October 2020
Issue 109

Army Industrial Hygiene News and Regulatory Summary

Hazardous Substances

Potential Scenarios and Hazards in the Work of the Future: A Systematic Review of the Peer-Reviewed and Gray Literatures

Special Interest Articles:

It would be useful for researchers, practitioners, and decision-makers to anticipate the hazards that workers will face in the future. The focus of this study is a systematic review of published information to identify and characterize scenarios and hazards in the future of work. Eleven bibliographic databases were systematically searched for papers and reports published from 1999 to 2019 that described future of work scenarios or identified future work-related hazards. To compile a comprehensive collection of views of the future, supplemental and ad hoc searches were also performed. After screening all search records against a set of predetermined criteria, the review yielded 36 references (17 peer-reviewed, 4 gray, and 15 supplemental) containing scenarios. In these, the future of work was described along multiple conceptual axes (e.g. labor market changes, societal values, and manual versus cognitive work). Technology was identified as the primary driver of the future of work in most scenarios, and there were divergent views in the literature as to whether technology will create more or fewer jobs than it

displaces. Workforce demographics, globalization, climate change, economic conditions, and urbanization were also mentioned as influential factors. Other important themes included human enhancement, social isolation, loneliness, worker monitoring, advanced manufacturing, hazardous exposures, sustainability, biotechnology, and synthetic biology.

Read more:
https://academic.oup.com/annweh/article/64/8/786/5877004

Contents:

Metals and Particulates Exposure from a Mobile E-Waste Shredding Truck: A Pilot Study

The US electronics recycling industry has introduced a novel mobile electronic waste (e-waste) shredding truck service to address increasing needs for secure data destruction of e-waste. These trucks can shred small electronics with data security concerns at remote locations for a wide variety of clients. Shredding jobs usually involve hand-feeding electronic waste (e-waste) for 4–10 h day^{-1}, 1–5 days. Shredding of e-waste has been documented as a source of high metal exposures, especially lead and cadmium. However, no studies have been done to assess exposures on mobile e-waste shredding trucks. We conducted a pilot cross-sectional exposure assessment on a mobile e-waste shredding truck performing a 65-min shredding job (truck back door open and no local exhaust ventilation) in the Greater Boston area in 2019. We collected area air and surface wipe samples for metals along with real-time particulate measurements from different locations. The highest metal air concentrations (e.g. 2.9 µg-lead m^{-3}) were found next and 1.8 m away from the shredder operator inside the semi-trailer. Metal surface contamination was highest near the shredder (e.g. 1190 µg-lead 100 cm^{-2}) and extended to other parts of the truck. Near the shredder, the concentration of ultrafine particles was up to 250 000 particles cm^{-3} and particulate matter 2.5 mm or less in diameter ($PM_{2.5}$) was up to 171 µg m^{-3}, and neither returned to background levels after 40 min of inactivity. A diesel-electric generator was used to power the shredder and could have contributed to some of the particulate emissions. We found that mobile e-waste shredding trucks are a source of metals and particulates emissions. We recommend the industry adopts better controls for shredding inside trucks,

such as local exhaust ventilation with proper filtration and use of personal protective equipment, to protect workers' health and the environment.

Read more: https://academic.oup.com/annweh/article-abstract/64/8/890/5880271?redirectedFrom=fulltext

Exposures to Fumigants and Residual Chemicals in Workers Handling Cargo from Shipping Containers and Export Logs in New Zealand

Objectives
Previous studies have reported high concentrations of airborne fumigants and other chemicals inside unopened shipping containers, but it is unclear whether this is reflective of worker exposures.

Methods
We collected personal 8-h air samples using a whole-air sampling method. Samples were analysed for 1,2-dibromoethane, chloropicrin, ethylene oxide, hydrogen cyanide, hydrogen phosphide, methyl bromide, 1,2-dichloroethane, C2-alkylbenzenes, acetaldehyde, ammonia, benzene, formaldehyde, methanol, styrene, and toluene. Additive Mixture Values (AMVs) were calculated using the New Zealand Workplace Exposure standard (WES) and American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLVs) of the 8-h, time-weighted average exposure limit. Linear regression was conducted to assess associations with work characteristics.

Results
We included 133 workers handling shipping containers, 15 retail workers unpacking

container goods, 40 workers loading fumigated and non-fumigated export logs, and 5 fumigators. A total of 193 personal 8-h air measurements were collected. Exposures were generally low, with >50% below the limit of detection for most chemicals, and none exceeding the NZ WES, although formaldehyde exceeded the TLV in 26.2% of all measurements.

Read more: https://academic.oup.com/annweh/article-abstract/64/8/826/5854125?redirectedFrom=fulltext

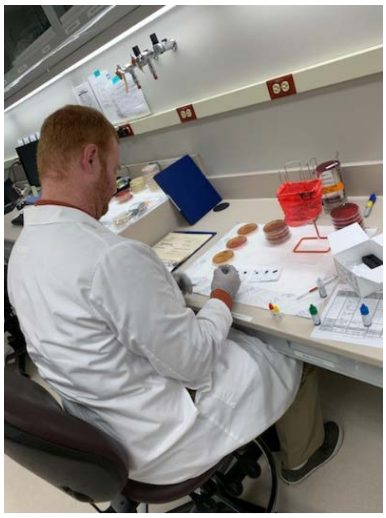
Development of a Personal Aerosol Sampler for Monitoring the Particle–Vapour Fractionation of SVOCs in Workplaces

Semi-volatile organic compounds (SVOCs), partitioned between particulates and vapours of an aerosol, require special attention. The toxicological effects caused by the inhalation of such aerosols may depend on the concentration and in which phase the organic compounds are found. A personal denuder-gas–particle separation aerosol sampler was developed to provide information about the partitioning of aerosols from organic compounds. The sampler was tested in a series of controlled laboratory experiments, which confirmed the capability and accuracy of the sampler to measure gas–particle mixtures. An average difference of 14.8 ± 4.8% was found between sampler and reference laboratory instruments. The obtained results showed that our sampler enables a more accurate measurement of the SVOC aerosols' gas–particle fractionation, compared with that of conventional samplers.

