Elucidating Gene-by-Environment Interactions Associated with Differential Susceptibility to Chemical Exposure

Little is known about why the effects of environmental agents, including industrial chemicals, manufacturing by-products, metals, pesticides, and herbicides differ between individuals within and across populations (Abdo et al. 2015; National Academies of Sciences, Engineering, and Medicine et al. 2016; Blaser et al. 2013). There is strong evidence that gene–environment interactions (GxE) play an important role in health outcomes, and that these interactions are likely a major source of the heterogeneity in chemical response. It is well established that GxE are an important component of the etiology of complex traits and diseases (Hunter 2005). Pharmacogenomic studies have consistently demonstrated that differential susceptibility to chemical exposure is directly related to genetic variation (Johnson 2003; Motsinger-Reif et al. 2013). Thus, for any genetically diverse population, latent genetic variation may contribute to observed differential susceptibility when challenged by chemical exposure. While it is accepted that such GxE interactions are important, there remain significant challenges—both experimental and statistical—in detecting and characterizing such interactions (Rappaport and Smith 2010; Zeise et al. 2013).

Read more: https://ehp.niehs.nih.gov/ehp2662/
Characterization Of Paint Dust Aerosol Generated From Mechanical Abrasion Of TiO₂-Containing Paints

The purpose of the study was to determine the potential for release of titanium dioxide nanoparticles in paint dust. The coatings aerosol resuspension system was developed and used for testing the generation and physical, chemical and morphological properties of paint dust particles from mechanical abrasion (i.e., sanding) of coated wood surfaces. The paint dust emissions from bare and coated wood surfaces with multiple coatings using variable sandpaper grits were evaluated. Substantially higher particle number concentrations were measured for paint dust containing particles in the nano range (particles with aerodynamic diameter less than 100 nm) than those measured for wood dust. The variability of particle number concentration and size distribution of paint dust derived under different conditions indicated that considerable quantities of nanoparticles might be released from mechanical abrasion of painted surfaces that may induce unhealthy exposure conditions. Moreover, spectroscopic and microscopic analysis identified the presence of paint and wood components in paint dust, including titanium dioxide agglomerates that were originally embedded in the paint. The agglomerates were mostly attached to particles with sizes < 100 nm, enabling them to potentially penetrate into the lower respiratory tract. These results demonstrated that the paint dust exposure generation system can provide qualitative and quantitative information on particle emissions and the abundance of nanoparticles from paint sanding in realistic conditions and they may be used to assess occupational and environmental exposures and risks. Furthermore, the prevalence of titanium dioxide nanoparticles in paint dust highlights the potential for exposures of painters and other occupational groups to hazardous paint dust and the
need for protective devices and strategies aiming to reduce exposures to nanoparticles.

*Read more: Journal of Occupational and Environmental Hygiene, Accepted author version posted online: 01 Jun 2018 (Available with AIHA membership)*

**For Job-Related Skin Problems, Best Prevention Unclear**

It’s hard to say whether creams, moisturizers or other preventive measures might help protect workers in many industries from skin damage on their hands that can lead to painful blisters, cracks and infections, a research review suggests.

The analysis focused on so-called occupational irritant hand dermatitis, which can affect employees who regularly come in contact with water, detergents, chemicals and other irritants or who wear gloves during their work day. People at risk include nurses, construction workers, hairdressers, farm workers, restaurant employees and individuals who work in dye, printing and metal industries.


**An in Vitro Model for Quantifying Chemical Transfer from Fabric to and through Skin**

Consumer fabrics may be impregnated or contaminated with chemicals capable of penetrating the skin. Some retail-sourced clothing is known to contain high levels of synthetic chemical additives. Biomonitoring studies have demonstrated that exposure to chemically laden clothing can cause an appreciable rise in urinary metabolite concentrations. Yet the fabric-to-skin-to-blood pathway remains poorly quantified. This study uses an in vitro dermal exposure model to measure the rate at which 7-hydroxycoumarin—a nonvolatile, low molecular weight optical brightening
agent—migrates out of fabric and into and through the skin.

