

March 2020

Issue 102

# Army Industrial Hygiene News and Regulatory Summary

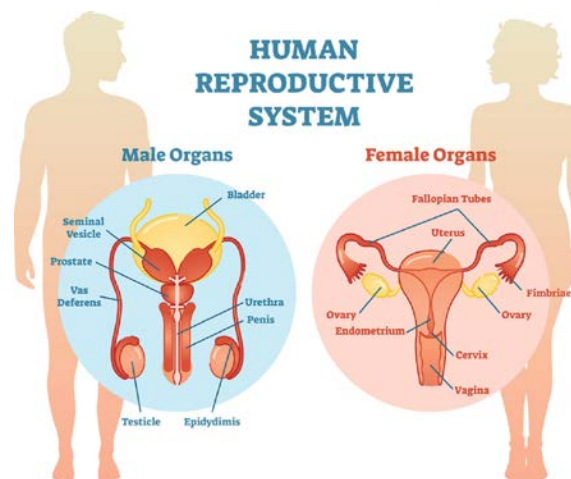
## Hazardous Substances

### Special Interest Articles:

- [Dermal Exposure](#)
- [N95 Decon](#)
- [Fast COVID-19 Test](#)
- [Telework Ergo Tips](#)
- [Counterfeit N95](#)

### Potential Male and Female Reproductive Toxicants: Applying the Key Characteristics Approach

With more than 40,000 chemicals currently in use in the United States,<sup>1</sup> it would be a seemingly impossible task to determine how all of them affect human health. With so much uncertainty, how should investigators prioritize which chemicals to study? A new “key characteristics” approach may help. Two papers recently published in *Environmental Health Perspectives* outlined this approach in identifying key characteristics of chemicals that cause reproductive toxicity in females<sup>2</sup> and males.<sup>3</sup>



Read more:

<https://ehp.niehs.nih.gov/doi/10.1289/EHP6214>

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## ATSDR Finalizes Toxicological Profiles for Methyl Bromide, Other Chemicals



The Agency for Toxic Substances and Disease Registry has published a final toxicological profile for bromomethane, or methyl bromide, a gas primarily used to make other chemicals. According to ATSDR, the production and use of bromomethane was phased out in the United States in 2005, and the U.S. Environmental Protection Agency allows only limited uses of bromomethane because it depletes the ozone layer. Another use of bromomethane is as a fumigant to control

pests in agriculture and shipping. ATSDR stresses that workers are more likely than members of the general population to be exposed to bromomethane by inhalation. The agency explains that workers who breathed bromomethane experienced health effects such as lung damage and signs of nervous system damage, including dizziness, muscle weakness, and seizures. According to the toxicological profile, bromomethane vapor can also irritate workers' eyes and skin.

*Read more:*

<https://www.aiha.org/news/at-sdr-finalizes-toxicological-profile-for-methyl-bromide-other-chemicals>

## **PHMSA Issues Temporary Relief to Companies Transporting Hand Sanitizer by Highway**

On April 2, in support of the critical need to move hazardous materials during the COVID-19 public health emergency, the U.S. Department of Transportation (DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA) issued a temporary relief notice for companies shipping hand sanitizers used for sanitation purposes. Intended to make sanitation products readily available during the public health emergency, the relief applies to hand-sanitizer products that meet certain specifications and are shipped by highway only; shipments made by air, rail or water



*Read more:*

<https://www.thetrucker.com/trucking-news/the-nation/phmsa-issues-temporary-relief-to-companies-transporting-hand-sanitizer-by-highway>

## **Estimated Dermal Exposure to Nebulized Pharmaceuticals for a Simulated Home Healthcare Worker Scenario**



The duties of home healthcare workers are extensive. One important task that is frequently performed by home healthcare workers is administration of nebulized medications, which may lead to significant dermal exposure. In this simulation study conducted in an aerosol exposure chamber,

we administered a surrogate of nebulizer-delivered medications (dispersed sodium chloride, NaCl) to a patient mannequin. We measured the amount of NaCl deposited on the exposed surface of the home healthcare worker mannequin, which represented the exposed skin of a home healthcare worker. Factors such as distance and position of the home healthcare worker, room airflow rate and patient's inspiratory rate were varied to determine their effects on dermal exposure. There was a 2.78% reduction in dermal deposition for every centimeter the home healthcare worker moved away from the patient. Increasing the room's air exchange rate by one air change per hour

increased dermal deposition by about 2.93%, possibly due to a decrease in near field particle settling. For every 10-degrees of arc the home healthcare worker is positioned from the left side of the patient toward the right and thus moving into the ventilation airflow direction, dermal deposition increased by about 4.61%. An increase in the patient's inspiratory rate from 15–30 L/min resulted in an average of 14.06% reduction in dermal deposition for the home healthcare worker, reflecting a relative increase in the aerosol fraction inhaled by the patient. The findings of this

study elucidate the interactions among factors that contribute to dermal exposure to aerosolized pharmaceuticals administered by home healthcare workers. The results presented in this paper will help develop recommendations on mitigating the health risks related to dermal exposure of home healthcare workers.

*Read more: Journal of Occupational and Environmental Hygiene, Published online: 05 Mar 2020 (Available with AIHA membership)*

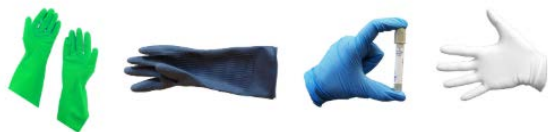
### Chemical Decontamination of Hazardous Drugs: A Comparison of Solution Performances

Over the past 40 years, numerous actions have been undertaken to decrease the contamination of hospital facilities by intravenous conventional antineoplastic drugs (ICADs) such as centralizing compounding in pharmacies, using personal protective equipment, specific compounding, or infusion devices. As recently proposed in the <USP800> monograph, an additional specific decontamination step must be envisaged. A recent literature review analysed and discussed the different solutions tested in terms of decontamination efficacy. This article aims to discuss the performance of these solutions in the framework of aseptic compounding.



