

## Hazardous Substances

### Special Interest Articles:

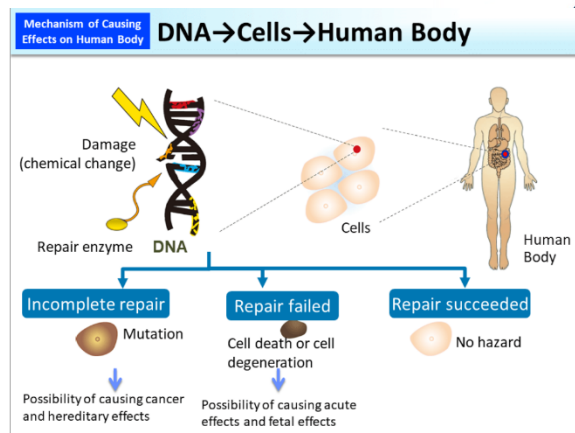
- [Asbestosis](#)
- [Copper](#)
- [Foam](#)
- [Couch Dust](#)
- [Travel Plaza](#)
- [Pentachloro-phenol](#)

## Eight Ways Chemical Pollutants Harm the Body

A new review of existing evidence proposes eight hallmarks of environmental exposures that chart the biological pathways through which pollutants contribute to disease: oxidative stress and inflammation, genomic alterations and mutations, epigenetic alterations, mitochondrial dysfunction, endocrine disruption, altered intercellular communication, altered microbiome communities, and impaired nervous system function.

The study by researchers at Columbia University Mailman School of Public Health, Ludwig Maximilian University, and Hasselt University is published in the journal *Cell*.

“Every day we learn more about how exposure to pollutants in air, water, soil, and food is harmful to human health,” says senior author Andrea Baccarelli, MD, PhD, chair of Environmental Health Sciences at Columbia Mailman School. “Less understood, however, are the specific



biological pathways through which these chemicals inflict damage on our bodies. In this paper, we provide a framework to understand why complex mixtures of environmental exposures bring about serious illness even at relatively modest concentrations.”

Read more:

<https://www.publichealth.columbia.edu/public-health-now/news/eight-ways-chemical-pollutants-harm-body>

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## EPA Should ‘Reconsider’ Strategy for Chemical Risk Evaluations: National Academies



The systematic review process used by the Environmental Protection Agency to complete chemical risk evaluations under the Frank R. Lautenberg Chemical Safety for the 21st Century Act contains multiple shortcomings, and the agency should “reconsider its overall strategy” for such assessments, concludes a recently published report from the National

Academies of Sciences, Engineering and Medicine. While examining the approach of the EPA Office of Pollution Prevention and Toxics, a National Academies committee found that the review process was not “comprehensive, workable, objective and transparent.”

*Read more:*  
<https://www.safetyandhealthmagazine.com/articles/20945-epa-should-reconsider-strategy-for-chemical-risk-evaluations-national-academies>

## Pollutant Levels After Hurricane Harvey Exceeded Lifetime Cancer Risk in Some Areas

The unprecedented rainfall from Hurricane Harvey in 2017 brought more than flood damage to southeast Texas. For people living in environmental justice communities such as the Manchester neighborhood near the Houston Ship Channel, heavy rainfall and



flooding may have increased risks of exposure to harmful chemicals from nearby industry.

To gain a better understanding of how flooding mobilized pollution in the area, a research team led by Garrett Sansom, DrPH, research assistant professor in the Department of Environmental and Occupational Health at the Texas A&M University School of Public Health, analyzed samples of soil from the Manchester neighborhood collected immediately after Hurricane Harvey. Findings were just published in the *Journal of Health and Pollution*. Student and faculty

researchers along with staff from Texas Environmental Justice Advocacy Services and residents of Manchester collected soil samples at 40 locations throughout Manchester one week after Harvey. The samples were then processed and analyzed to measure concentrations of pollutants known as polycyclic aromatic hydrocarbons (PAHs), which are linked with poor health outcomes, including different types of cancer.

*Read more:*

[https://www.eurekalert.org/pub\\_releases/2021-03/tau-pla032421.php](https://www.eurekalert.org/pub_releases/2021-03/tau-pla032421.php)

### Survival of Patients with Asbestosis Can Be Assessed by Risk-Predicting Models



**Objectives** Our aim was to investigate the pulmonary function test (PFT) results of patients with asbestosis and determine whether baseline PFTs and the risk-

predicting models such as gender, age and physiologic (GAP) variables model and composite physiologic index (CPI) would be useful in predicting survival in these patients.

**Methods** Demographics and PFTs of 100 patients with asbestosis were evaluated. The survival difference between the GAP stages was determined with Kaplan-Meier survival curves with statistical significance analysed with log-rank test. The suitability of the risk-predicting models and baseline PFTs to predict the survival of patients was analysed with Cox regression.

Read more:

<https://oem.bmj.com/content/early/2021/02/25/oemed-2020-106819>

## Maternal Exposure to Chemicals Linked to Autistic-Like Behaviours in Children

A new study by Simon Fraser University's Faculty of Health Sciences researchers—published today in the *American Journal of Epidemiology*—found correlations between increased expressions of autistic-like behaviors in pre-school aged children to gestational exposure to select environmental toxicants, including metals, pesticides, polychlorinated biphenyls (PCBs), phthalates, and bisphenol-A (BPA).

