels of people who already suffer from coronary heart disease – the condition that causes heart attacks - and make it worse.

Read more:  
http://www.reuters.com/article/us-health-air-pollution-idUSKBN17S1J9

Effectiveness of Hand Washing on the Removal of Iron Oxide Nanoparticles from Human Skin Ex Vivo

In this study, the effectiveness of washing with soap and water in removing nanoparticles from exposed skin was investigated. Dry, nanoscale hematite (α-Fe2O3) or maghemite (γ-Fe2O3) powder, with primary particle diameters between 20–30 nm, were applied to two samples each of fresh and frozen ex vivo human skin in two independent experiments. The permeation of nanoparticles through skin, and the removal of nanoparticles after washing with soap and water were investigated. Bare iron oxide nanoparticles remained primarily on the surface of the skin, without penetrating beyond the stratum corneum. Skin exposed to iron oxide nanoparticles for 1 and 20 hours resulted in removal of 85% and 90%, respectively, of the original dose after washing. In the event of dermal exposure to chemicals, removal is essential to avoid potential local irritation or permeation across skin. Although manufactured at an industrial scale and used extensively in laboratory experiments, limited data are available on the removal of engineered nanoparticles after skin contact. Our finding raises questions about the potential consequences of nanoparticles remaining on the skin and whether alternative washing methods should be proposed. Further studies on skin decontamination beyond use of soap and water are needed to improve the understanding of the potential health consequences of dermal exposure to nanoparticles.

Read more: Journal of Occupational and Environmental Hygiene Accepted author version posted online: 20 Apr 2017 (Available with an AIHA membership)
Agency-by-Agency Look at Trump's Budget

How President Donald Trump's proposed $4.1 trillion federal spending plan would affect individual government agencies.

Read more:  
http://abcnews.go.com/Politics/wireStory/agency-agency-trumps-budget-47601656

Arizona Warned Over Improperly Slashing Workplace Safety Penalties

An investigation by federal OSHA officials has found the Industrial Commission of Arizona’s practice of arbitrarily reducing employers’ penalties for safety violations is undermining the deterrent power of those penalties and is not permitted under existing policies.

The investigation also determined the governor-appointed commission “has been operating outside of its legal authority” by reclassifying the severity level of safety violations recommended by inspectors at the Arizona Division of Occupational Safety and Health, or ADOSH.

Read more:  
OSHA Suspends Rule Requiring Firms Report Injury and Illness Data Electronically

The Labor Department on Wednesday suspended an Obama-era rule requiring that companies electronically report their injury and illness records, a move that effectively keeps these records from being publicly disclosed for the immediate future.

Several business groups, including the Associated Builders & Contractors, Associated General Contractors of America and the National Association of Home Builders, had challenged the 2016 Occupational Safety and Health Administration rule in court and lobbied the administration to jettison it on the grounds that it could unfairly damage the reputation of some of their members.


Issuance of Final Guidance Publications – 5 Skin Notation Profiles

NIOSH announces the availability of the following final 5 Skin Notation Profiles:
- Acrylic acid [CAS No. 79-01-7],
- Dichlorvos [CAS No. 62-73-7],
- Morpholine [CAS No. 110-91-8],
- Ethyl p-nitrophenyl phenylphosphorothioate (EPN) [CAS No. 2104-64-5],
- Dioxathion [CAS No. 78-34-2].

Read more: https://www.federalregister.gov/document
Army Industrial Hygiene News and Regulatory Summary

s/2017/05/03/2017-08887/issuance-of-final-guidance-publications

APHC

Training

Registration & Recordings Currently Available
https://apih.doh.spcilc.army.mil
Dial in: 210-249-4234 or DSN 421-3272
(overseas DSN 312)

NEW 2017 WEBINARS!!

2017

IH LEADERS WEBINARS

April 26th 0900 ET
Go Army Ed Funding For The IH
Dial-In Access Code 29314#

June 21st 0900 ET
Army Career Tracker For the IH
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Aug 23rd 0900 ET
The IH Career Program CP12
Dial-In Access Code 11665#

Oct 25th 1100 ET
SMART Objectives for the IH
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This month’s featured self-development material on blackboard:

- **Analytical Chemistry**
  - Interview with PHC Analytical Lab Manager (1 hr)
  - Sampling Technical Guide 141 and Beyond (1.5 hr)

- **Biohazards**
  - Biohazards (Intermediate - 2 hr)
  - Competency Verification: Biohazard (1 hr)
  - Introduction to Biosafety Cabinets and BSL Labs (0.5 hr)

- **IH Program/Project Management**
  - Industrial Hygiene Management and Ethics (0.5 hr)

- **Thermal Stressors**
  - Thermal Stressors (1.25 hr)

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- Cancer in the Military
- Taming The SEG Monster
- Don’t Be Afraid of the Big Bad Budget
- De-Mystifying The Metrics
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April 11th 0900 ET (Special Ed.)
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Dial-In Access Code 67180#

May 3rd 0900 ET
Re-Invigorating Radiation
Dial-In Access Code 74477#

July 12th 0900 ET
Chase Away IH
Managerial Nightmares
Dial-In Access Code 47140#

Sept 12th 0900 ET
Data Integrity:
When IH Data Goes to Court
Dial In Access Code 33655#

Nov 8th 0900 ET
Speedy Ventilation Data Entry
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AIHA HPECC Recordings: get certificates just for watching
- Direct Reading Instruments for the Practicing IH http://cc.callinfo.com/play?id=5v7jxv
- Expedient Engineering Controls for Epidemics and Terrorism Events http://cc.callinfo.com/play?id=8elyth
- You've got something on your face (and hands) http://cc.callinfo.com/play?id=38yajj
- Lessons learned in selecting an all-hazards suite of direct reading instruments http://cc.callinfo.com/play?id=4yuvrz
- Computational Fluid Dynamics, Can It Truly Benefit the Industrial Hygienist or is It Just Colorful Fluid Dynamics? http://cc.callinfo.com/play?id=dl1n5xp

Don't want to miss any more opportunities like these? Join HPECC on Facebook today. https://www.facebook.com/groups/AIHA.HPECC/
Army Industrial Hygiene News and Regulatory Summary

DOEHRS-IH

What's new with Army DOEHRS-IH?

Face to Face Training Opportunities: (APG, MD bldg. 6008 - 28 seats)

2017 Army DOEHRS-IH Initial COURSE DATES:
- Jun 12-16
- Aug 14-18
- Oct 16-20

DOEHRS-IH Super Stars:

Fort Meyer is our next rising star! Fort Meyer IH has begun incorporating Army IH Business Practices into their DOEHRS-IH location tree. Army enterprise is promoting use of Army IH Business Practices based on trend and gap analysis done over many years. ABP provides DOEHRS users with a more functional and less administratively heavy approach to capturing our data and helps standardize use across the Army.

Shop/Building Naming consistent with Army

One Building-One Shop

Client Folder - Building Folder - Shop
Professional Development and Career Programs

For Army Industrial Hygienists and Industrial Hygiene Technicians, Professional Development is through the Army Safety and Occupational Health (SOH) Career Program, known as Career Program 12 (CP-12).

Career Programs were established to ensure there is an adequate base of qualified and trained professional, technical, and administrative personnel to meet the Army’s current and future needs.

Planned training and development are essential elements to building a successful career.

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