

9 December 2016

Army Public Health Weekly Update

Army Public Health Center

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Army Industrial Hygiene News and Regulatory Summary

The November issue includes special interest articles on skin sensitization, PPE for women, indoor dust, cold weather, and mobile apps.



How the U.S. Army personalized its mental health care

7 December - The U.S. Army's efforts to come to grips with a dramatic upsurge in war-related behavioral conditions over the past 13 years holds valuable lessons for bringing precision mental health care to the civilian world. ... [T]he United States does not systematically collect data on mental health care outcomes and lacks any nationwide means for harnessing it. Further, the broad range of difficult conditions, competing therapies, and different professions within mental health care have made it seem a poor candidate for the precise assessment, ongoing monitoring, and individualized feedback that are necessary components for making precision medicine a reality. All three of those essential components of precision medicine are now being addressed in the Army, using a system called the Behavioral Health Data Portal (BHDP). It makes possible the routine collection of patient-reported data using standardized screening instruments, incorporates redesigned patient and care team workflows to allow consistent monitoring, and embeds clinical-decision-support systems for providing individualized feedback and action at the point of care. And it tackles two of the most difficult challenges of ongoing precision care: following patients over time and as they move from place to place and from care provider to care provider. [Harvard Business Review](#)

Importance of external cause coding for injury surveillance: lessons from assessment of overexertion injuries among U.S. Army soldiers in 2014

November 2016 - Injuries are a barrier to military medical readiness, and overexertion has historically been a leading mechanism of injury among active duty U.S. Army soldiers. Details are needed to inform prevention planning. The Defense Medical Surveillance System (DMSS) was queried for unique medical encounters among active duty Army soldiers consistent with the military injury definition and assigned an overexertion external cause code (ICD-9: E927.0–E927.9) in 2014 (n=21,891). Most (99.7%) were outpatient visits and 60% were attributed specifically to sudden strenuous movement. Among the 41% (n=9,061) of visits with an activity code (ICD-9: E001–E030), running was the most common activity (n=2,891, 32%); among the 19% (n=4,190) with a place of occurrence code (ICD-9: E849.0–E849.9), the leading location was recreation/sports facilities (n=1,332, 32%). External cause codes provide essential details, but the data represented less than 4% of all injury-related medical encounters. [Medical Surveillance Monthly Report](#)

Pilot program will put military medical clinics in commissaries

6 December - Need medical attention? You might be able to do some grocery shopping while you're there, if the Navy's planned test of putting medical clinics in some

A Stabbing, a Possible Ebola Outbreak, and a 'Time Bomb'

It may sound like the plot of a movie: police find a young man dead with stab wounds. Tests quickly show he'd had Ebola.

Officials realize the suspects in the case, men in a local gang, may have picked up and spread Ebola across the slum. These men are reluctant to quarantine themselves and some – including a man nicknamed "Time Bomb" – cannot even be found.

This scenario actually unfolded in the West African nation of Liberia in 2015. And what followed was a truly unconventional effort by epidemiologists to stop a new Ebola outbreak.
Podcast

commissaries is successful. The test, which will take place in the Jacksonville, Florida, area, is in the planning phase. The clinics will be run by Navy corpsmen, said Vice Adm. Forrest Faison III, the Navy surgeon general, during a Dec.1 session at the conference of the Association of Military Surgeons of the United States, held just outside Washington, D.C. ... Further information about the test – what types of care would be offered, whether appointments would be required, or the role (or interest level) of the Defense Commissary Agency or other service branches in the pilot, for instance – was not immediately available.
[Military Times](#)

PTSD treatment getting scrutiny in clinical trials at three military hospitals

5 December - It only takes about a minute for Dr. Michael Bartoszek to inject a local anesthetic into a bundle of nerves in a patient's neck. But the relatively simple procedure can have a big impact on troops suffering from post-traumatic stress. Bartoszek, a doctor at Womack Army Medical Center, said the treatment - known as a stellate ganglion block - can reduce anxiety, halt nightmares and stop the hyper-vigilance associated with PTSD. The effects are near instantaneous, he said. And they can be long-lasting. ... At Fort Bragg, Tripler Army Medical Center in Hawaii and Landstuhl Regional Medical Center in Germany, officials are hoping to gather data on at least 240 patients to provide the first scientific proof of the procedure's efficacy as a PTSD treatment. ... "The study itself has been fine," Bartoszek said. "The biggest challenge is convincing folks to participate. Soldiers are hesitant to risk not getting the treatment they believe might calm their symptoms."

[The Fayetteville Observer](#)

Toxic armories

2 December – National Guard inaction exposes communities to lead [Part I of a series]: ... The National Guard's indoor firing ranges were supposed to be well-ventilated, cleaned regularly and equipped with air filters to prevent lead from escaping. But in armories from Washington state to Vermont, people tracked dust outside the ranges by foot. Ventilation systems sucked in lead, spreading it to public areas and offices, sometimes as far as roofs, sidewalks and the soil outside, according to inspection records. The scope of the contamination is staggering. Inspectors have found lead dust at alarming levels in armory gyms, drill halls, conference rooms, hallways, stairwells, kitchens, pantries, offices, bathrooms and a day care center, records and interviews show. ... The National Guard was put on notice about the lead problem in the 1990s. Guard officials pledged to identify which of their roughly 1,800 firing ranges were polluted, but they never followed through.