*Read more:*  
<https://academic.oup.com/annweh/article-abstract/64/2/114/5680131?redirectedFrom=fulltext>

## Glove Permeation of Chemicals: The State of the Art of Current Practice—Part 2. Research Emphases on High Boiling Point Compounds and Simulating the Donned Glove Environment



This second part of the review of the 21<sup>st</sup> century literature on glove permeation is divided into the following major themes; permeation data and mathematical models, exposure/risk assessment, and manufacturer data. The major issues in the literature were the demonstrations that increasing temperature and applying forces increased permeation; and that glove manufacturer data were sometimes not reproducible. Double gloving of disposable gloves was found to be effective in resisting chemical permeation for short periods of time. Harmonization of standards and commercial glove classifications were called for at conditions that were closer to the temperature and applied forces actually present in the workplace, including whole

glove testing and quantitative rather than just qualitative criteria. More research was recommended in each section and subsection with particular emphasis on defining the efficiency of solid phase collection devices, and more data in areas like exposure to cosmetics, household products, liquid foods, drinks, and cleaning liquids. More research in exposure assessment for permeated chemicals with sensors on the inner glove surface and on the skin was called for. Finally, it was decided that the state of the art of current practice was in a situation that needed the permeation standards, research, and the permeation charts of glove manufacturers to be at conditions that better reflected those encountered by workers with donned gloves.

*Read more: Journal of Occupational and Environmental Hygiene, Published online: 25 Mar 2020 (Available with AIHA membership)*

## Radiation

### Patient Radiation Exposure Down 20 Percent in United States

Between 2006 and 2016, patients in the United States were exposed to 20 percent less medical radiation. This decrease halts the nearly 25-year uptick in exposure.

The data, published Tuesday in *Radiology*, details a stark change from the last major report to measure patient radiation exposure. That study revealed a six-fold increase nationwide between 1980 and 2006, sounding an alarm bell for a need to control radiation doses whenever possible.



Read more:

<https://www.diagnosticimaging.com/low-dose/patient-radiation-exposure-down-20-percent-united-states>

### Research Shows Significant Difference in Radiation Response between Sexes



Women undergoing radiotherapy for many cancers are more likely than men to be cured, but the side effects are more brutal, according to one of Australia's most experienced radiation oncology medical physicists.

University of South Australia (UniSA) Professor of Medical Radiation, Eva Bezak, says women are generally more sensitive to radiation than men, but this is not considered in international guidelines for radiation dosages.

Current guidelines are generally based on a person's height, weight or BMI, and radiobiological responses of the general population.

Read more: <https://www.news-medical.net/news/20200330/Research-shows-significant-difference-in-radiation-response-between-sexes.aspx>

## Ventilation

### Tips for Assessing Indoor Air Quality in the Laboratory

Indoor air quality, known as IAQ, and more broadly indoor environmental quality, began with a few cases of tight building syndrome and mushroomed into prominence due to cases of multiple chemical sensitivity and indoor mold contamination. Now, thanks to efforts from the Environmental Protection Agency (EPA), Occupational Safety and Health Administration (OSHA), American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), and the US Green Building Council (USGBC), we have a robust knowledge base for dealing with these important issues.



Read more:

<https://www.labmanager.com/lab-health-and-safety/tips-for-assessing-indoor-air-quality-in-the-laboratory-21844>

## PPE

### FDA Approves Battelle's Process to Decontaminate N95 Face Masks but Limits It to 10,000 per Day



The Food and Drug Administration has approved the limited use of a process that would clean much-needed N95 protective face masks and allow them to be reused, the agency said in a release. Columbus-Ohio based Battelle uses a “vapor phase hydrogen peroxide” process to decontaminate the masks being used by healthcare providers and others to protect against the spread of COVID-19. Battelle says its Critical Care Decontamination

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Systems could decontaminate up to 80,000 masks per day.

[battelles-process-to-decontaminate-n95-face-masks-but-limits-it-to-10000-per-day/ar-BB11SfM6](https://www.msn.com/en-us/news/technology/fda-approves-battelles-process-to-decontaminate-n95-face-masks-but-limits-it-to-10000-per-day/ar-BB11SfM6)

Read more: <https://www.msn.com/en-us/news/technology/fda-approves->

## OSHA Provides Temporary Guidance for Respirator Fit-Testing in Healthcare

As the coronavirus pandemic spreads across the country, it is critical for employers to have the tools they need to protect their workers' health. The shortage of N95 respirators during this outbreak has put a strain on healthcare providers and others to provide respiratory protection to workers.



In response to a call from President Trump, the Department of Labor is taking steps to increase the availability of general use respirators for emergency use by healthcare personnel in healthcare facilities. OSHA has issued temporary guidance for its respiratory protection standard, 29 CFR 1910.134, regarding required annual fit-testing of general use respirators.

Read more: <https://www.assp.org/news-and-articles/2020/03/17/osha-provides-temporary-guidance-for-respirator-fit-testing-in-healthcare>

## Noise

### The Association of Occupational Noises and the Prevalence of Metabolic Syndrome



#### Objectives

Previous studies have shown the association of exposure to noise with cardiovascular diseases such as hypertension, however, it is not well known whether the exposure has any effect on metabolic syndrome (MetS). This study



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aimed to quantify and clarify the association between noise exposure and the prevalence of MetS.

### Methods

This cross-sectional study was conducted in 2017 among 518 workers in a thermal power plant industry. According to types of work and 8-h equivalent A-weighted sound pressure level (8-h LAeq), the participants were divided into the following groups: office workers and line-production workers exposed to < 85, 90 to <95, 95 to <100, and

≥100 dBA. We used the National Cholesterol Education Program (NCEP) Adult Treatment Panel III (ATP III) criteria to identify subjects with MetS. The logistic regression was used to determine the odds of MetS among study groups.

*Read more:*

<https://academic.oup.com/annweh/advance-article-abstract/doi/10.1093/annweh/wxaa030/5812590?redirectedFrom=fulltext>

## Preventive Medicine

### Abbott Launches Fastest Point-of-Care COVID-19 Test on Market to Date

Abbott became the latest company to release a COVID-19 diagnostic last week, pledging test turnaround times of as little as five minutes.

The U.S. Food and Drug Administration granted the test emergency use authorization last week. It is meant to run on another Abbott product, the ID NOW platform, which can be used at physicians' offices, urgent care clinics, and hospital emergency departments to deliver positive results in 5 minutes and negative results in 13 minutes. By using the ID NOW platform, Abbott says, the test will be able to take



advantage of the largest molecular point-of-care installed base in the country.