Exposures to Volatile Organic Compounds among Healthcare Workers: Modeling the Effects of Cleaning Tasks and Product Use

Work-related asthma (WRA) is a common, chronic, but preventable respiratory disease, which affects millions of workers in the USA (Dodd and Mazurek, 2016). Previous studies report that 15–22% of adult asthma can be attributed to work (Balmes et al., 2003; Henneberger et al., 2011). Surveillance studies have reported the highest prevalence of current asthma in the healthcare and social assistance industry (10.7%) and healthcare support occupations (12.4%) (Wiszniewska and Walusiak-Skorupa, 2014; Dodd and Mazurek, 2016; Mazurek and Weissman, 2016). Epidemiologic studies have reported an increased risk of asthma, rhinitis, and respiratory symptoms associated with cleaning and disinfecting tasks, such as cleaning surfaces and sterilizing instruments (Delclos et al., 2007; Gonzalez et al., 2014), floor stripping and waxing (Obadia et al., 2009), and use of spray products (Obadia et al., 2009; Dumas et al., 2012; Le Moual et al., 2012).

Read more:

Protecting Workers from Lead Hazards at Indoor Firing Ranges

Firing range employers must protect their workers from the hazards of lead exposure. The Occupational Safety and Health Administration (OSHA) Lead Standard (29 CFR 1910.1025) requires that in a workplace with potential lead exposure, the employer conduct an initial determination of workers...
airborne exposure to lead. If a worker is exposed at or above the action level (AL) or above the permissible exposure limit (PEL) for lead, additional requirements apply. This fact sheet provides firing range employers with information on how their workers can be exposed to lead and summarizes the provisions and requirements of the Lead Standard that apply to firing ranges. For more complete information on lead and detailed requirements under the Lead Standard, visit OSHA’s Safety and Health Topics Page on Lead.

Read more: https://www.osha.gov/Publications/OSHA3771.pdf

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**Radiation**

**NRC Issues Report on FY2017 Abnormal Occurrences**

The Nuclear Regulatory Commission has released to Congress its report on abnormal occurrences during fiscal year 2017. This is an annual report for the NRC, and it details the evaluation of each incident by the agency, state agencies, and licensees, and steps taken to ensure the incidents aren’t repeated.

This year’s report lists 11 medical events involving radioactive materials. Five happened at NRC licensees during FY2017, and "all were medical events involving misadministration of radioactive material during cancer detection or treatment," according to the agency. Six others happened in what are called Agreement States -- the NRC has agreements in place with 37 states under which the states regulate industrial and medical uses of radioactive materials. These six also were medical events.

New Underground Ventilation System under Construction at WIPP

U.S. Department of Energy officials joined with local community leaders on June 14 for the groundbreaking ceremony of a new underground ventilation system for DOE's Waste Isolation Pilot Plant (WIPP) in Carlsbad, N.M. The new Safety Significant Confinement Ventilation System (SSCVS) will allow for increased waste shipments to WIPP by allowing mining, waste emplacement, rock bolting, and maintenance activities to occur simultaneously.

Read more: https://ohsonline.com/articles/2018/06/20/new-underground-ventilation-system.aspx

ISEA 138: Raising the Standard for Hand Impact Protection

The bones and soft tissues in the back of the hand are all vulnerable to impact injuries, varying from bumps and bruises to severe bone fractures. Many people mistakenly believe that hand impact injuries only affect a narrow range of industries, such as the offshore oil and gas sector, mining, and construction. In reality, the market is much wider, with impact-related injuries also being a common danger for manufacturing, warehouse, and transport workers.

Read more: https://ohsonline.com/articles/2018/06/01
Healthy Diets Linked to Lower Risk of Hearing Loss in Women

The older you become, the more likely you’ll be to have hearing loss. Experts estimate that about one in three Americans between the ages of 65 and 74 has hearing loss. Among those older than 75, an estimated one of every two people has hearing loss.