This population study measured the levels of 25 chemicals in blood and urine samples collected from 1,861 Canadian women during the first trimester of pregnancy. A follow up survey was conducted with 478 participants, using the Social Responsiveness Scale (SRS) tool for assessing autistic-like behaviors in pre-school children

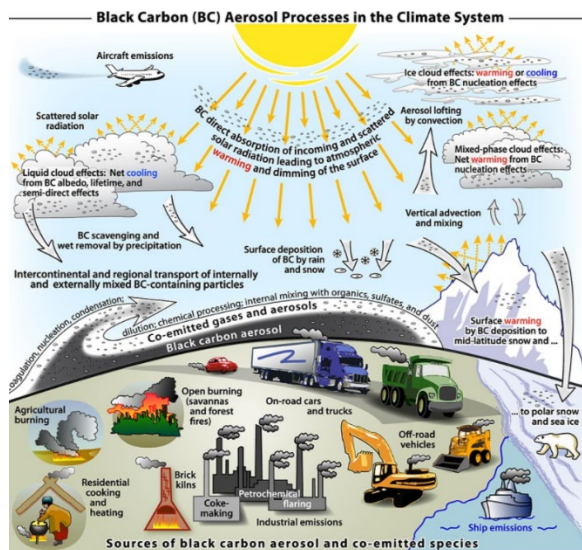
Read more:

<https://medicalxpress.com/news/2021-03->



[maternal-exposure-chemicals-linked-autistic-like.html](https://medicalxpress.com/news/2021-03-maternal-exposure-chemicals-linked-autistic-like.html)

## Contribution of Long-Term Exposure to Outdoor Black Carbon to the Carcinogenicity of Air Pollution: Evidence Regarding Risk of Cancer in the Gazel Cohort



### Background:

Black carbon (BC), a component of fine particulate matter [particles with an aerodynamic diameter  $\leq 2.5 \mu\text{m}$  (P2.5)], may contribute to carcinogenic effects of air pollution. Until recently however, there has been little evidence to evaluate this hypothesis.

### Objective:

This study aimed to estimate the associations between long-term exposure to BC and risk of cancer. This study was conducted within the French Gazel cohort of 20,625 subjects.

### Methods:

We assessed exposure to BC by linking subjects' histories of residential addresses to a map of European black carbon levels in 2010 with back- and forward-extrapolation between 1989 and 2015. We used extended Cox models, with attained age as time-scale and time-varying cumulative exposure to BC, adjusted for relevant sociodemographic and lifestyle variables. To consider latency between exposure and cancer diagnosis, we implemented a 10-y lag, and as a sensitivity analysis, a lag of 2 y. To isolate the effect of BC from that of total PM2.5, we regressed BC on PM2.5 and used the residuals as the exposure variable.

### Read more:

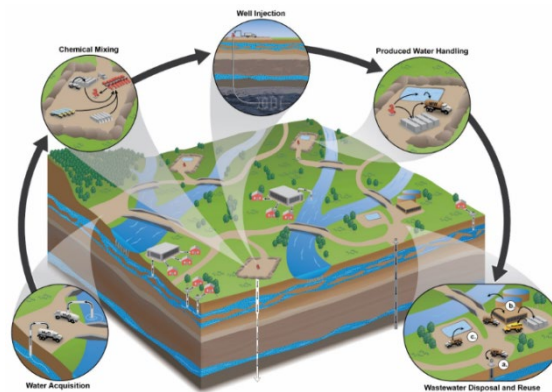
<https://ehp.niehs.nih.gov/doi/full/10.1289/EHP8719>

## Research Uncovers Mechanism Responsible for Formation of Toxic Fracking Byproducts

Hydraulic fracturing, also known as "fracking," relies on water, sand and other chemicals to clear the way for engineers to remove oil or gas from shale -; porous rocks below the ground.

Engineers know what they are pumping into the ground, but they haven't understood why they have found certain highly dangerous compounds in flowback -; the mixture of water, salt and other chemicals that flows back to the surface after being pumped through the shale.

Now, research from the lab of Kimberly Parker, assistant professor in the Department of Energy, Environmental & Chemical Engineering at the McKelvey School of Engineering at Washington University in St. Louis, shows that underground presence of halogen radicals is a key to the formation of these halogenated



organic compounds, which are dangerous for human health and damaging to the environment.

Read more: <https://www.news-medical.net/news/20210215/Research-uncovers-mechanism-responsible-for-formation-of-toxic-fracking-byproducts.aspx>

## Radiation

### New Data on How Chemical Elements React to Irradiation Available

The IAEA has developed novel theoretical calculation models on how primary radiation affects all 83 natural chemical elements and has made this information available online. These calculations can help experts make stronger and more resistant materials to be used in areas where materials may be exposed to radiation,

including in the nuclear industry, medicine, biology, fusion and space technology. Chemical elements, made up of atoms, vary in the number of protons, neutrons and electrons. This is responsible for their physical and chemical properties, including how they react to radiation. Depending on their composition, materials are affected differently by radiation. They display

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different kinds of defects after an initial atomic displacement event induced by a high-energy particle. Studying this so-called primary damage is key to understanding any kind of radiation effects.