*Read more:*

<https://homelandprepnews.com/stories/46594-abbott-launches-fastest-point-of-care-covid-19-test-on-market-to-date/>

## Eliminating Take-Home Exposures: Recognizing the Role of Occupational Health and Safety in Broader Community Health



REDUCE CONTAMINATION AT HOME

Toxic contaminants inadvertently brought from the workplace to the home, known as take-home or paraoccupational exposures, have often been framed as a problem that

arises due to unsanitary worker behavior. This review article conceptualizes take-home exposures as a public health hazard by (i) investigating the history of take-home contaminants and how they have been studied, (ii) arguing that an ecosocial view of the problem is essential for effective prevention, (iii) summarizing key structural vulnerabilities that lead populations to be at risk, and (iv) discussing future research and prevention effort needs.

Read more:

<https://academic.oup.com/annweh/article-abstract/64/3/236/5716892?redirectedFrom=fulltext>

## Controlling Coronavirus Transmission Using a Mobile App to Trace Close Proximity Contacts

Oxford, United Kingdom. A team of medical researchers and bioethicists at Oxford University has published results today in *Science* that furthers our understanding of coronavirus transmission. This evidence is enabling several international partners, including NHSX, a joint unit comprised of teams from NHS England and the UK's Department of Health & Social Care, and the Norwegian Institute of Public Health (FHI), to assess the feasibility of developing mobile apps for instant contact tracing in record time. If rapidly and widely developed, these mobile apps could help to



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significantly slow the rate of transmission, and support countries to emerge from lockdowns safely, as restrictions are gradually eased.

*Read more:*

[https://www.eurekalert.org/pub\\_releases/2020-03/oubd-cct033120.php](https://www.eurekalert.org/pub_releases/2020-03/oubd-cct033120.php)

### Maryland Lawmakers Applaud CDC's Decision to Reopen Fort Detrick Facility



Federal lawmakers in Maryland commended the Centers for Disease Control and Prevention (CDC) for its move to return the U.S. Army Medical Research Institute of Infectious Diseases (USAMRIID) at Fort Detrick to full operational capacity.

The USAMRIID will now resume conducting its full scope of research on infectious diseases.

The facility has served as the Department of Defense (DoD)'s lead laboratory for medical biological defense research. Research conducted at USAMRIID leads to therapeutics, vaccines, diagnostics, and information that benefit both military personnel and civilians.

*Read more:*

<https://homelandprepnews.com/stories/46681-maryland-lawmakers-applaud-cdcs-decision-to-reopen-fort-detrick-facility/>

### EPA Releases List of Effective Disinfectants to Fight COVID-19

On March 5, 2020, the EPA announced a list of EPA-registered disinfectant products. This is an important step in controlling the spread of the virus and ensuring people are using quality, effective products.

“Using the correct disinfectant is an important part of preventing and reducing the spread of illnesses along with other critical aspects such as hand washing,” said EPA Administrator Andrew Wheeler. “[The]



EPA is providing this important information in a public and transparent manner on disinfectant products to help reduce the spread of COVID-19.”

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The products that appear on the EPA's registered list have qualified for use against COVID-19 through the agency's Emerging Viral Pathogen program. This program allows product manufacturers to provide EPA with data, even in advance of an outbreak, that shows their products are effective against harder-to-kill viruses than

SARS-CoV-2. It also allows the public to gain additional information about these products against the emerging pathogen.

*Read more:*

<https://eponline.com/articles/2020/03/11/epa-releases-list-of-effective-disinfectants-to-fight-covid19.aspx>

### New Coronavirus Stable for Hours on Surfaces



New research finds that the virus that causes coronavirus disease 2019 (COVID-19) is stable for several hours to days in

aerosols and on surfaces. Scientists found that severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2) was detectable in aerosols for up to three hours, up to four hours on copper, up to 24 hours on cardboard and up to two to three days on plastic and stainless steel.

*Read more:*

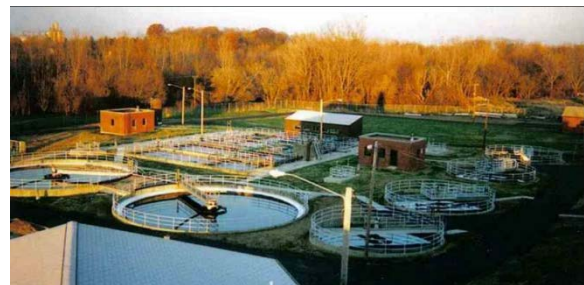
<https://www.sciencedaily.com/releases/2020/03/200317150116.htm>

## Environmental Health

### Wastewater Test Could Provide Early Warning of COVID-19

Researchers at Cranfield University are working on a new test to detect SARS-CoV-2 in the wastewater of communities infected with the virus.

The wastewater-based epidemiology (WBE) approach could provide an effective and rapid way to predict the potential spread of novel coronavirus pneumonia (COVID-19) by picking up on biomarkers in faeces and urine from disease carriers that enter the sewer system.



Rapid testing kits using paper-based devices could be used on-site at wastewater treatment plants to trace sources and

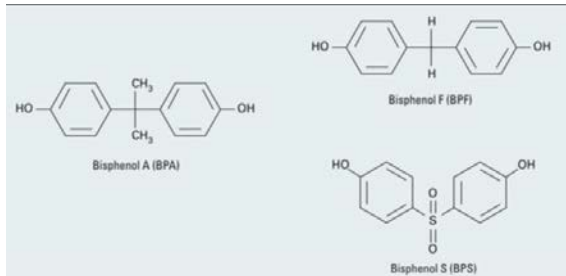
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determine whether there are potential COVID-19 carriers in local areas.

Read more:

[https://www.eurekaalert.org/pub\\_releases/2020-03/cu-wtc033020.php](https://www.eurekaalert.org/pub_releases/2020-03/cu-wtc033020.php)

## Chemicals Used to Replace BPA May Lead to Increased Blood Pressure



Common bisphenol A (BPA) substitutes can affect the developing fetus and cause hypertension in later life, suggests a rodent study accepted for presentation at ENDO 2020, the Endocrine Society's annual meeting. The research will be published in a special supplemental section of the *Journal of the Endocrine Society*.