There are a number of reasons for losing hearing as you age. Just like other parts of the body, the ear and its nerve pathways can change over time. In addition, certain diseases and medical treatments can be toxic to the ears. Long-term exposure to sounds that are too loud or last too long can cause hearing loss as well.


Preventive Medicine

Educational Interventions Decrease Sunburns among Heavy Equipment Operators

Background: "The rates of melanoma have been increasing in recent decades in the United States, and outdoor workers are at an increased risk for developing this deadliest form of skin cancer," said Duffy. "We wanted to investigate how behavioral interventions can affect sunscreen use and
sunburning among operating engineers as a way to prevent skin cancer."
While prior studies have indicated that interventions can result in beneficial sun-safety behaviors among outdoor workers, a systematic analysis revealed that this population had inadequate sun-protective behaviors. Furthermore, in a previous analysis, Duffy and colleagues found that approximately two-thirds of operating engineers reported rarely or never wearing sunscreen, even though 80 percent of this population reported spending four to five hours per day in the sun during summer work hours. The use of sunscreen and protective clothing can mitigate exposure to UV radiation and decrease the risk of developing skin cancer.

**Read more:**

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**UV-Light Cleaning Shown to Cut Superbugs Hospital-Wide**

A new study led by researchers from Duke University has found that adding short-wavelength ultraviolet-C light (UVC) to standard room cleaning strategies modestly decreases hospital-wide incidence of two common healthcare-associated infections. The randomized controlled trial, conducted at nine hospitals in the southeastern United States, found that enhanced terminal room disinfection with UVC in a subset of rooms previously occupied by patients colonized or infected with multidrug-resistant organisms (MDROs) led to a decrease in hospital-wide incidence of *Clostridium difficile* and vancomycin-resistant enterococci (VRE). The results, published yesterday in *The Lancet Infectious Diseases*, were from a secondary analysis of a 2017 study that found that adding a UVC device to standard room disinfection in high-risk rooms decreased the risk of subsequent acquisition of *C. difficile* and other MDROs.

**Read more:**
CDC Profiles Outbreaks Linked To Untreated Recreational Water

As many people head to beaches and other bodies of water for the Fourth of July holiday, the US Centers for Disease Control and Prevention (CDC) provided a snapshot of outbreaks linked to untreated recreational water and said specific steps can minimize the risk of getting sick. Writing in today’s issue of *Morbidity and Mortality Weekly Report (MMWR)*, researchers analyzed 140 outbreaks involving untreated water that occurred between 2000 and 2014, sickening at least 4,958 people from 35 states, 2 of them fatally.


White House Wants to Cut this Public Health Service Corps by Nearly 40 Percent

The White House is proposing to reduce by nearly 40 percent the uniformed public health professionals who deploy during disasters and disease outbreaks, monitor drug safety and provide health care in some of the nation’s most remote and disadvantaged areas.

The proposal is part of a plan announced last week by the Office of Management and Budget to overhaul the federal government. It would cut the size of the U.S. Public Health Service Commissioned Corps from its current 6,500 officers to “no more than 4,000 officers.”

FDA Releases New Guidance on Food Defense

The US Food and Drug Administration (FDA) released the first of three installments of draft guidance on the intentional adulteration (IA) rule, part of the Food Safety and Modernization Act (FSMA).