Read more:
https://academic.oup.com/annweh/article-abstract/64/8/903/5877137?redirectedFrom=fulltext

Operative and Technical Modifications to the Coriolis® µ Air Sampler That Improve Sample Recovery and Biosafety during Microbiological Air Sampling

Detecting infectious aerosols is central for gauging and countering airborne threats. In this regard, the Coriolis® µ cyclonic air sampler is a practical, commercial collector that can be used with various analysis methods to monitor pathogens in air. However, information on how to operate this unit under optimal sampling and biosafety conditions is limited. We investigated Coriolis performance in aerosol dispersal experiments with polystyrene microspheres and *Bacillus globigii* spores.



We report inconsistent sample recovery from the collector cone due to loss of material when sampling continuously for more than 30 min. Introducing a new collector cone every 10 min improved this shortcoming. Moreover, we found that several surfaces on the device become contaminated during sampling. Adapting a high efficiency particulate air-filter system to the Coriolis prevented contamination without altering collection efficiency or tactical deployment.

Read more:
https://academic.oup.com/annweh/article/64/8/852/5848475

Occupational Asthma and Its Causation in the UK Seafood Processing Industry

Objectives

The processing of seafood (fish and shellfish) for human consumption can lead to health consequences, including occupational asthma (OA). Several non-UK studies have reported both respiratory outcomes and airborne levels of major allergens in seafood processing. However, there is a paucity of such evidence in the UK land-based seafood processing sector, which employs some 20 000 workers.

Methods

University of Manchester's Surveillance of Work-related and Occupational Respiratory Disease (SWORD) reporting system has been interrogated over the period 1992–2017 to define the incidence rate of OA cases that can be ascribed to the UK land-based processing sector, and the seafood species implicated. Airborne allergen monitoring data undertaken at Health and Safety Executive's laboratory from 2003 to 2019 have also been collated.

Results

The estimated annual OA incidence rate in seafood processors was 70 [95% confidence intervals (CIs) 48.9, 91.1] per 100 000 workers compared with 2.9 (95% CIs 2.8, 3.1) in 'all other industries'. The annual calculated percentage trend in OA (1992–2017) was −8.1% (95% CIs −15.9, 0.4) in seafood processing showing a similar trend to 'all other industries' (mean −7.0%; 95% CIs −7.8, −6.1). Prawns and salmon/trout were notably implicated by SWORD as causative species related to OA.

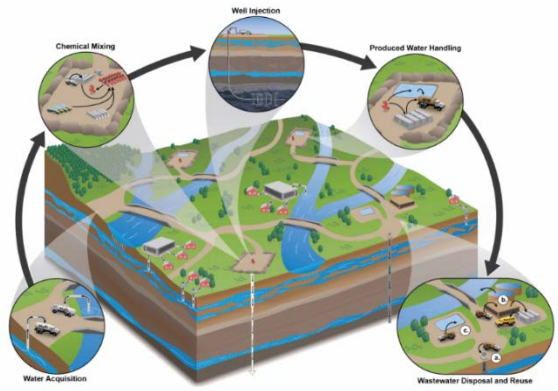
Read more:
https://academic.oup.com/annweh/article/64/8/817/5850842

Radiation

Radiation Elevated at Fracking Sites, Researchers Find

Researchers at Harvard released a new study Tuesday showing elevated radiation levels at fracking sites, saying the concerning levels could pose health risks to residents in the adjacent area.
The study was published in the journal Nature and details how the controversial hydraulic fracturing drilling sites are registering radiation levels above normal background levels, Reuters reported.
Sites within 12 miles downwind of 100 fracking wells were found to have radiation levels that are about 7 percent above normal background levels, according to the study.

Read more:



https://thehill.com/policy/energy-environment/520802-radiation-elevated-at-fracking-sites-researchers-find

Ventilation

Study Suggests Airplane Ventilation Systems Aren't Spreading Coronavirus

A new study released Thursday suggests that people don't need to worry about circulating air spreading coronavirus on airplanes.

The US Department of Defense study supports earlier research showing the ventilation systems on aircraft filter the air efficiently and take out particles that could transmit viruses.

The study, which was released without peer review, did not take into account other ways that people could catch the virus on aircraft — including from others coughing or breathing directly on them, from surfaces or from confined spaces such as restrooms.