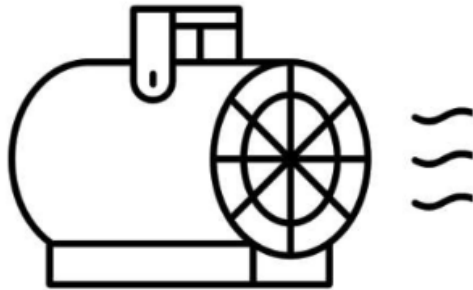
*Read more:*

<https://www.iaea.org/newscenter/news/new-data-on-how-chemical-elements-react-to-irradiation-available>



### Ventilation

#### COVID-19: CPWR Publishes Ventilation Tips for Indoor Construction Sites



The Center for Construction Research and Training is aimed at improving ventilation at indoor construction sites that don't have

working heating, ventilating and air conditioning systems.

Improved indoor ventilation, according to CPWR, is part of a layered approach to mitigating the spread of COVID-19 in the workplace, along with physical distancing, respiratory protection, face coverings and reducing the number of workers in an area.

*Read more:*

<https://www.safetyandhealthmagazine.com/articles/20941-covid-19-cpwr-publishes-ventilation-tips-for-indoor-construction-sites>

**PPE**

**Copper Foam as a Highly Efficient, Durable Filter for Reusable Masks  
and Air Cleaners**

During the COVID-19 pandemic, people have grown accustomed to wearing facemasks, but many coverings are fragile and not easily disinfected. Metal foams are durable, and their small pores and large surface areas suggest they could effectively filter out microbes. Now, researchers reporting in ACS' *Nano Letters* have transformed copper nanowires into metal foams that could be used in facemasks and air filtration systems. The foams filter efficiently, decontaminate easily for reuse and are recyclable.



Read more:

[https://www.eurekalert.org/pub\\_releases/2021-03/acs-cfa031921.php](https://www.eurekalert.org/pub_releases/2021-03/acs-cfa031921.php)

**Noise**

**Inside Innovation: Electrification Makes Worksites Both ‘Green’ and  
Not Heard**



New electrified construction machinery has the obvious benefit of reducing GHGs and

fuel exhaust emissions. Yet there is another important benefit: reduced noise. The continuous high decibels on a jobsite created by fossil-fuel engines pose an ongoing threat to the health and safety of workers.

“Occupational hearing loss, primarily caused by high noise exposure, is the most common U.S. work-related illness...the third most common chronic physical condition in



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the United States," say the Centers for Disease Control and Prevention (CDC).

Read more:

<https://canada.constructconnect.com/dcn/>

[news/technology/2021/03/inside-innovation-electrification-makes-worksites-both-green-and-not-heard](https://news/technology/2021/03/inside-innovation-electrification-makes-worksites-both-green-and-not-heard)

### Preventive Medicine

#### Smoking May Disappear Within a Generation, Analysts Predict

In 10 to 20 years there could be no smokers left in many markets, according to analysts at Jefferies. Governments and tobacco companies are on the same side in this shift, as more countries adopt smokefree targets and companies push smokers over to reduced-risk products such as vaping and oral nicotine.

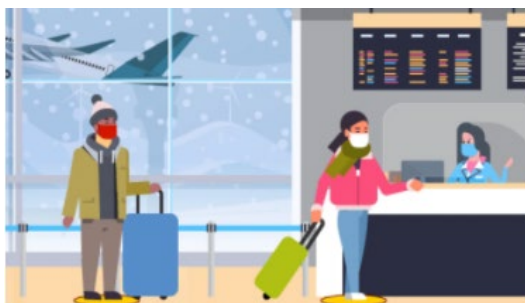


With regulators and tobacco ambitions increasingly aligned, in many countries, no smokers within a generation could become a reality," analyst Owen Bennett wrote in a note on Friday. "If smoke free is to happen, this is only achieved with the support of RRP."

Read more:

<https://medicalxpress.com/news/2021-03-analysts.html>

#### Yale Scientists Design Wearable Clip to Detect SARS-Cov-2 Air Exposure



As the coronavirus continues to spread globally, people who are wondering whether they have been exposed to the virus may have an answer in a new wearable virus-detecting clip developed by researchers at the Yale School of Public Health and the Yale School of Engineering and Applied Science.

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Assistant professor of epidemiology Krystal Pollitt has been working in coordination with professor of chemical and environmental engineering Jordan Peccia's lab for the past year to develop the FreshAir Clip — a small, silicone passive sampler that picks up aerosolized viral particles and can

be analyzed in a laboratory setting to discern levels of exposure to SARS-CoV-2.

*Read more:*

<https://yaledailynews.com/blog/2021/03/04/yale-scientists-design-wearable-clip-to-detect-sars-cov-2-air-exposure/>

### How Much Peanut Does It Take to Trigger an Allergic Reaction?

An estimated 6 million Americans may suffer from peanut allergies. Tiny amounts of peanut protein can lead to hives, itching, tingling in the mouth, shortness of breath or nausea within minutes.

For individuals with severe peanut allergies, food-induced anaphylaxis can occur. It's a life-threatening emergency that requires treatment with an injection of epinephrine and a trip to the emergency room. Food labels offer warnings such as "may contain peanuts" or "was processed in a facility that may process nuts."



*Read more:*

[https://www.eurekaalert.org/pub\\_releases/2021-03/uoc-hmp032621.php](https://www.eurekaalert.org/pub_releases/2021-03/uoc-hmp032621.php)

### Scientists Map Sensitivity of Thousands of Genes to Chemical Exposure



Scientists at the University of Massachusetts, Amherst, have used what they claim is an unprecedented objective approach to identify which genes and molecular pathways— including mechanisms involving aging, lipid metabolism, and autoimmune disease—are most sensitive to chemical exposure. Headed by environmental health scientist Alexander Suvorov, PhD, the research findings could help to improve our

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understanding of how chemicals, including pollutants and pharmaceuticals, interact to impact gene expression, and potentially human health.