The rule is meant to guide the food industry on reducing the risk of exposing food facilities to IA, such as acts of terrorism. Unlike other FSMA rules that address specific foods or hazards, IA will require preventive measures for reducing vulnerabilities at all domestic and foreign companies that are required to register with the FDA as food facilit


Environmental Health


Buildings consume nearly 40% of primary energy production globally. Certified green buildings substantially reduce energy consumption on a per square foot basis and they also focus on indoor environmental quality. However, the co-benefits to health through reductions in energy and concomitant reductions in air pollution have not been examined. We calculated year by year LEED (Leadership in Energy and Environmental Design) certification rates in
six countries (the United States, China, India, Brazil, Germany, and Turkey) and then used data from the Green Building Information Gateway (GBIG) to estimate energy savings in each country each year. Of the green building rating schemes, LEED accounts for 32% of green-certified floor space and publically reports energy efficiency data. We employed Harvard’s Co-BE Calculator to determine pollutant emissions reductions by country accounting for transient energy mixes and baseline energy use intensities.

Read more: http://www.nature.com/articles/s41370-017-0014-9

Design and Sampling Methodology for a Large Study of Preschool Children's Aggregate Exposures to Persistent Organic Pollutants in Their Everyday Environments

Young children, because of their immaturity and their rapid development compared to adults, are considered to be more susceptible to the health effects of environmental pollutants. They are also more likely to be exposed to these pollutants, because of their continual exploration of their environments with all their senses. Although there has been increased emphasis in recent years on exposure research aimed at this specific susceptible population, there are still large gaps in the available data, especially in the area of chronic, low-level exposures of children in their home and school environments. A research program on preschool children’s exposures was established in 1996 at the USEPA National Exposure Research Laboratory. The emphasis of this program is on children's aggregate exposures to common contaminants in their everyday environments, from multiple media, through all routes of exposure. The current research project, “Children’s Total Exposure to Persistent Pesticides and Other Persistent Organic Pollutants,” (CTEPP), is a pilot-scale study of the exposures of 257 children, ages 1½–5 years, and their primary adult caregivers to contaminants in their everyday surroundings.

Read more: http://www.nature.com/articles/7500326
Army Industrial Hygiene News and Regulatory Summary

Congress Aims to Force Pentagon Reform on Open Burning of Munitions

The next round of Department of Defense funding will come with an important requirement: Congress wants the Pentagon’s outmoded and highly toxic practice of burning old munitions and other explosives in the open air to finally come to a stop.

The language of the 2019 National Defense Authorization Act made public this week, which proposes $717 billion in spending, also demands that the Pentagon report back to Congress with a specific plan for ending the centurylong burning of munitions.

Read more: https://www.propublica.org/article/congress-aims-to-force-pentagon-reform-on-open-burning-of-munitions

Ergonomics

Exposure to Upper Arm Elevation during Work Compared to Leisure among 12 Different Occupations Measured with Triaxial Accelerometers

Regarding prevention of neck and shoulder pain (NSP), unsupported arm elevation is one factor that should be taken into account when performing work risk assessment. Triaxial accelerometers can be used to measure arm elevation over several days but it is not possible to differentiate between supported and unsupported arm elevation from accelerometers only. Supported arm elevation is more likely to exist during sitting than standing. The aim of the study was to evaluate the use of whole workday measurements of arm elevation with accelerometers to assess potentially harmful work exposure of arm elevation, by comparing arm elevation at work with arm elevation during leisure, in a population with diverse work tasks, and to assess how the exposure parameters were
modified when upper arm elevation during sitting time was excluded.

Read more:

Safety

Evaluation of the Impact of Ambient Temperatures on Occupational Injuries in Spain

The health effects of temperatures have been extensively studied, particularly regarding mortality and morbidity (Basu 2009; Gasparrini et al. 2015b). A study conducted in 13 countries estimated that 7.29% of total mortality can be attributable to cold temperatures and 0.42% to heat (Gasparrini et al. 2015b). So far, the majority of the studies have considered counts of deaths, hospitalizations, or emergency visits as a health indicator. Extreme ambient heat has important consequences also in the occupational sector, with some studies reporting important losses in work capacity and productivity linked to climate warming, with associated costs amounting to between 0.1% and 0.5% of GDP (Kjellstrom et al. 2016; Zander et al. 2015; Dunne et al. 2013; Hübler et al. 2008). Extreme heat, however, can have additional consequences in the occupational sector, for example, through increasing the risk of suffering occupational injuries. Some studies have suggested this link, also applicable to cold temperatures, but the evidence is still limited to a small number of studies with participants who experienced relatively few injuries and with a limited geographic extent (Bonafede et al. 2016).