Read more:
https://boston.cbslocal.com/2020/10/16/airplane-ventilation-systems-coronavirus-safe-to-fly-spread/

PPE

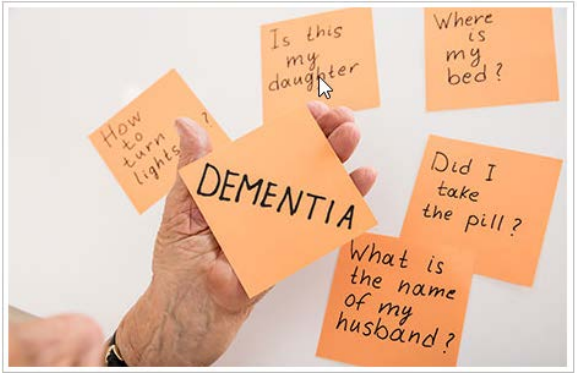
COVID-19 Pandemic: New E-Tool Designed To Help Pick the Right Respiratory Protection

A new e-tool from the Washington State Department of Labor & Industries is intended to help employers and workers choose the appropriate mask, facial covering or respirator based on the COVID-19 exposure risk level of specific job duties. Users can access the e-tool via a computer or mobile device to determine which type of respiratory protection is right for them based on whether they work alone or with others, indoors or outdoors, or in a vehicle alone or with others. The resource isn't intended for hospitals, clinics or other treatment facilities.

Read more:
https://www.safetyandhealthmagazine.com/articles/20382-covid-19-pandemic-new-e-tool-designed-to-help-pick-the-right-respiratory-protection

Noise

Community Noise May Affect Dementia Risk



Results from a new study published in *Alzheimer's & Dementia* support emerging evidence suggesting that noise may influence individuals' risk of developing dementia later in life.

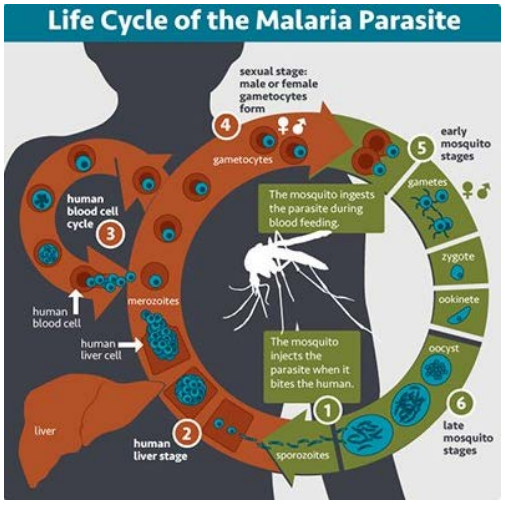
Researchers studied 5,227 participants of the Chicago Health and Aging Project who were aged 65 years or older, of whom 30% had mild cognitive impairment and 11% had Alzheimer's disease. They found that persons living with 10 decibels more noise near their residences during the daytime had a 36% higher odds of having mild cognitive impairment and a 30% higher odds of having Alzheimer's disease.

Read more:
https://www.sciencedaily.com/releases/2020/10/201021085106.htm

Preventive Medicine

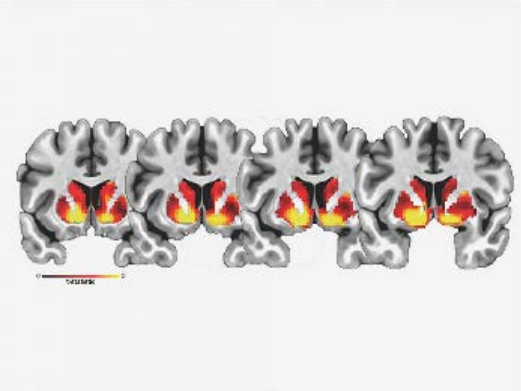
Malaria Parasites Hide Out In Humans When It's Not Mosquito Season

Malaria parasites survive the mosquito-free dry season by waiting silently in humans for the return of the rainy season that brings back with it mosquitoes. New research, by an international team including Penn State scientists, helps explain how the Plasmodium falciparum parasite survives the disruption to its lifecycle, which requires development within the mosquito host for transmission between people. A paper describing the research appears Oct. 26 in the journal *Nature Medicine*



Read more: https://medicalxpress.com/news/2020-10-malaria-parasites-humans-mosquito-season.html

NIH-Funded Study Links Adolescent Brain Differences to Increased Waist Circumference



Differences in the microstructure of the nucleus accumbens (NAcc), a region in the brain that plays an important role in processing food and other reward stimuli, predict increases in indicators of obesity in children, according to a study funded by the National Institute on Drug Abuse (NIDA) and nine other institutes, all part of the National Institutes of Health. The paper (link is external), published today in the journal *Proceedings of the National Academy of Sciences,* is based on data from the Adolescent Brain Cognitive Development (ABCD) Study (link is external). The ABCD Study will follow nearly 12,000 children through early adulthood to assess factors that influence individual brain development and other health outcomes.