Read more:

<https://www.genengnews.com/news/scientists-map-sensitivity-of-thousands-of-genes-to-chemical-exposure/>

### 3.4 Percent of U.S. Workers Are Current E-Cigarette Users

About 3.4 percent of U.S. workers are current electronic cigarette users, and about half also currently use combustible tobacco products, according to research published in the March 5 issue of the U.S. Centers for Disease Control and Prevention *Morbidity and Mortality Weekly Report*. Girija Syamlal, M.B.B.S., from the CDC in Atlanta, and colleagues analyzed 2017 to 2018 National Health Interview Survey data for adults aged 18 years and older who were employed during the week before the interview to estimate the recent national prevalence of e-cigarette use.



[percent-of-u-s-workers-are-current-e-cigarette-users-2650959515.html](https://consumer.healthday.com/3-4-percent-of-u-s-workers-are-current-e-cigarette-users-2650959515.html)

Read more:

[https://consumer.healthday.com/3-4-](https://consumer.healthday.com/3-4-percent-of-u-s-workers-are-current-e-cigarette-users-2650959515.html)

## Environmental Health

### Couches a Major Source of Toxic Chemical Dust



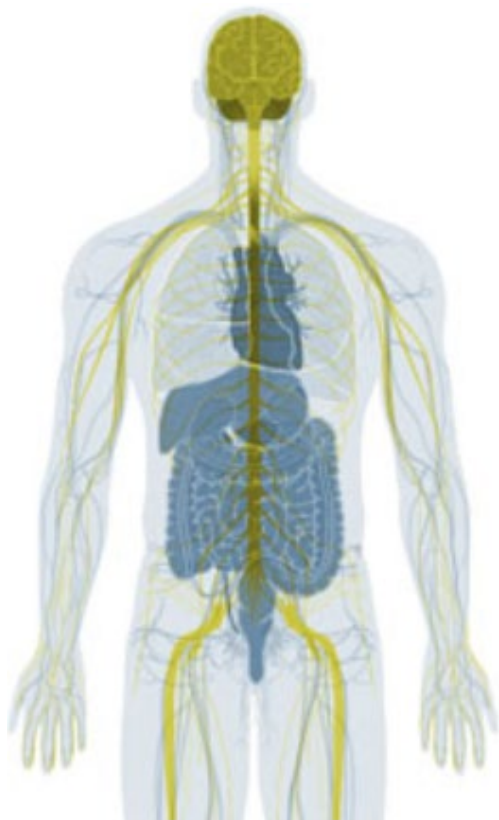
A new study shows that when people replace their old couch with a new one that has no added flame retardants, levels of the harmful chemicals in household dust drop significantly. Replacing the foam inside the couch cushions is also just as effective. The findings confirm that choosing healthier furniture without flame retardants can

make a big difference in people's—especially children's—everyday exposures to these toxic chemicals.

*Read more:*

<https://www.technologynetworks.com/app lied-sciences/news/couches-a-major-source-of-toxic-chemical-dust-347043>

### Defining and Intervening on Cumulative Environmental Neurodevelopmental Risks: Introducing a Complex Systems Approach



contributing to health inequities. However cumulative environmental health risks and impacts have received little attention from U.S. policy makers at state and federal levels to develop comprehensive strategies to reduce these exposures, mitigate cumulative risks, and prevent harm. An area for which the inherent limitations of current approaches to cumulative environmental health risks are well illustrated is children's neurodevelopment, which exhibits dynamic complexity of multiple interdependent and causally linked factors and intergenerational effects.

#### **Objectives:**

We delineate how a complex systems approach, specifically system dynamics, can address shortcomings in environmental health risk assessment regarding exposures to multiple chemical and nonchemical stressors and reshape associated public policies.

#### **Background:**

The combined effects of multiple environmental toxicants and social stressor exposures are widely recognized as important public health problems

*Read more:*

<https://ehp.niehs.nih.gov/doi/full/10.1289/EHP7333>

## **More than 50 New Environmental Chemicals Detected in People**



Researchers have detected more than 50 new environmental chemicals lurking in people's bodies, the vast majority of which are little known or unknown compounds. These chemicals — which have never been observed in people before — were

discovered in a study of pregnant women and their newborns.

The findings are concerning given that very little is known about these chemicals and their potential health effects, researchers from the new study say. What's more, pregnant women and their newborns are a particularly vulnerable population.

*Read more:*

<https://www.livescience.com/new-environmental-chemicals-pfas-pregnant-woment.html>

## **Stealth Chemicals: A Call to Action on a Threat to Human Fertility**

Shanna Swan of the Mt. Sinai School of Medicine in New York City is a leading researcher into the effects of so-called endocrine-disrupting chemicals on human fertility. A 2017 paper she co-authored came to the startling conclusion that sperm counts among men in the industrialized world fell nearly 60 percent from 1973 to 2011, in part because of the effects on the hormonal system of chemicals widely used in consumer products. Other factors include obesity, smoking, and alcohol.