Read more:
https://ehp.niehs.nih.gov/ehp2590/
The Effect of Workforce Mobility on Intervention Effectiveness Estimates

To affect change in workers’ health and safety, worksite-based interventions usually target a multilevel host of factors that may include the organizational, physical, and/or social environment of workers (OSHA, 2012). Literature reviews demonstrate that worksite-based interventions that address changes in the work environment in addition to targeting specific attributes or behaviors of workers are associated with greater success (Sorensen and Barbeau, 2005; Cherniack et al., 2011).

The activities involved in worksite-based intervention programs usually take less than 6 months in duration, and most workers are at their worksites for longer than 6 months (Sorensen et al., 2005; Barbeau et al., 2007; Kennedy et al., 2010); however, there are some exceptions as some workplaces are highly dynamic. Consider worksites in the construction industry that feature a constantly changing array of sub-contractors specializing in different aspect of the construction processes working under the umbrella of a general contractor and owner.

Read more: https://academic.oup.com/annweh/article/62/3/259/4830164

3 Injured In Fire at Army Ammunition Plant in Virginia

A news release issued Tuesday says a flash fire at the Radford Army Ammunition Plant occurred in a nitrocellulose drying facility Monday evening. The injured workers were being treated at a hospital in North Carolina.


Three people have been injured in a fire at the main propellant-manufacturing facility for the U.S. Department of Defense, and production at the Virginia site has been suspended.
This Lighter, Stronger Combat Helmet Is Headed to Soldiers

In about a year, a helmet under development that shaves nearly half of the weight off soldiers’ current helmet and provides better protection will likely be on soldiers’ heads.

It uses the same materials, shedding an additional accessory currently fielded, all through a change in how the plastic used to make it is processed.

Developers with the Army’s Natick Soldier Research, Development and Engineering Center have recently showcased the NSRDEC Prototype Helmet after first sharing some of the work being done on the helmet last year.


Fort Detrick Biosafety Work Could Be Threatened With Temporary Shutdown of Lab Operations

The recent heavy flooding that caused millions of dollars in infrastructure damage and shook up local homes and businesses could also affect the timely completion of biosafety work at containment laboratories at Fort Detrick.

The U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) halted all operations at Biosafety Level 3 and 4 laboratories on May 31 due to ongoing repairs at the Fort Detrick Steam Sterilization Plant because of problems
stemming from heavy rain and flooding earlier in the month.

Read more:

NFPA Moving CO Alarm Requirements into Fire Alarm Code

The National Fire Protection Association announced last week that, with its Technical Meeting in Las Vegas concluded, the requirements of NFPA 720, Standard for the Installation of Carbon Monoxide Detection and Warning Equipment are one step closer to issuance by the Standards Council as incorporated into the 2019 edition of NFPA 72®, National Fire Alarm and Signaling Code®. NFPA 720, which has worked to minimize occupants' risk to carbon monoxide in homes and other occupancies since it was first issued in 2003, will be withdrawn once the 2019 edition of NFPA 72 is issued by the Standards Council this August, according to the NFPA news release.

Read more:

Emergency Preparedness

Creating a 'Comfort Zone' for Emergency Equipment Water Temperature

Moving water transfers heat, either increasing the temperatures of the objects it contacts or decreasing them. Heat transfer, via moving water, made twentieth century man more productive and more comfortable. It sped up transportation and made a wealth of innovative products possible. But while the physical properties of heat transfer via water movement can certainly be beneficial, there are many instances when temperatures must be controlled within a high and low range to
avoid injury. For many years, industrial emergency equipment was not one of those instances. The water that flowed through emergency showers and eyewashes was subject to climatic, source affected, and other ambient variables that could raise it to injurious temperatures or lower it to downright freezing temperatures.