Chemicals such as bisphenol A (BPA) are widely used in the synthesis of plastics and

are found in numerous consumer products. Most humans are exposed to BPA on a daily basis. BPA disrupts the body's endocrine system by mimicking the hormone estrogen. BPA exposure has been linked with high blood pressure.

Based on studies over the last few decades, the U.S. Food and Drug Administration in 2012 banned the use of this chemical in baby bottles and infant formula packaging. Manufacturers often replace BPA with other chemicals such as bisphenol S (BPS) and bisphenol F (BPF). These substitute chemicals are often found in products labeled "BPA free."

Read more:

[https://www.eurekaalert.org/pub\\_releases/2020-03/tes-cut032520.php](https://www.eurekaalert.org/pub_releases/2020-03/tes-cut032520.php)

## Despite Telework, Stay-At-Home Orders, Not Much Change to Air Quality in DC Area

One outcome that is emerging from the mandated stay-at-home orders and other local initiatives related to the coronavirus pandemic is less traffic on D.C.-area roadways.

But the potential for improved air quality remains to be seen, at least for now.



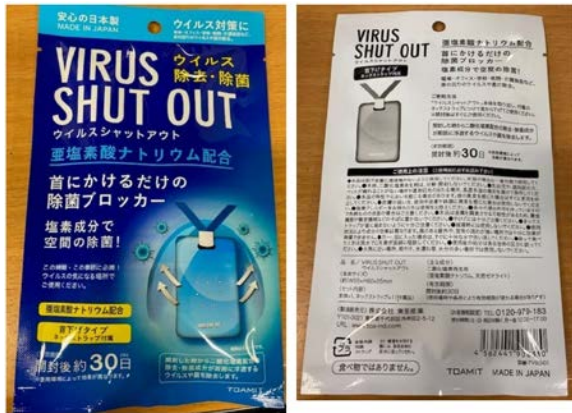
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The official U.S. Air Quality Index, or AQI, forecast for the D.C. region on Wednesday was 21, although the actual number fluctuated throughout the day. Any number under 50 is considered “good” by the Environmental Protection Agency. But there has been no significant change to the AQI since stay-at-home orders were first implemented.

Read more:

<https://wtop.com/local/2020/04/despite-telework-stay-at-home-orders-not-much-change-to-air-quality-in-dc-area/>

## U.S. EPA Acts to Protect the Public from Unregistered “Virus Shut Out” Product Imported into Honolulu and Guam



Today, the U.S. Environmental Protection Agency (EPA) announced it has prevented several shipments of an illegal health product from entering U.S. Pacific ports under federal pesticide laws. The item, Virus Shut Out, is not registered with the EPA. Therefore, its safety and efficacy against viruses have not been evaluated. In addition, its labeling – including directions

for use – is not provided in the English language as required by law, and on-line advertising materials contain misleading claims about its safety and effectiveness.

EPA has been working with U.S. Customs and Border Protection (CBP) to deny entry to the illegal product, which is being imported from Japan and Hong Kong through U.S. ports in Honolulu and Guam. EPA and CBP will continue monitoring for products with illegal pesticidal claims. In addition, EPA has reached out to Amazon to remove the product from their online marketplace. Amazon has taken this step.

Read more:

<https://www.epa.gov/newsreleases/us-epa-acts-protect-public-unregistered-virus-shut-out-product-imported-honolulu-and>

## Ergonomics

### COVID-19 Pandemic: Washington L&I Publishes Home Office Ergo Tips



For people working from home during the COVID-19 pandemic, a new fact sheet from the Washington State Department of Labor & Industries explains how to set up a safe and efficient home workstation.

Released March 24, the fact sheet focuses on five key ergonomic issues:

- Relaxed shoulders
- Supported lower back

- Level head
- Straight wrists
- Supported feet

First, ensure your chair is comfortable and working. While sitting, make sure your keyboard, monitor and mouse are positioned so that your arms, wrists and neck are relaxed. If you're working via a laptop computer, try to use a separate keyboard, mouse and monitor as much as possible.

*Read more:*

<https://www.safetyandhealthmagazine.com/articles/19654-covid-19-pandemic-washington-li-publishes-home-office-ergo-tips>

## Safety

### Saliva Test for Cannabis Could Someday Help Identify Impaired Drivers (Video)

In the U.S., those who consume alcohol and drive are often subjected to roadside stops, breathalyzer tests and stiff penalties if their blood alcohol content exceeds certain limits. Currently, no such test exists for cannabis intoxication, although the substance is known to impair driving, among other activities. Scientists now



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report that they are one step closer to a convenient saliva test for measuring cannabis levels at roadside stops.

Read more:

[https://www.eurekalert.org/pub\\_releases/2020-03/acs-stf021920.php](https://www.eurekalert.org/pub_releases/2020-03/acs-stf021920.php)

## New NIOSH Posters Address Potential Hazards, Controls for 3D Printing



NIOSH recently published two new posters that characterize potential hazards associated with 3D printing and describe work activities that can cause exposure while 3D printing with both filaments ([PDF](#)) and metal powders ([PDF](#)). The posters also suggest the engineering controls, administrative controls, and personal protective equipment that can be used to

prevent exposure during different stages of 3D printing.

The posters identify the hazards of 3D printing with metal powders and filaments, the potential health effects associated with the use of each material, and the activities that can put workers at risk during each stage of the printing process. NIOSH's posters then suggest different engineering and administrative controls that can be used (for example, employing local exhaust ventilation and cleaning work areas frequently) and the PPE that workers can wear to reduce their chance of experiencing health issues.

Read more:

<https://www.aiha.org/news/new-niosh-posters-address-potential-hazards-controls-for-3d-printing>

## Fighting Occupational Burnout in Three Ways

It's beginning to feel like normal news: healthcare workers are on the front line of the COVID-19 pandemic, hospitals are scrambling for supplies and nurses and doctors are being forced to reuse face masks or worse: make them out of scarves.





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The health care industry has been immensely strained the last few weeks—testing is scarce, supplies is dire, morale is low and cases keep climbing. As an industry that already has a high burnout rate, health care professions are more burnt out than ever. One *New York Times* article by organizational psychologist Adam Grant says that over half of doctors and a third of

nurses suffer from burnout, and the consequences are dire.