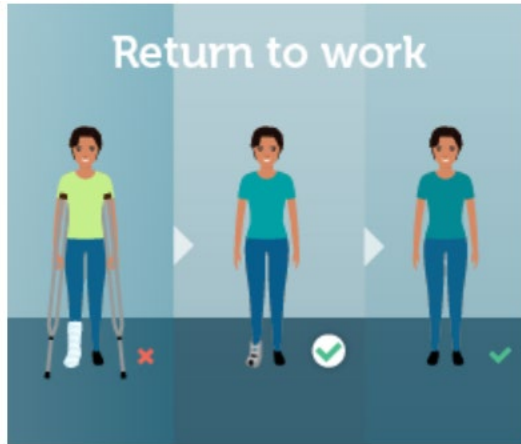
*Read more:*

<https://e360.yale.edu/features/stealth-chemicals-a-call-to-action-on-a-threat-to-human-fertility>



## Ergonomics

### Does Gradually Returning to Work Improve Time to Sustainable Work After a Work-Acquired Musculoskeletal Disorder in British Columbia, Canada? A Matched Cohort Effectiveness Study



**Objective** This study investigates if gradual return to work (GRTW) is associated with full sustainable return to work (RTW) for seriously injured workers with a musculoskeletal disorder (MSD), in British Columbia, Canada.

**Methods** This is an effectiveness study using a retrospective cohort study design. Accepted workers' compensation lost-time claims were extracted for workers with an MSD who were on full work disability for at least 30 days, between 2010 and 2015 (n=37 356). Coarsened exact matching yielded a final matched cohort of 12 494 workers who experienced GRTW at any point 30 days post-injury and 12 494 workers without any GRTW. The association between GRTW and sustainable RTW through to end of 12 months was estimated with multivariable quantile regression.

*Read more:*

<https://oem.bmj.com/content/early/2021/03/18/oemed-2020-107014>

## Safety

### Trucking Groups to CDC: Truck Stops, Travel Plazas Should Be Vaccination Sites

A coalition of trucking-related groups, including the American Trucking

Associations and an organization that represents truck stop owners, is urging the

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Centers for Disease Control and Prevention to designate truck stops and travel plazas as mobile COVID-19 vaccination sites to help “alleviate significant challenges that truck drivers currently face in receiving an expedient vaccine.”

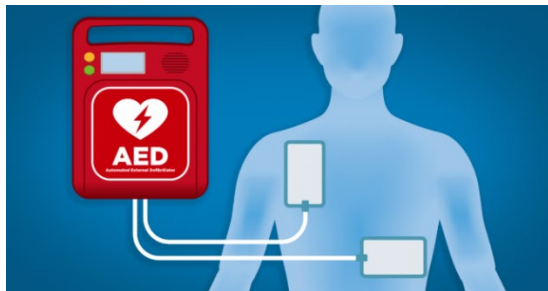
In a letter dated Feb. 25 and sent to CDC Director Rochelle Walensky, ATA, NATSO – formerly known as the National Association of Truck Stop Operators – and others contend truck drivers “should be allowed to receive a vaccine in a state other than that within which they reside due to their length of time on the road and away from home.” The coalition also requests that drivers be allowed to receive a second dose of a vaccine at a different location, if needed.



*Read more:*

<https://www.safetyandhealthmagazine.com/articles/20957-trucking-groups-to-cdc-truck-stops-travel-plazas-should-be-vaccination-sites>

### What State Plan States Require AEDs in the Workplace?



The federal Occupational Safety and Health Administration (OSHA) standards do not specifically address automated external defibrillators (AEDs). However, exposures to first-aid hazards and the requirement that persons be properly trained to render first aid, which in some instances requires CPR

training, are addressed in specific OSHA standards for the general industry. The regulations in state plan states follow federal OSHA and do not specifically address AEDs.

However, many states have separate legislation requiring AEDs. Below is a listing of the private and public places where AEDs are required by state law in the state plan states.

*Read more:*

<https://ehsdailyadvisor.blr.com/2021/03/w-hat-state-plan-states-require-aeds-in-the-workplace/>

## **Advances in Worksite Connectivity Boosts Productivity, Collaboration and Safety**

It can be hard for workers to communicate in industrial work environments. Noise levels make it hard to hear one another, forcing workers to shout or use hand signals to communicate. The physical distance typically found in large worksites only exacerbates the problem. When workers need information, they often have to leave their workstations in search of the people and answers they need to move forward. And when an entire team needs to meet, production can be brought to a standstill as the team moves to an area more conducive to conversation.

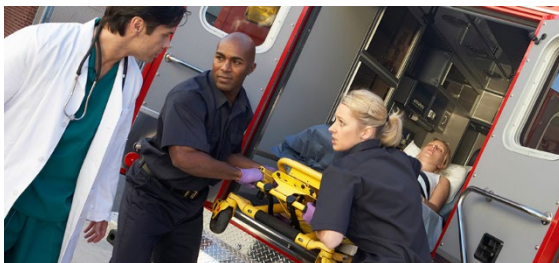


[/advances-in-worksite-connectivity.aspx?admgarea=ht.ConstructionSafety](#)

*Read more:*

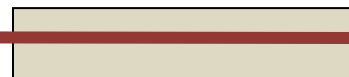
<https://ohsonline.com/articles/2021/03/19>

## **Paramedic Occupational Violence Mitigation: A Comprehensive Systematic Review of Emergency Service Worker Prevention Strategies and Experiences for Use in Prehospital Care**



Occupational violence is a significant issue within the context of prehospital healthcare with the majority of paramedics reporting

some form of abuse, intimidation, physical or sexual assault during their career. Though the paramedic literature acknowledges the severity of this issue, there is limited literature examining occupational violence mitigation strategies. Despite this, the operational and environmental similarities that exist between paramedics and other emergency service workers such as the police and firefighters, provide an opportunity to





review relatable occupational violence mitigation strategies and experiences.