Read more: https://www.nih.gov/news-events/news-releases/nih-funded-study-links-adolescent-brain-differences-increased-waist-circumference

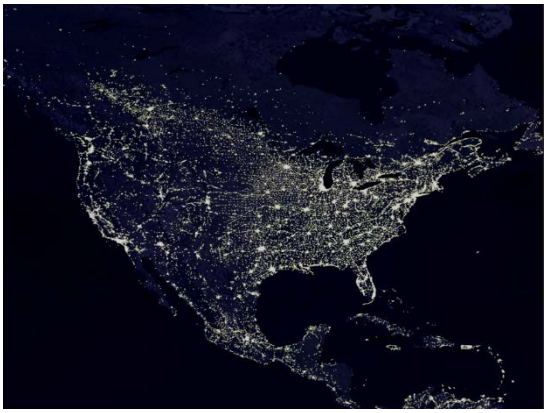
New Lead Screening Method Zooms In On Highest-Risk Areas in Georgia

While many people think of lead poisoning as a problem of the past, chronic exposure still occurs in some communities that may be missed in limited screening programs for children's blood lead levels. Now researchers at Emory University have developed a more precise screening index, illustrated with a map, which provides a fine-grain view of areas where children are most at risk for low-level lead exposure in

the city of Atlanta and throughout the state of Georgia.
Scientific Reports published their new method, including analyses that tested and showed its efficacy, using historical data

Read more:
https://new.eurekalert.org/pub_releases/2020-10/ehs-nls102620.php

Light Pollution May Increase Biting Behavior at Night in Aedes Aegypti Mosquitoes



Artificial light abnormally increases mosquito biting behavior at night in a species that typically prefers to bite people during the day, according to research from the University of Notre Dame that was published in *The American Journal of Tropical Medicine and Hygiene*

Read more:
https://medicalxpress.com/news/2020-10-pollution-behavior-night-aedes-aegypti.html

NIH Study Tests a Comprehensive Model Intervention to Reduce Opioid Overdose Deaths in Hard-Hit Communities

National Institutes of Health and other federal leaders outlined their vision for a groundbreaking study that will aim to address gaps in reaching communities most heavily affected by the opioid epidemic with proven, evidence-based interventions for opioid use disorder (OUD). This approach is detailed in a paper published in a special issue of *Drug and Alcohol Dependence*, and also describes the early impact of COVID-19 on its goals, and the potential for uncovering insights at the

NIH HEAL INITIATIVE

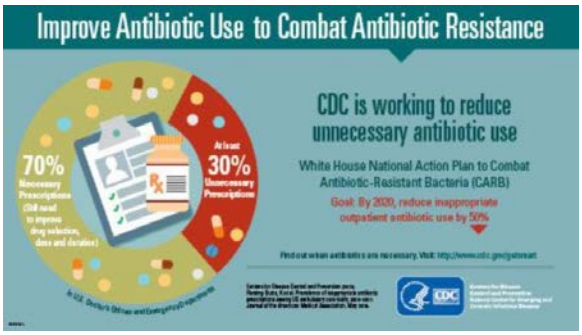
intersection of COVID-19 and the opioid epidemic.

An estimated 1.6 million people had OUD in 2019; of these, only 18.1% received medication treatment for opioid misuse. To address this gap, in May 2019, the NIH announced plans to invest more than $350 million to support the multi-year HEALing Communities Study, a multi-site research study that will test the impact of an integrated set of evidence-based practices on reducing opioid-related overdose deaths by 40% in three years in communities hard-hit by the opioid crisis.

Read more: https://www.nih.gov/news-events/news-releases/nih-study-tests-comprehensive-model-intervention-reduce-opioid-overdose-deaths-hard-hit-communities

Environmental Health

The 'SELection End points in Communities of bacTeria' (SELECT) Method: A Novel Experimental Assay to Facilitate Risk Assessment of Selection for Antimicrobial Resistance in the Environment



Background:
Antimicrobial resistance (AMR) is one of the most significant health threats to society. A growing body of research demonstrates selection for AMR likely occurs at environmental concentrations of antibiotics. However, no standardized experimental approaches for determining selective concentrations of antimicrobials currently exist, preventing appropriate environmental and human health risk assessment of AMR.

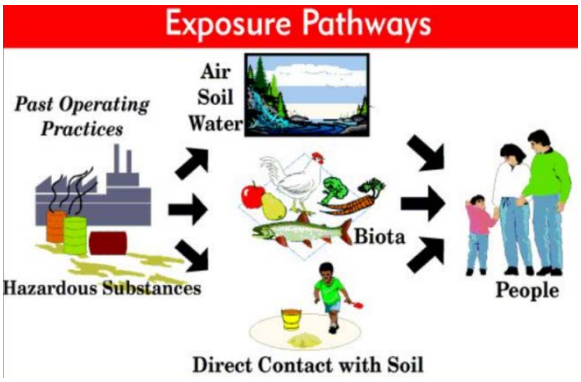
Objectives:
We aimed to design a rapid, simple, and cost-effective novel experimental assay to determine selective effect concentrations of antibiotics and to generate the largest experimental data set of selective effect concentrations of antibiotics to date.

Methods:
Previously published methods and data were used to validate the assay, which determines the effect concentration based on reduction of bacterial community (wastewater) growth. Risk quotients for test antibiotics were generated to quantify risk.

Read more:
https://ehp.niehs.nih.gov/doi/10.1289/EHP6635

Quantile g-Computation: A New Method for Analyzing Mixtures of Environmental Exposures

Environmental exposures occur in mixtures of similar or different agents from the same or different sources. Attention to mixtures has grown in recent years,[1] as has interest in causal inference techniques.[2,3,4] Statistical methods for mixture analysis, including weighted quantile sum (WQS) regression, have become widely available and used.[5,6] Investigators recently reported in *Environmental Health Perspectives* a new method that combines aspects of WQS with a causal inference method known as g-computation[7] to estimate the joint effect of all exposures in a mixture.[8] The researchers, led by Alexander Keil, call their new method quantile g-computation.