*Read more:*

<https://ohsonline.com/articles/2020/03/30/fighting-occupational-burnout-in-three-ways.aspx>

### COVID-19 Pandemic: CDC Issues Interim Cleaning, Disinfection Recommendations after Exposure



In light of emerging data on the COVID-19 pandemic, the Centers for Disease Control and Prevention has released interim

environmental cleaning and disinfection recommendations for community facilities with suspected or confirmed cases of the potentially deadly respiratory illness. The guidelines – aimed at limiting the spread of the disease – are focused on community, non-health care facilities such as schools, institutions of higher education, offices, day care facilities, businesses, and community centers that “do, and do not, house persons overnight.”

*Read more:*

<https://www.safetyandhealthmagazine.com/articles/19658-covid-19-pandemic-cdc-issues-interim-cleaning-disinfection-recommendations-after-exposure>

***Emergency Preparedness***

**Reusable Respirators May Be a Suitable Alternative to Disposable Respirators**

Shortages of respiratory protective devices for healthcare personnel are major concerns during the COVID-19 pandemic. A team of researchers at Baylor College of Medicine, Emory University, the University of Texas Health Science Center at Houston and the National Institute for Occupational Safety and Health Centers at the Centers for Disease Control and Prevention have found that reusable respirators may be a suitable alternative to disposable N95 respirators currently in high demand. The study appears in the journal *JAMA*.



*Read more:*

[https://www.eurekalert.org/pub\\_releases/2020-03/bcom-rrm032620.php](https://www.eurekalert.org/pub_releases/2020-03/bcom-rrm032620.php)

**Cal/OSHA Allows Surgical Mask Substitution**



The California Division of Occupational Safety and Health (Cal/OSHA) issued interim guidance requiring healthcare facilities to provide surgical masks during the COVID-19 pandemic when respirators are not available. The California Aerosol Transmissible Diseases (ATD) standard

requires the use of respiratory protection for workers exposed to airborne infectious diseases.

However, the COVID-19 pandemic has resulted in a shortage of N95 filtering facepiece respirators. COVID-19 is a respiratory disease caused by the SARS-CoV-2 virus, first identified in Wuhan City, China, in December 2019. All approved respirators are certified by the National Institute for Occupational Safety and Health (NIOSH).

*Read more:*

<https://safety.blr.com/workplace-safety->



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[news/employee-safety/respiratory-protection/CalOSHA-allows-surgical-mask-substitution/](#)

## Deployment Health

### U.S. Army Raises Health Protection across All Installations

In order to maintain operational readiness around the world and to protect the force, the U.S. Army will raise the Health Protection Condition level to Charlie across all installations to align with the National Capital Region. Additionally, extra measures are being implemented to protect immediate contingency response forces to prevent exposure to COVID-19 should they need to deploy. These actions will ensure the Army's ability to quickly deploy contingency response forces across the globe.

The Army is increasing all installations to HPCON level Charlie. Installations will limit all access to essential personnel only and will limit the numbers of access points. All



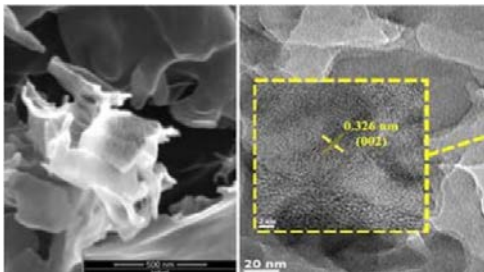
unit personnel are expected to follow all social distancing guidance to continue protecting our force.

Read more:

<https://www.army.mil/article/233962/?from=CV>

## Nanotechnology

### New Nano Strategy Fights Superbugs



It's not enough to take antibiotic-resistant bacteria out of wastewater to eliminate the risks they pose to society. The bits they leave behind also must be destroyed, scientists have found.

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National Science Foundation-funded researchers at Rice University have a new strategy for "trapping and zapping" antibiotic resistant genes, the pieces of bacteria that, even though their hosts are dead, can find their way into and boost the resistance of other bacteria.

*Read more:*

[https://nsf.gov/discoveries/disc\\_summ.jsp?cntn\\_id=300237&org=NSF&from=news](https://nsf.gov/discoveries/disc_summ.jsp?cntn_id=300237&org=NSF&from=news)

### Regulatory Research & Industrial Hygiene Professional News

#### Congress

### Reps. Yoho, Soto Introduce Bill to Create National Stockpile of Personal Protective Equipment



U.S. Reps. Ted Yoho (R-FL) and Darren Soto (D-FL) introduced a bill to ensure the United States builds its stockpile of personal protective equipment (PPE).

The American-Made Protection for Healthcare Workers and First Responders Act will address the PPE shortage and build the national stockpile of goods from American producers. It is also designed to eliminate the nation's dependence on foreign adversaries' supply chains during a crisis.

*Read more:*

<https://homelandprepnews.com/stories/46516-reps-yoho-soto-introduce-bill-to-create-national-stockpile-of-personal-protective-equipment/>

## NIOSH

### Coronavirus: Counterfeit Chinese-Made Face Masks Pulled Offline after Global News Probe

The Chinese-made “N95” respiratory masks were advertised online as having been certified by U.S. safety regulators — an important claim amid the global coronavirus pandemic, as front-line workers scramble for life-saving protective equipment.

But the masks were fake. And following an investigation by Global News, the counterfeits were pulled last week from websites in India, Pakistan and a half-dozen other countries.

Read more:

<https://globalnews.ca/news/6751303/counterfeit-face-masks-pulled-from-sales-website-global-news-probe/>



## OSHA

### Injury/Illness Recordkeeping and COVID-19: Updated OSHA Guidance

#### Recording workplace exposures to COVID-19

OSHA recordkeeping requirements at 29 CFR Part 1904 mandate covered employers record certain work-related injuries and illnesses on their OSHA 300 log.

On Tuesday, March 10, 2020, OSHA provided guidance requiring the recording and reporting of workplace exposures to COVID-19. In response to employer concerns about how they would determine where a person contracted the virus—in the workplace or elsewhere—the agency issued updated guidance on March 13, 2020.