This review used Joanna Briggs Institute guidance for systematic reviews of both qualitative evidence and effectiveness. Studies included in this review incorporated

those published in English from 1990 to January 2020.

*Read more:*

<https://oem.bmj.com/content/early/2021/03/02/oemed-2020-107037>

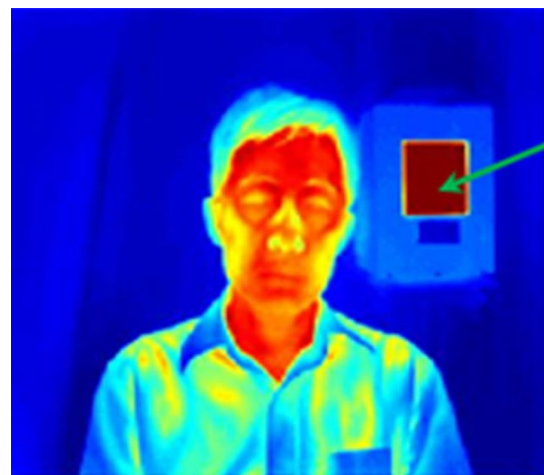
### FDA Warns About Improper Use of Thermal Imaging Systems to Take Worker, Visitor Temps

Improper use of thermal imaging systems can result in inaccurate temperature readings, the Food and Drug Administration is warning health care providers, consumers and other users.

Also known as telethermographic systems, infrared thermographs, thermal cameras or “fever cameras,” thermal imaging systems are designed to measure a person’s body temperature. However, improper use can occur “due to a variety of factors,” FDA says in a recent press release.

Risks of improper use include a device falsely measuring an elevated body temperature and incorrectly detecting a normal body temperature.

“These risks are more likely to be present where thermal imaging systems scan multiple individuals simultaneously,” says



the agency, which directs users to its website for recommendations.

*Read more:*

<https://www.safetyandhealthmagazine.com/articles/20944-fda-warns-about-improper-use-of-thermal-imaging-systems-to-take-worker-visitor-temps>

## New Research Shows Risk of COVID-19 from Aerosols to Healthcare Workers



New research published in *Anaesthesia* (a journal of the Association of Anaesthetists) challenges the guidance that special aerosol precautions are only needed when using oxygen therapies for COVID-19 patients,

and raises concerns about safety of staff and patients on hospital wards, if they are not protected from infectious aerosols.

The study set out to examine whether oxygen therapies used for patients with severe COVID-19 produce large amounts of small respiratory particles called aerosols, which can transmit virus and can evade routine precautions used on hospital wards. The study found these oxygen therapies do not produce excessive amounts of aerosols and in fact reduce aerosols suggesting these therapies can be made widely available.

Read more:

<https://medicalxpress.com/news/2021-03-covid-aerosols-healthcare-workers.html>

## Emergency Preparedness

### Army Developing Tool for US Cities to Practice Cyberattack Response

The Army Cyber Institute is building a portable, tailorable platform for cities to practice responding to cyberattacks targeting critical infrastructure.

“For a long time we assumed uncontested homeland, and now that’s not necessarily as good of an assumption as it used to be,” said Lt. Col. Erica Mitchell, research lead for



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the critical infrastructure/key resources team at the Army Cyber Institute. The idea stems from the series of exercises created by the institute, the Army's cyber think tank at West Point, to investigate how cyberattacks affect critical infrastructure at the local level — for systems such as telecommunications or water service, for example. In some cases, the exercises

examined how a serious cyber assault could impact military forces stateside from deploying overseas.

*Read more:*

<https://www.defensenews.com/cyber/2021/03/31/army-developing-tool-for-us-cities-to-practice-cyberattack-response/>

### Deployment Health

#### Army Announces FDA Clearance of Field Deployable TBI Blood Test



The U.S. Army Medical Materiel Development Activity, in partnership with Abbott, announced the U.S. Food and Drug Administration approval of the Abbott i-STAT™ Alinity™ Traumatic Brain Injury plasma assay, a rapid blood test for TBI in January.

Between 2000 and 2019, more than 400,000 service members experienced a TBI as a result of combat injuries and training accidents, as well as everyday activities such as sporting events.

Developing a field-deployable solution for the detection and evaluation of TBI among our wounded service members serving at home and deployed overseas has been a top priority for the Department of Defense for more than a decade.

*Read more:*

<https://www.health.mil/News/Articles/2021/03/12/Army-Announces-FDA-Clearance-of-Field-Deployable-TBI-Blood-Test>

## Nanotechnology

### New Nanotech Device Enables Onsite Test for Water Toxicity

The technology, now in its next phase of development via university spin-out Nanolyse Technologies, could transform the protection of human health and the environment against chemical pollution caused by toxic, heavy metals dissolved in water.

Dr Imad Ahmed, founder and CEO of Nanolyse told *The Engineer* that Nanolyse's technology uses a combination of nano-porous membranes and custom magnetic nanocarriers to separate and concentrate ions from water.