It is difficult to tease apart the potential effects of individual constituents in a mixture. Keil, an assistant professor of epidemiology at the University of North Carolina at Chapel Hill, explains that WQS addresses this problem by reimagining the mixture as a single index. It estimates the effect of an intervention that causes all elements of the mixture to decrease or increase at once, he says. “

Read more: https://ehp.niehs.nih.gov/doi/10.1289/EHP7342

Duke-NUS Study Uncovers Why Bats Excel as Viral Reservoirs without Getting Sick

Bats act as reservoirs of numerous zoonotic viruses, including SARS-CoV, MERS CoV, Ebola virus, and--most likely--SARS-CoV-2, the pathogen behind the ongoing coronavirus pandemic. However, the molecular mechanisms bats deploy to tolerate pathogenic viruses has remained unclear.

Now scientists from Duke-NUS Medical School, Singapore, have discovered novel molecular mechanisms that allow bats to tolerate zoonotic viruses without getting sick. Published this week in the *Proceedings of the National Academy of Sciences (PNAS)*, the study suggests that bats adopt unique strategies to prevent overactive immune responses, which protects them against diseases caused by zoonotic viruses.

Read more:
https://www.eurekalert.org/pub_releases/2020-10/dms-dsu102620.php

Microplastics in Groundwater (And Our Drinking Water) Present Unknown Risk

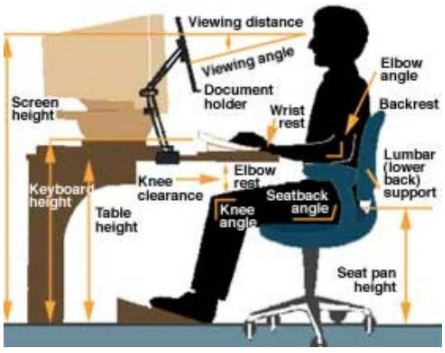
Microplastics (plastics <5mm) and their negative health impacts have been studied in oceans, rivers, and even soils, and scientists are beginning to grapple with the myriad human health impacts their presence might have. One understudied, but critical, link in the cycle is groundwater, which is often a source of drinking water. While microplastics in groundwater likely affect human health, only a handful of studies have examined the abundance and movement of microplastics in groundwater.

This gap means the potential for adverse health effects remains largely unknown.

Read more:
https://new.eurekalert.org/pub_releases/2020-10/gsoa-mig102620.php

Ergonomics

Survey Reveals Importance of Ergonomics to U.S. Workers



A new survey from office furniture manufacturer Steelcase examines the understanding of U.S. workers of ergonomics, its importance in the workplace and how it affects a worker's productivity and physical well-being

Through a survey of nearly 700 office workers in the United States, the study

revealed that more than half (64 percent) of Americans believe they know the definition of the word ergonomics. However, only 20 percent actually do know the correct definition. Interestingly, only 36 percent of younger respondents (18-24) believe they know what the term means versus 74 percent of those between 45 and 54.

Read more:
https://www.ehstoday.com/health/article/21910743/survey-reveals-importance-of-ergonomics-to-us-workers

Safety

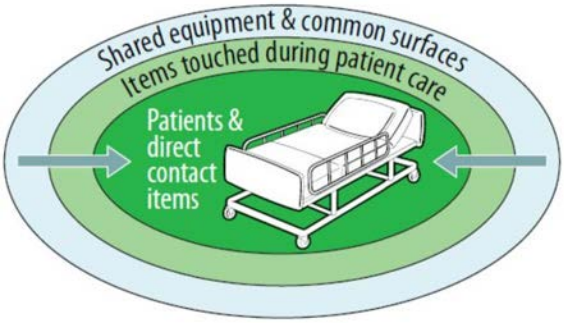
New Method of Detecting Combustible Dust Uses Real-Time Imaging

Using newly developed algorithms, researchers from Purdue University have designed an image- and video-based application to detect combustible dust concentrations suspended in the air.

The application, which the researchers say can be used in agricultural, powder-handling or manufacturing settings, involves capturing images of a suspended dust cloud and then analyzing the light extinction coefficient. In testing, the algorithm was able to recognize 95% of sawdust and 93% of cornstarch particulates in the air, a university press release states, adding that the application was able to distinguish suspended dust from "normal background noise."

Read more:
https://www.safetyandhealthmagazine.com/articles/20414-new-method-of-detecting-combustible-dust-uses-real-time-imaging

Drug-Resistant Hospital Bacteria Persist Even After Deep Cleaning



Scientists have used genome sequencing to reveal the extent to which a drug-resistant gastrointestinal bacterium can spread within a hospital, highlighting the challenge hospitals face in controlling infections. Enterococcus faecium is a bacterium commonly found in the gastrointestinal tract, where it usually resides without causing the host problems. However, in immunocompromised patients, it can lead to potentially life-threatening infection. Over the last three decades, strains have emerged that are resistant to frontline antibiotics including ampicillin and vancomycin, limiting treatment options - and particularly worrying, these strains are often those found in hospital-acquired E. faecium infections.