# Army Industrial Hygiene News and Regulatory Summary

## Recording Workplace Exposures to COVID-19

COVID-19 can be a recordable illness if a worker is infected as a result of performing their work-related duties. However, employers are only responsible for recording cases of COVID-19 if **all of the following** are met:

Read more: <https://www.assp.org/news-and-articles/2020/03/17/injury-illness-recordkeeping-and-covid-19-updated-osh-guidance>

**EPA**

## U.S. EPA's Temporary COVID-19 Enforcement Discretion Policy

On Thursday, March 26, the United States Environmental Protection Agency ("EPA") announced and issued a Memo establishing an agency-wide temporary enforcement policy suspending or staying a broad array of enforcement efforts for certain environmental regulations and requirements in response to the COVID-19 pandemic. The Memo states that EPA recognizes that "the pandemic may affect facility operations and the availability of key staff and contractors and the ability of laboratories to timely analyze samples and provide results."



Read more: <https://www.natlawreview.com/article/us-epa-s-temporary-covid-19-enforcement-discretion-policy>

# Army Industrial Hygiene News and Regulatory Summary

APHC

## Training

### HAVE YOU COMPLETED ALL THESE WEBINARS?

<https://aiph-dohs.ellc.learn.army.mil>

#### **ARMY FIELD OP MANUAL:**

2/27/2019 FOM: FOM1 (Introduction & Ch 1) 29min  
5/29/2019 FOM: FOM2 (Basic Characterization) 19min  
7/23/2019 FOM: FOM3 (Similar Exposure Groups) 18min  
10/2/2019 FOM: FOM4 (Workplace Monitoring Plans) 16min  
11/6/2019 FOM: FOM5 (Characterize Exposures) 25min  
3/4/20 FOM: FOM6-8 (assessment, reporting, reassessment) 18min

#### **ASK THE SME:**

11/14/2018 SME: Hexavalent Chromium 48min  
1/9/2019 SME: IAQ (recording failed)  
2/27/2019 SME: Ergonomics 51min  
8/6/2019 SME: Pharmacy Hazardous Drug Samples 28min  
12/4/2019 SME: OEL Selection 30min  
1/8/2020 SME: Hexavalent Chromium Update 39min  
1/8/2020 SME: Inflatable Paint Booth Guidance 30min  
1/8/2020 SME: Ototoxins 42min  
3/4/2020 SME: APHC Analytical Lab  
4/6/2016 Special Edition: Cancer in the Military and the Perception of Clusters 52min  
3/27/2019 Special Edition: 2019 Update Brief Mold-Related Issues in Army Housing 1.5hr

#### **IH LEADERS:**

4/26/2017 Leader: Go Army Ed Funding For The IH 24min  
6/21/2017 Leader: IH Related Taskers 34min  
8/23/2017 Leader: IH Career Program 12 Town hall 48min  
12/5/2017 Leader: How to Officially Document IH Events 30min  
4/11/2018 Leader: IH Equipment 11min  
6/5/2018 Leader: Industrial Hygiene Ethics 2hr  
8/9/2018 Leader: Ft Wainwright Sampling Mystery 60min  
11/14/2018 Leader: West Point Power Plant Noise Study 21min  
1/9/2019 Leader: Adventures in Ventilation at Natick 21min  
2/27/2019 Leader: Ft Knox Noise Enigma 24min  
8/6/2019 Leader: CCAD Success Story 15min  
8/6/2019 Leader: Fort Eustis Modular Warping Tug Air Quality Study 9min  
12/4/2019 Leader: Rock Island SEG Sample Mystery 19min  
1/8/2020 Leader: Engineering Control Advancements 32min  
3/4/2020 Leader: Making DOEHS Do the Hard Work A LIDS9 Example 15min  
3/4/2020 Leader: Steps to Merge SEG Monsters 12min

#### **MANAGE YOUR IH MONSTER:**

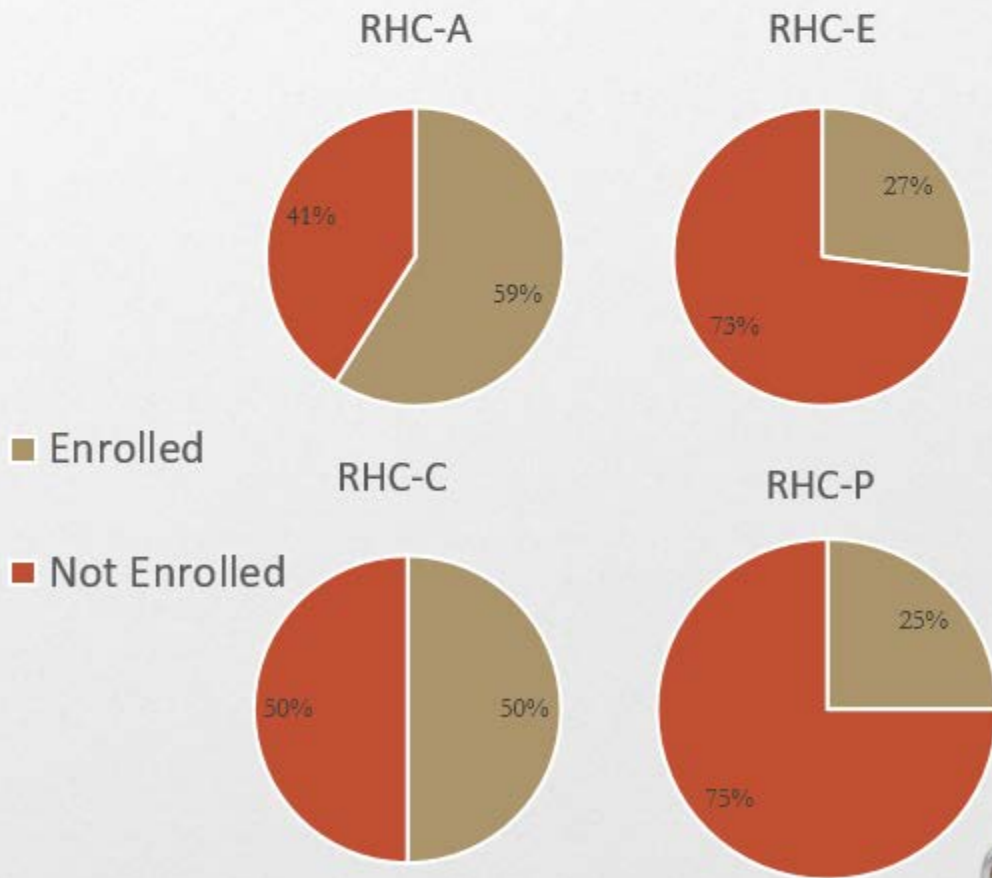
3/3/2016 Monster: Taming That SHOP Monster  
3/22/2016 Monster: Submitting Samples Using DOEHS-IH and LIDS9  
7/12/2016 Monster: Taming That SEG Monster  
8/9/2016 Monster: Don't Be Afraid of the Big Bad Budget 68min  
9/12/2016 Monster: De-Mystifying the Metrics  
11/4/2016 Monster: All About ANOVA  
1/12/2017 Monster: Business Objects at it's Best 53min  
3/15/2017 Monster: Magical Medical Surveillance 19min  
4/11/2017 Monster: Levering Locations 61min  
5/3/2017 Monster: Re-Invigorating Radiation 42min  
7/12/2017 Monster: Chase Away IH Managerial Nightmares 48min  
9/12/2017 Monster: Data Integrity: When IH Data Goes to Court 30min  
11/8/2017 Monster: Metric Update 41min  
11/8/2017 Monster: Speedy Ventilation 35min  
3/15/2018 Monster: Highly Hazardous Communicable Diseases 2hr  
5/9/2018 Monster: A Deep Dive into IH Contract Services 17min  
7/12/2018 Monster: Assessment Adventure 47min  
8/9/2018 Monster: Pathology, Grossing, Morgue, Tissue, and Death Care 1.5hr  
11/14/2018 Monster: Metric Update 61min  
1/9/2019 Monster: Versatile Ventilation 27min  
8/6/2019 Monster: Common Data Quality Mistakes 17min  
8/6/2019 Monster: How to Enter Illumination Surveys into DOEHS-IH 6min  
8/6/2019 Monster: Mystery Behind the Metrics 14min  
12/4/2019 Monster: FY20 Metrics Update 28min  
1/8/2020 Monster: OH..MY..SEG.. 8min  
3/4/2020 Monster: A Sampling Force Awakens 35min