Read more:

Deployment Health

A Third of U.S. Military Injuries in Iraq, Afghanistan Not From Battle

Falls, car crashes and other accidents off the battlefield cause one-third of injuries and about one in 10 deaths among U.S. service members deployed to Iraq and Afghanistan, a U.S. study suggests. Researchers examined data on almost 30,000 casualties from 2003 to 2014 in the Department of Defense Trauma Registry, including cases that happened both on and off the battlefield. Overall, roughly half of these injuries were caused by explosives, and another 15 percent were from gunshot wounds.

Read more:
This Army Unit Will Be First to Test an Exoskeleton That Lightens Combat Load

Soldiers with the 10th Mountain Division will be the first to test the long-awaited exoskeleton that developers say can reduce injuries, carrying loads and help troops move around the battlefield with ease. The U.S. Army Natick Soldier Research, Development and Engineering Center partnered with the division in February to identify, evaluate and transition exoskeleton technology to the Army. NSRDEC has led exoskeleton efforts for the Army for a number of years. One of the more advanced products that will soon hit the division is made by Lockheed Martin. Army Times spoke recently with company officials about the ONYX device, which will go through phases of testing, beginning as early as this fall.

Read more: https://www.armytimes.com/news/your-army/2018/06/05/this-army-unit-will-be-first-to-test-an-exoskeleton-that-lightens-combat-load/

A Systematic Review of the Routes and Forms of Exposure to Engineered Nanomaterials

Background
Establishing the routes of exposure is a fundamental component of the risk assessment process for every dangerous substance. The present study systematically reviews the available literature to assess the relevance of the different routes and forms of exposure that are of concern for the protection of workers during the manufacture, handling, or end-use of engineered nanomaterials (ENMs).
Methods
A systematic review of the peer-reviewed literature published between 2000 and 2015 was completed. Only studies including measurements of inhalation or dermal exposure were selected and used to identify the exposure situations for which the measurements were collected. The identified exposure situations were grouped based on the type of ENM (i.e. carbon nanotubes and fibres, silicon-based, titanium dioxide, other metal oxides, pure elemental metals, and other ENMs) and activity involved.


Draft Bill Would Significantly Change NSR Criteria

A two-pronged effort—one by the EPA and one by Congress—is under way to reform the Clean Air Act’s (CAA) New Source Review (NSR) program. In December 2017 and March 2018, EPA Administrator Scott Pruitt issued two memorandums for Agency regional offices, which somewhat loosened the criteria for determining if NSR is required. Now, House Republicans have issued a discussion draft of a bill that would significantly change the NSR criteria. The bill and industry’s perennial complaints about NSR were discussed at a May 16, 2018, hearing of the Committee on Energy and Commerce’s Subcommittee on Environment.

Read more: https://ehsdailyadvisor.blr.com/2018/05/draft-bill-significantly-change-nsr-criteria/
Silica Enforcement: OSHA Provides 30-Day Transition for General Industry

Occasionally, when OSHA issues new or revised standards, there are two dates of importance for employers subject to those standards. The first is the date OSHA will make compliance mandatory. The second is the date OSHA states it will begin enforcing noncompliance. In some cases, the two dates may be the same. But with standards that may pose unusual compliance challenges to businesses, and particularly small businesses, OSHA may allow a short transition period after the compliance date during which the agency will assist employers that are falling short but making good-faith efforts to meet the requirements.

Read more: https://ehsdailyadvisor.blr.com/2018/06/silica-enforcement-osha-provides-30-day-transition-general-industry/

Falls Remain Deadliest Hazard

According to a recent study by the National Institute for Occupational Safety and Health (NIOSH), falls are the second leading cause of work-related fatalities in the United States. Over the past 11 years, 14 percent of all job-related deaths were caused by falls, according to NIOSH researchers. According to the Occupational Safety and Health Administration (OSHA), falls are the number one cause of death in the construction industry. OSHA considers falls one of the “Fatal Four” causes of death, along with electrocution, struck-by, and caught-in or between accidents. Like all of these work-related fatalities, falls are preventable.