Read more:
https://new.eurekalert.org/pub_releases/2020-10/uoc-dhb102620.php

Prioritize COVID-19 Protections for Essential Workers with Existing Medical Conditions, CDC Says

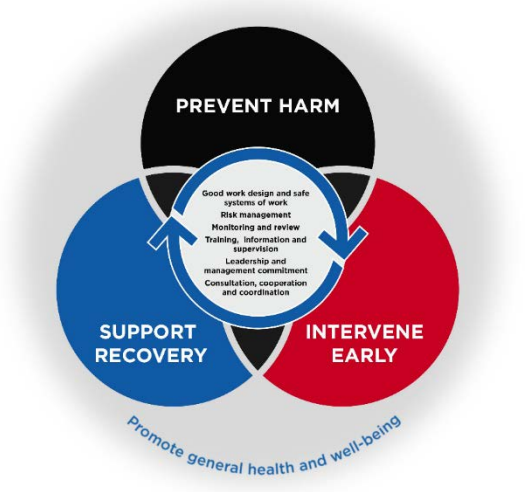
Employers should prioritize COVID-19 exposure controls for essential workers whose existing medical conditions put them at higher risk of severe illness from the potentially deadly disease, say researchers from the Centers for Disease Control and Prevention.

The researchers analyzed 2017-2018 survey data (the most recent available) from the agency's Behavioral Risk Factor Surveillance System to assess the baseline prevalence of existing medical conditions among workers in six essential occupations and seven essential industries. The study population comprised 213,518 adult workers.

Existing medical conditions were significantly elevated among home health and personal care aides, as well as workers in the nursing home/rehabilitation, trucking and transit industries. Those in the health care industry, however, also have increased exposure risks because their jobs require close contact with patients, the general public or co-workers.

Read more:
https://www.safetyandhealthmagazine.com/articles/20380-prioritize-covid-19-protections-for-essential-workers-with-existing-medical-conditions-cdc-says

11 Ways to Create Psychological Safety at Work



In 2018, nearly one in five adults experienced some form of mental illness. In 2020, it grew worse—an emotional well-being survey showed 90 percent of U.S. adults experienced pandemic-related emotional distress. According to the World Health Organization, depression and anxiety cost the world's economy an estimated $1 trillion per year in lost productivity. Today, psychological safety at work is more important than ever.

Sadly, only 39 percent of participants feel that their employer understands them as well as they're expected to understand their customers. This leads to tremendous disengagement. Gallup reports that less than one-third of the U.S. workforce is engaged in their jobs. Worse, that number plummets to a mere 13 percent on a worldwide level.

Read more:
https://www.business2community.com/workplace-culture/11-ways-to-create-psychological-safety-at-work-02353967

Emergency Preparedness

US Emergency Sick Leave Act Tied To Reduced COVID-19 Cases

The emergency sick leave provision of the Mar 18 bipartisan Families First Coronavirus Response Act (FFCRA) appears to have reduced the spread of the virus. A *Health Affairs* study yesterday found that states where workers could get up to 2 weeks of paid sick leave showed 417 fewer confirmed cases per day, or an average of 1 prevented case per day per 1,300 workers.

The lack of universal access to paid sick leave in the United States makes it an outlier among nations in Europe and the Americas. Twenty-seven percent of all US workers and more than half of food and accommodation industry workers are ineligible for paid sick leave. The emergency sick leave provision of the FFCRA is estimated to provide paid sick leave benefits to roughly half of the US workforce.

Read more:
https://www.cidrap.umn.edu/news-perspective/2020/10/news-scan-oct-16-2020

Deployment Health

VA Marks First Deployment of Cerner Health Records System

Cerner Corp. has deployed a new electronic health record system at a Veterans Administration center in Washington state. It's the first deployment as part of a $16 billion project that will put the VA and the U.S. Department of Defense on the same health record system.

The Mann-Grandstaff VA Medical Center is the first to have the new Cerner EHR system up and running. In addition to Spokane, Wash., center, the deployment included four community-base outpatient clinics in Washington, Montana and Idaho, and a VA

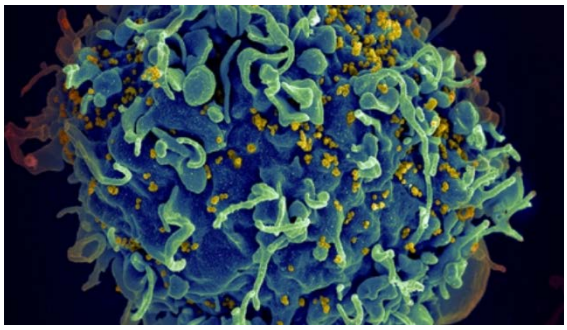
business operations center in Las Vegas, according to a Monday release.
Earlier this month, the VA said it had migrated clinical and demographic data for about 88,000 veterans in preparation for the launch. The VA said in a release that the data transfer and launch will let clinicians and staff access and update patient information in the EHR system rather than having to use multiple systems.

Read more: https://www.bizjournals.com/kansascity/news/2020/10/27/va-deploys-cerner-ehr-system-at-washington-center.html

Nanotechnology

Tiny Golden Bullets Could Help Tackle Asbestos-Related Cancers

Gold nanotubes—tiny hollow cylinders one thousandth the width of a human hair—could be used to treat mesothelioma, a type of cancer caused by exposure to asbestos, according to a team of researchers at the Universities of Cambridge and Leeds.



In a study published today in journal *Small*, the researchers demonstrate that once inside the cancer cells, the nanotubes absorb light, causing them to heat up, thereby killing the cells.
More than 2,600 people are diagnosed in the UK each year with mesothelioma, a malignant form of cancer caused by exposure to asbestos. Although the use of asbestos is outlawed in the UK now, the country has the world's highest levels of mesothelioma because it imported vast amounts of asbestos in the post-war years. The global usage of asbestos remains high, particularly in low- and middle-income countries, which means mesothelioma will become a global problem.