# Army Industrial Hygiene News and Regulatory Summary

**WEBINARS VIEWINGS CAN BE LIVE OR RECORDED**  
<https://aiph-dohs.ellc.learn.army.mil>

	RHC-A	RHC-C	RHC-E	RHC-P
2016	75	63	6	15
2017	220	104	11	19
2018	112	86	5	14
2019	450	351	21	47

Pie charts display percentage of industrial hygiene personnel enrollment in the APHC Army IH Webinars but does not reflect active participation.

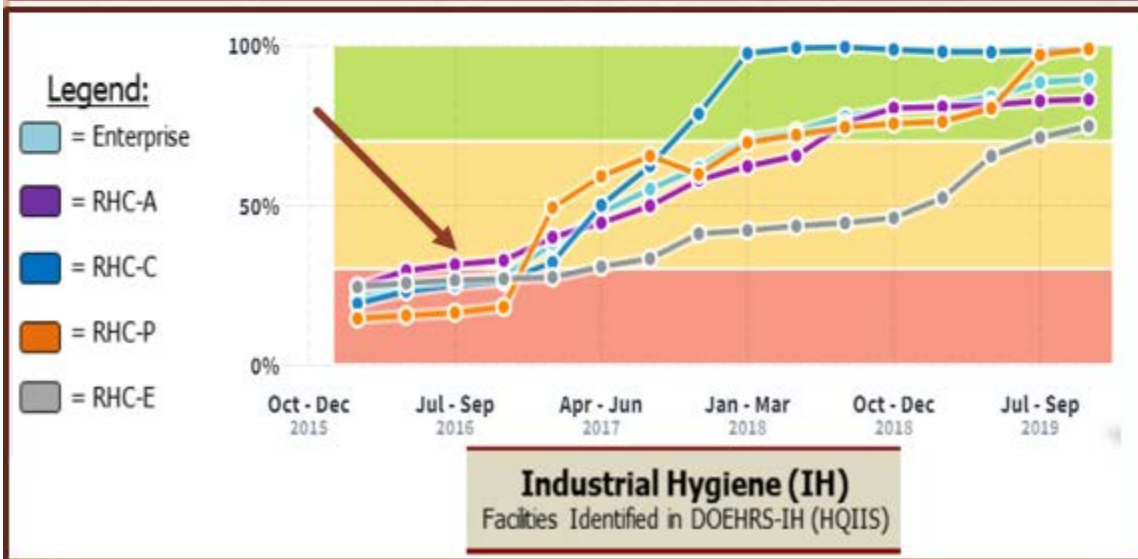
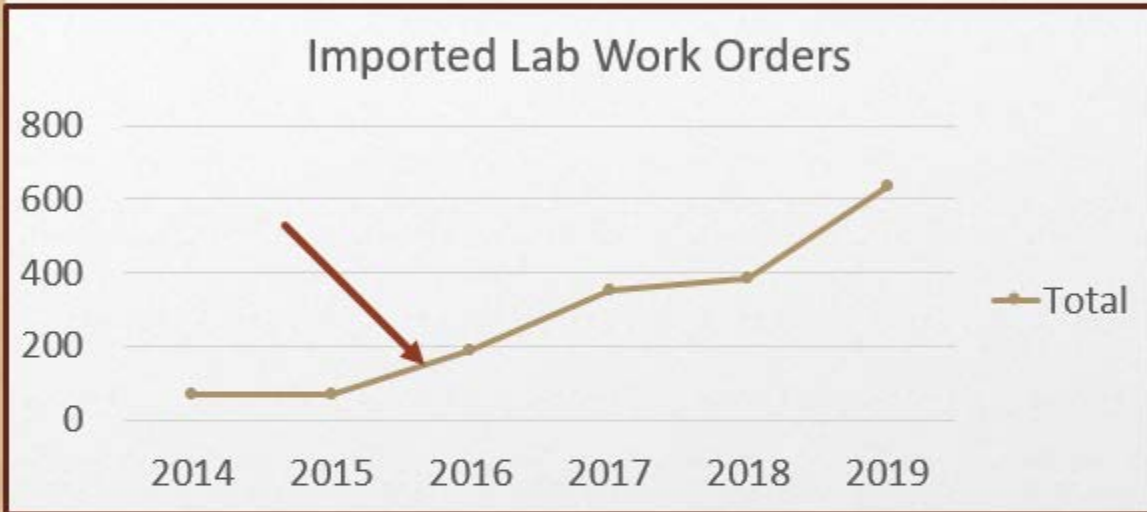