"A water sample is injected into the system and selective, magnetic nanocarriers scavenge positively or negatively-charged ions from the solution in minutes," he said.



"Macro molecules – such as proteins and lipids – do not pass through nano-porous membranes. The nanocarriers are then isolated with a permanent magnet, plus a small volume of acid, allowing analysis of the element's chemical speciation."

Read more:

<https://www.theengineer.co.uk/chemical-pollution-water-toxicity-nanolyse/>

## Regulatory Research & Industrial Hygiene Professional News

DOL

### Labor Department Moves to Reverse Trump Rules that Narrow Worker Protections

The Labor Department moved Thursday to end two rules established under the Trump administration that reduced federal labor protections for millions of workers.

The two rules both dealt with classifications of workers as employees or independent contractors, a distinction that governs

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whether an employer is required to provide benefits, including health care. In a statement, the agency said it was proposing changes to two rules instituted

under the previous administration: the Independent Contractor Final Rule, passed by the agency just days before took office in January, as well as a regulation issued by the Labor Department under the Fair Labor Standards Act, which was largely gutted by a court decision last year.

Read more:

<https://www.hollandsentinel.com/story/news/environment/2021/02/06/bill-to-protect-firefighters-from-pfas-reintroduced-in-congress/43376361/>

## FDA

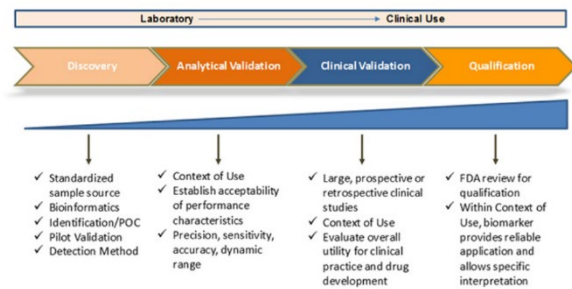
### FDA Authorizes Device to Screen Asymptomatic People for Certain SARS-Cov-2 Biomarkers

The Food and Drug Administration Friday authorized for emergency use an armband device that screens people without COVID-19 symptoms for certain potential SARS-CoV-2 biomarkers, such as excessive blood clotting.

The agency authorized the Tiger Tech COVID Plus Monitor for use in settings conducting temperature checks in accordance with infection control guidelines.

When combined with temperature checks, the new screening device “could help identify individuals who may be infected with the virus, thus helping to reduce the spread of COVID-19 in a wide variety of

### Biomarkers Development Process



public settings, including healthcare facilities, schools, workplaces, theme parks, stadiums and airports,” said Jeff Shuren, M.D., director of FDA’s Center for Devices and Radiological Health.

Read more:

<https://www.aha.org/news/headline/2021->

# Army Industrial Hygiene News and Regulatory Summary

[03-22-fda-authorizes-device-screen-asymptomatic-people-certain-sars-cov-2](#)

**NIOSH**

## NIOSH Releases Research Agenda for COVID-19 Issues



NIOSH released a research agenda for critical issues involved in the COVID-19

pandemic. Future research should focus on essential workers involved in critical continuity functions in the United States, according to NIOSH.

The institute also emphasized the need for a research focus on immigrant workers, workers with disabilities and special needs, workers with limited English proficiency, workers with lower incomes, and racial and ethnic minority groups to address the health disparities and inequities faced by workers in those populations.

*Read more:*

<https://ehsdailyadvisor.blr.com/2021/03/ni-osh-releases-research-agenda-for-covid-19-issues/>

**OSHA**

## COVID-19: OSHA's National Emphasis Program

On Friday, March 12, 2021, the Occupational Safety and Health Administration (OSHA) launched a National Emphasis Program (“NEP”). The NEP will focus new inspection and enforcement efforts on “companies that put the largest number of workers at serious risk of

contracting coronavirus.” The purpose of the NEP is to substantially reduce or eliminate coronavirus exposure for workers in companies where risks are high. This

# Army Industrial Hygiene News and Regulatory Summary

program entails both new inspections and follow-up inspections at worksites that were inspected in 2020 to make sure conditions either were corrected or need to be corrected.

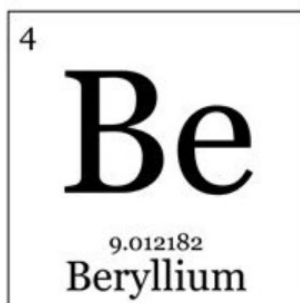
Read more:

<https://www.natlawreview.com/article/covid-19-osha-s-national-emphasis-program>

## Important Dates for the COVID-19 National Emphasis Program



## OSHA Updates: Beryllium Standards Corrections, New Whistleblower Authority



On February 24, the Occupational Safety and Health Administration (OSHA) issued corrections to its August 31, 2020, amendments to

the construction and shipyard beryllium standards (86 FR 11119).

The agency inadvertently failed to revise a paragraph of both standards when it issued

the August 31 final rule. The final rule also failed to include the correct language for the revised provisions in the tables of the Economic Feasibility Analysis and Regulatory Flexibility Certification sections of the rule's preamble.