Read more: https://phys.org/news/2020-10-tiny-golden-bullets-tackle-asbestos-related.html

Regulatory Research & Industrial Hygiene Professional News

Judiciary

10th Circuit Expands PSM Coverage

The United States Court of Appeals for the Tenth Circuit

The Tenth Circuit Court of Appeals (covering Oklahoma, Kansas, New Mexico, Colorado, Wyoming, and Utah) issued an opinion on Tuesday (10/27/2020) that expands the applicability of OSHA's process-safety-management standard to interconnected processes—even when the interconnected process does not contain any highly hazardous chemicals.

The Tenth Circuit reached its decision based upon a plain reading of the regulatory definition of "process." In doing so, the court also rejected Wynnewood Refining's argument, under *Kisor v. Wilkie*, that the court should consider the "text, structure, history, and purpose" of the regulation, including close review of the PSM standard's preamble. The Tenth Circuit rejected Wynnewood's argument as a misunderstanding and misapplication of *Kisor*, noting that such a review is unnecessary when the plain language of the regulation is unambiguous.

Read more:
https://www.natlawreview.com/article/10th-circuit-expands-psm-coverage

FDA

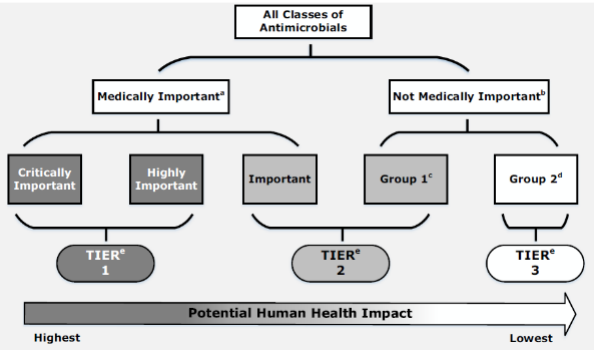
FDA Considers Revising Criteria for Ranking Medically Important Antibiotics

The US Food and Drug Administration (FDA) late last week published a concept paper outlining potential revisions to criteria that the agency uses to guide the use of medically important antimicrobial drugs in veterinary medicine.

The FDA says the proposed approach for updating the current ranking of antibiotics, which was created in 2003 under Guidance for Industry (GFI) #152, would take into account an improved understanding of

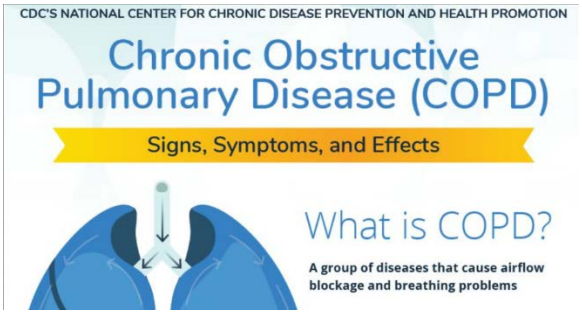
antimicrobial resistance, changes in human clinical practices, and other scientific advances. The revised criteria would also more broadly consider the importance of these antibiotics in human medicine, beyond their use in treating foodborne bacterial infections.

Read more:
https://www.cidrap.umn.edu/news-perspective/2020/10/asp-scan-weekly-oct-16-2020 (scroll down to 6th heading)



NIOSH

NIOSH: Nearly 1 in 5 Cases of COPD Related to Job Exposures



A new study released by the National Institute for Occupational Safety and Health (NIOSH) reveals nearly one in five cases of chronic obstructive pulmonary disease (COPD) can be linked to on-the-job exposures.

Just over one-third of the cases of COPD in people who have never smoked can be linked to occupational exposures, say the researchers, who published their findings in the American Journal of Epidemiology.
In addition, new research from the Centers for Disease Control and Prevention found that COPD, which includes asthma and bronchitis, now affects about 24 million Americans, most of them past or current smokers. Nearly 58 percent do not even know they may have the disease.

Read more:
https://www.ehstoday.com/archive/article/21913725/niosh-nearly-1-in-5-cases-of-copd-related-to-job-exposures

OSHA

OSHA Doesn't Expect Employers to Report COVID-19 Hospitalizations Anymore

UNITED STATES DEPARTMENT OF LABOR

If your workplace is the site of a major coronavirus outbreak, don't expect your employer to tell the Occupational Safety and Health Administration.
Employers are legally required to notify OSHA promptly whenever a worker ends up hospitalized due to a work-related injury or illness. But the way the Trump administration is choosing to read the rules, there is almost no scenario in which a COVID-19 hospitalization must be reported to the agency.

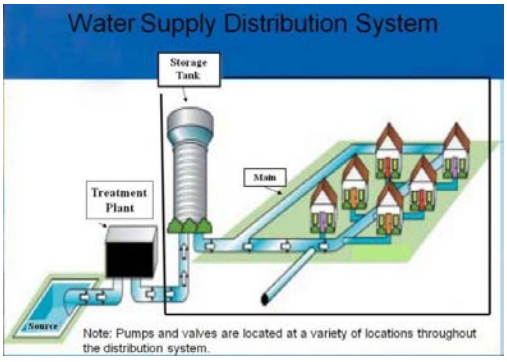
Workplace safety experts are concerned the lack of employer reporting will leave the federal government unable to track large workplace outbreaks and intervene to stop the spread. Some of the worst COVID-19 clusters in the country have revolved around workplaces

Read more:
https://www.huffingtonpost.ca/entry/osha-covid-19-hospitalizations_n_5f889a28c5b6e9e76fbb6db7

EPA

America's Water Infrastructure Act: More Deadlines Ahead for Community Drinking Water Systems!