# Army Industrial Hygiene News and Regulatory Summary

## WEBINARS VIEWINGS CORRESPOND WITH IMPROVED IH METRICS <https://aiph-dohs.ellc.learn.army.mil>

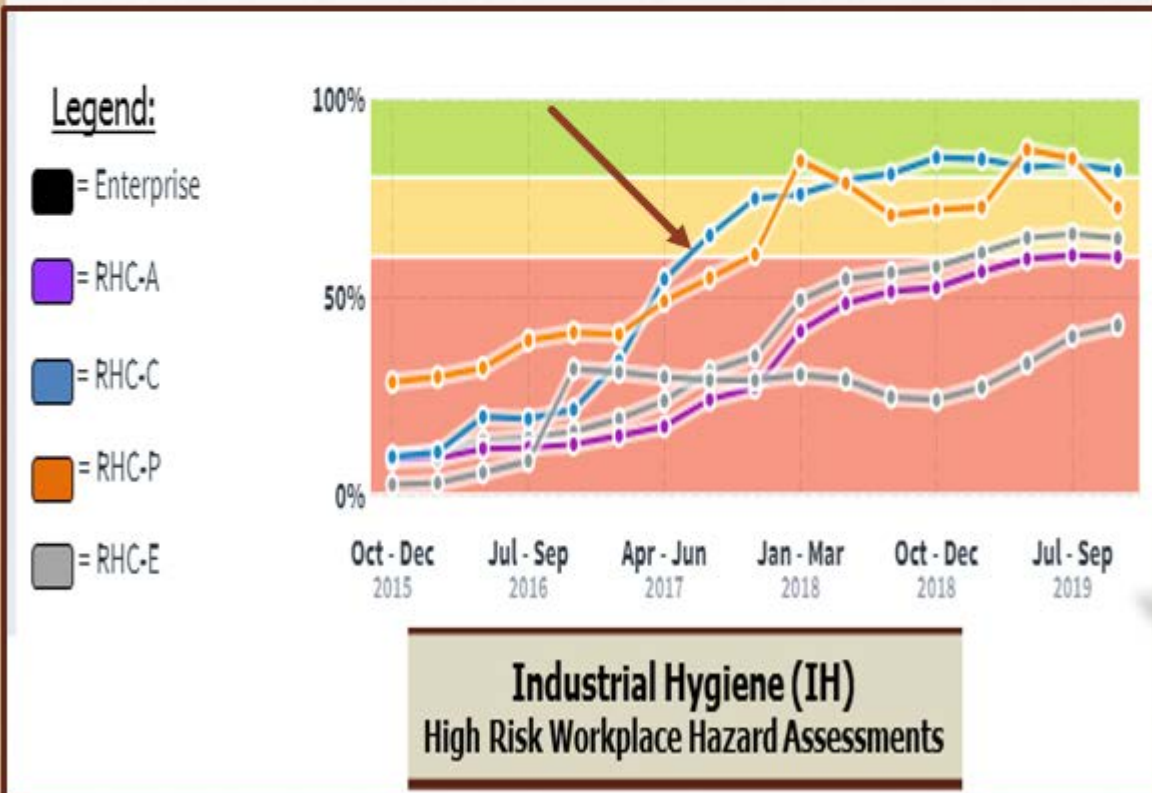
In 2016 tele/web conferences provided support for the IH Lab Import functionality and the HQIIS Metrics. The number of processed lab work orders and HQIIS Metric results has continually increased since 2016.



# Army Industrial Hygiene News and Regulatory Summary

WEBINARS VIEWINGS CORRESPOND WITH IMPROVED IH METRICS  
<https://aiph-dohs.elic.learn.army.mil>

In 2018 tele/web conferences provided support for the High Risk Workplace Hazard Assessments and the number of assessments performed in DOEHRS-IH has continually increased since 2018.



## Army Industrial Hygiene News and Regulatory Summary

The Army Blackboard web-based learning platform is currently using the Q4 2017 release.

Future releases of Army Blackboard will drop support for IE 11.

When the Army Blackboard reaches the Q4 2018 release, users will need to use Chrome, Edge, or Firefox midyear 2020.

Bb Release	Chrome	Edge	IE	Firefox	Safari (Mac OS Only)
Q4 2017 *	36+	20+	11	31+	6+
Q2 2018	49+	20+	11	48+	9+
Q4 2018	49+	20+	Unsupported	48+	9+
Q2 2019	63+	42+	Unsupported	57+	12+
Q4 2019	63+	42+	Unsupported	57+	12+

## **IMPORTANT: PLAN AHEAD NOW!**

Start thinking about 2021 training quotas.

### **WHAT?** Why now?

- Courses fill to capacity quickly and it's nearly impossible to get last minute seating quotas
- Funding is limited. 2021 funding is released in October to Career Programs and normally immediately allocated. It's NEVER too early to request funds for training. Requesting early means it will be in que when funds are released.
- 2021 sign up rosters will be opened on the APHC Blackboard site June 2020. Signing up places you in que for a seating consideration.

# Army Industrial Hygiene News and Regulatory Summary

This monthly summary is published by the Industrial Hygiene Program Management Division for the Army Public Health Center.

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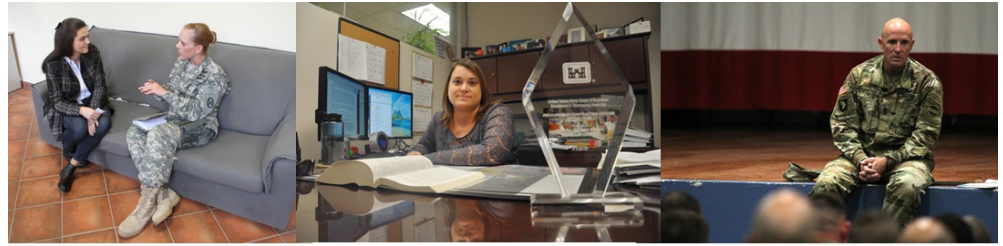
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FAX: (410)436-8795

### On the Web:

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



## 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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