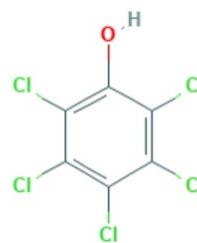
Read more:

<https://ehsdailyadvisor.blr.com/2021/03/osa-updates-beryllium-standards-corrections-new-whistleblower-authority/>

**EPA**

## The End of Pentachlorophenol Is Near

The US Environmental Protection Agency is proposing to ban all uses of the wood preservative pentachlorophenol. The decision comes after the sole producer of the chemical in North America announced that it was shutting down its



## Army Industrial Hygiene News and Regulatory Summary

pentachlorophenol business by the end of this year.

Commonly called penta, the chemical is used primarily to treat wooden utility poles. The US National Toxicology Program lists pentachlorophenol as a “reasonably anticipated” human carcinogen. The chemical is banned under the United

Nation’s Stockholm Convention on Persistent Organic Pollutants, a treaty the US signed but never ratified.

*Read more:*

<https://cen.acs.org/environment/pesticides/end-pentachlorophenol-near/99/web/2021/03>

### EPA Relaunches Climate Change Website Scrubbed By Trump Administration

Climate Change

CONT.



The Environmental Protection Agency (EPA) has relaunched its webpage dedicated to providing information on climate change and the environment after the page was previously scrubbed by the Trump administration in 2017.

The agency announced the move on Thursday, saying it was the first time in four years the EPA will have a designated page to provide the public information on greenhouse gas emissions, climate change effects and existing climate programs.

*Read more:* <https://thehill.com/changing-america/sustainability/climate-change/543942-epa-relaunches-climate-change-website-scrubbed>



APHC

*Training*

## DEFENSE COLLABORATION SERVICES HAS UPGRADED (HTML5)

ARMY IH WEBINAR DAY HAS A NEW LINK

- [HTTPS://CONFERENCE.APPS.MIL/WEBCONF/ARMYIHWEBINARDAY](https://conference.apps.mil/webconf/armyihwebinarday)
- CHROME OR FIREFOX REQUIRED TO JOIN
- WEB CONF PIN REMAINS THE SAME 170750506
- WEB CONF DIAL IN REMAINS THE SAME 410-874-6300 OR DSN: 312-874-6300
- AUDIO/MIC FUNCTIONALITY WITHIN MEETING (NO CALL IN REQUIRED)
- ADDED FUNCTIONALITY (BETTER SHARE SCREEN, RECORDING, MORE MODERN FEATURES, POLLING, PRESENTER TOOLS, SWIFT CHAT, WEBCAM, ETC.)

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## 2021 QUARTERLY ARMY IH WEBINAR DAY

[HTTPS://CONFERENCE.APPS.MIL/WEBCONF/ARMYIHWEBINARDAY](https://conference.apps.mil/webconf/armyihwebinarday)

12/2/2020	Monster	Building Downdraft Tables in DOEHS-IH	Steven
12/2/2020	Leader	Measuring Downdraft Ventilation	Belden
12/2/2020	SME	Downdraft Ventilation Q/A	Belden
12/2/2020	SME	DOEHS-IH Report Standardization	Delk
12/2/2020	Leader	Compressed Air use with Heavy Metals	Hueth
<b>3/3/2021</b>	<b>Leader</b>	<b>Vehicle Maintenance Shop Design Reviews</b>	<b>Parks</b>
<b>3/3/2021</b>	<b>Monster</b>	<b>Building Vehicle Exhaust in DOEHS-IH</b>	<b>Steven</b>
<b>3/3/2021</b>	<b>Leader</b>	<b>Measuring Vehicle Exhaust</b>	<b>Parks</b>
<b>3/3/2021</b>	<b>SME</b>	<b>Vehicle Exhaust Q/A</b>	<b>Parks</b>
<b>3/3/2021</b>	<b>SME</b>	<b>Vehicle Exhaust Ototoxins Q/A</b>	<b>Merkley</b>
6/2/2021	Monster	Building Drive-in/Drive-through Paint Booths in DOEHS-IH	Steven
6/2/2021	Leader	Measuring Drive-in/Drive-through Paint Booths	Belden
6/2/2021	SME	Drive-in/Drive-through Paint Booth Q/A	Belden
6/2/2021	SME	Letterkenny Paint booth incident/accident	Wisniewski
<b>9/1/2021</b>	<b>Monster</b>	<b>Building Dilution Ventilation in DOEHS-IH</b>	<b>Steven</b>
<b>9/1/2021</b>	<b>Leader</b>	<b>Measuring Dilution Ventilation</b>	<b>Parks</b>
<b>9/1/2021</b>	<b>SME</b>	<b>Dilution Ventilation Q/A</b>	<b>Parks</b>
<b>9/1/2021</b>	<b>SME</b>	<b>Sampling Qualifiers</b>	<b>Secrest</b>

# 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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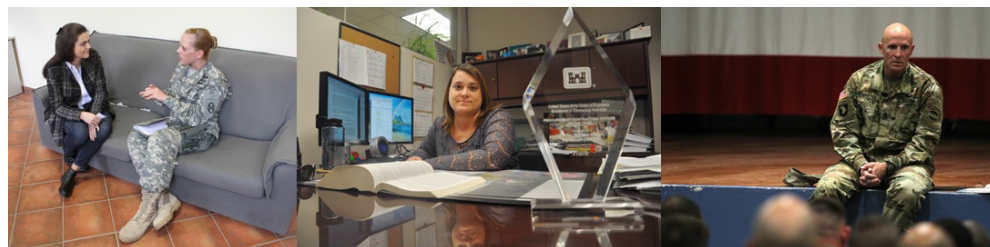
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## Professional Development and Career Programs

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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