Community Water Systems (CWSs) around the country should be aware of upcoming deadlines at the end of 2020 that were put into place under the America's Water Infrastructure Act (AWIA) previously signed into law in 2018. The law requires CWSs that serve more than 3,300 people to complete a risk and resilience assessment and develop an emergency response plan

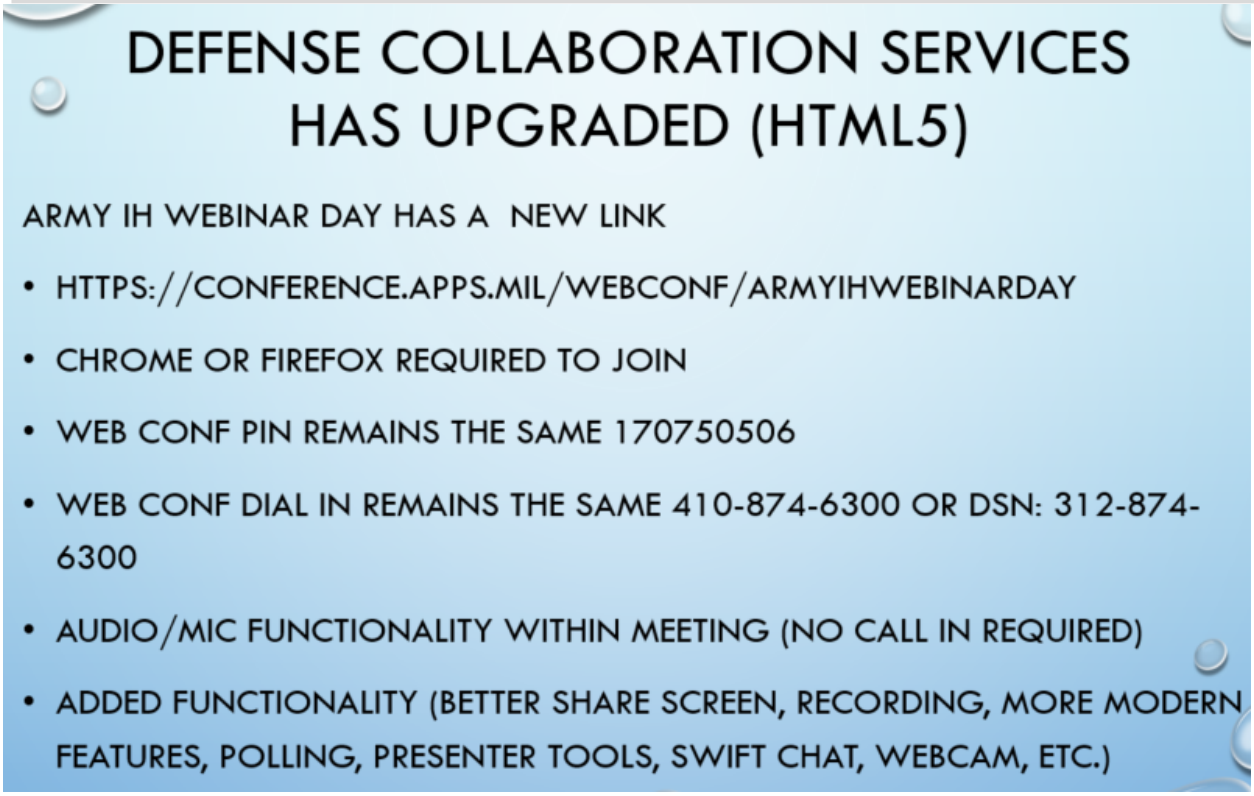


and establishes deadlines by which water systems must certify to the United States Environmental Protection Agency (EPA) completion of the risk assessment and emergency response plan.

Read more: https://www.jdsupra.com/legalnews/america-s-water-infrastructure-act-more-24494/

APHC

Training



2021 QUARTERLY ARMY IH WEBINAR DAY

HTTPS://CONFERENCE.APPS.MIL/WEBCONF/ARMYIHWEBINARDAY

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

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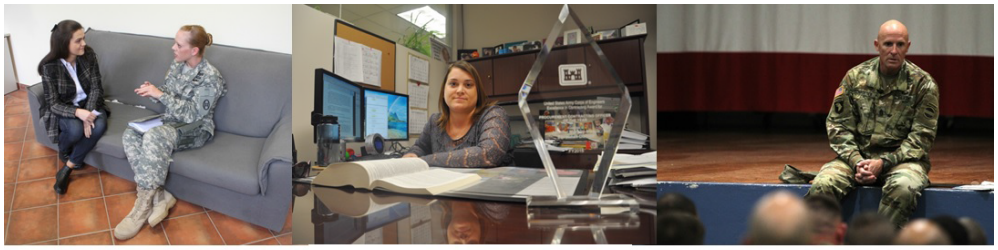

Professional Development and Career Programs

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.