Data Sources
The NIOSH researchers looked at the Census of Fatal Occupational Injuries as a data source. They examined the rates of deaths from falls in different occupations, and found that between 2003 and 2014,
nearly 9,000 workers were killed as a result of a fatal fall. Other than construction and extraction, the leading industries for fall-related fatalities were installation, maintenance, and repair.


EPA

**Lower Lead Dust Exposure Standards Proposed by EPA**

Citing evidence that no level of lead in the blood of children is safe, the EPA has proposed to lower its current dust-lead hazard standards for floors and windowsills.

Specifically, the Agency is seeking to lower the current dust-lead hazard standards, which was established in 2001, from 40 micrograms per square foot (µg/ft²) and 250 µg/ft² to 10 µg/ft² and 100 µg/ft² on floors and windowsills, respectively. The EPA says it selected these levels because they are technologically achievable.


**New Use Rule for Asbestos Proposed**

As part of a trio of actions taken under the 2016 amendments to the Toxic Substances Control Act (TSCA), the EPA has proposed the first-ever Significant New Use Rule (SNUR) for asbestos.

The proposal lists 16 uses of asbestos that the Agency says are not currently occurring; therefore, under the proposal, any person who intends to manufacture (a term that includes import) or process asbestos for any
of these uses would be required to notify the EPA 90 days before taking such action. The notification would initiate EPA’s review of the new use. Should the review indicate that the new use presents an unreasonable risk of injury to health or the environment, the Agency is empowered under TSCA to initiate actions to restrict or even ban that use.

Read more: https://ehsdailyadvisor.blr.com/2018/06/new-use-rule-asbestos-proposed/
HOSPITAL & LABORATORY VENTILATION COURSE (40HR)

Aberdeen Proving Ground, MD
April 29-May 3, 2019
Registration Open at www.aihp.dohs.elclearn.army.mil
INDUSTRIAL VENTILATION COURSE (40HR)

Aberdeen Proving Ground, MD
May 6-10, 2019
Registration Open at
WWW.AIPF-DOHS.ELC.LEARN.ARMY.MIL
FREE
Online
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Self-enroll

HAZWOPER REFRESHER (8HR)

Topics include:
Hazwoper Regulations
Medical Surveillance
Emergency Preparedness
Decontamination
Spill Containment
GHS
Site Safety & Health Plan
Non-Engineering Controls
Site Characterization
Site Safety, Security, and Emergencies
Hazard Identification
Confined Spaces

Registration Open at
WWW.AIHY-DOHS.ELC.LEARN.ARMY.MIL
2019 Training Schedule (traditional classroom events)

December 3-7, 2018 Army DOEHRs-IH Initial Course (First Quarter)
February 11-15, 2019 Army DOEHRs-IH Initial Course (Second Quarter)
April 29- May 3, 2019 Army DOEHRs-IH Initial Course (Third Quarter)
April 29- May 3, 2019 Healthcare & Laboratory Ventilation Course
May 6-10, 2019 Industrial Ventilation Course
May 13-17, 2019 Blueprint Reading & Design Review
August 12-16, 2019 Army DOEHRs-IH Initial Course (Fourth Quarter)

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Registration/Sign-up Rosters at https://aiph-dohs.elc.learn.army.mil
Are you looking for a course that will provide Army specific Industrial Hygiene self-development?

Do you prefer embedded knowledge checks and multiple attempt training?

Do you need Maintenance Points for a Professional Certification?

ARMY IH TOPICS ONLINE COURSE (40HR)
IH Assessment Adventure

Join on July 11 at 0900ET
https://conference.apps.mil/webconf/ManageYourIHmonster
(Dial in info will be posted in the chat box)
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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