[The Oregonian](#)

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<http://phc.army.smil.mil>

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GLOBAL

A paralyzed monkey can walk again, thanks to a wireless 'brain-computer' interface

3 December - A new report in Nature gives hopeful news about how we could recover from paralyzing spinal cord injuries in the future. Researchers describe a rhesus monkey regaining the use of its leg just six days after a paralyzing injury. The key is a wireless "brain-computer" interface, connecting an implant in the monkey's brain to an electrical stimulator on its spine. By translating the monkey's movement-related brain signals into electrical pulses on its spine, the technology helps the brain give the leg instructions to move — bypassing the injured part of the spinal cord. The study's lead researcher, Gregoire Courtine, thinks that humans could be testing a similar interface within a decade. [PRI](#)

EU health regulator warns some hep C drugs could reactivate hep B

2 December - The European Medicines Agency warned on Friday that some of the most successful hepatitis C treatments on the market could reactivate hepatitis B in patients, the second time this year it has raised safety concerns over these treatments. The latest health warning covers some of the top-selling products in the multi-billion dollar hepatitis C market. ... These drugs cure well over 90 percent of patients with the liver disease and also cut down the duration of the treatment. The Pharmacovigilance Risk Assessment Committee (PRAC), part of the EMA, said it suspected the reactivation of the hepatitis B virus was due to the rapid reduction of the hepatitis C virus, which is known to suppress the hepatitis B virus.

[Reuters](#)

Four steps to precision public health

5 December - ... The use of data to guide interventions that benefit populations more efficiently is a strategy we call precision public health. It requires robust primary surveillance data, rapid application of sophisticated analytics to track the geographical distribution of disease, and the capacity to act on such information. The availability and use of precise data is becoming the norm in wealthy countries. But large swathes of the developing world are not reaping its advantages. In Guinea, it took months to assemble enough data to clearly identify the start of the largest Ebola outbreak in history. This should take days. Sub-Saharan Africa has the highest rates of childhood mortality in the world; it is also where we know the least about causes of death. We at the Bill & Melinda Gates Foundation in Seattle, Washington, are committed to seeing data used equally in the developing world. The United Nations' Sustainable Development Goals, launched in September 2015, will require ever more accurate and timely data to track and achieve progress. We are calling on government leaders and global health workers to join us in revamping surveillance to make precision public health a reality. [Nature](#)

'Google for public data' yields new health insights

6 December - Feeling overwhelmed making sense of health data? A powerful new data set and visualization will help provide great insights into drug development and Medicare spending on drugs. Best part? The data will be freely available, courtesy of the aptly named company, Enigma. Funded by venture capitalists and more staid investors, including the NEA and New York Times Company, Enigma is a data technology company whose main business is providing analytics to industry, using both public and proprietary data, in order to help companies make better decisions. The "Google for public data" company gleans data from billions of public records, running the gamut from climate, to patent filings, to government contracts and the government shutdown. It excels at data visualization. [Forbes](#)

Israel's Bonus says lab-grown bones successfully transplanted

5 December - Israeli biotech company Bonus Biogroup's lab-grown, semi-liquid bone graft was successfully injected into the jaws of 11 people to repair bone loss in an early stage clinical trial, it said on Monday. The material, grown in a lab from each patient's own fat cells, was injected into and filled the voids of the problematic bones. Over a few months it hardened and merged with the existing bone to complete the jaw, it said. ... Ora Burger, vice president of regulation affairs at Bonus Biogroup, told Reuters the transplant "was 100 percent successful in all 11 patients". "Now we are going to conduct a clinical study in the extremities, long bones," she said. [Reuters](#)

Raising the curtain on cerebral malaria's deadly agents

6 December - Using state-of-the-art brain imaging technology, scientists at the National Institutes of Health filmed what happens in the brains of mice that developed cerebral malaria (CM). The results, published in *PLOS Pathogens*, reveal the processes that lead to fatal outcomes of the disease and suggest an antibody therapy that may treat it. ... The results indicated that the brain regions with the most damaged vessels and cell death were the olfactory bulb (the area involved in sensing smell) and crucially, the brainstem, an area that controls such vital functions as breathing and heart rate. ... [The researchers] tested a potential therapy to see if it could be used to remove the CD8+ T cells from vessel walls. ... Within 30 minutes of the treatment, the CD8+ T cells broke off from the blood vessels and could not stick to them, preventing the fatal brain swelling in all of the treated mice. [NIH](#)

Study: Interrupting *Aedes aegypti* during off-season decreases dengue

6 December - Monitoring mosquito populations and practicing insect control during non-transmission months can reduce the number of dengue cases, according to a pilot study published today in *PLoS One*. The study looked at *Ae aegypti* populations in India, and found that interventions made in December through May resulted in significantly fewer dengue cases in June through November. [CIDRAP News Scan](#) (fourth item)

The key to fighting the next 'Ebola' outbreak is in your pocket

4 December - ... In fighting infectious diseases, speed is crucial. ... Today, people from rural areas in the developing world ... are moving in and out of towns and cities in their millions; the people they meet there fly on to countries around the world. The good news is that the way we fight infectious diseases is - finally - speeding up to match. ... [M]obile mapping has confirmed that, in the wake of an epidemic or natural disaster, people head home to their families. ... Simon Hay, of the Institute of Health Metrics and Evaluation Washington, has combined all sorts of data - phone use, climate patterns, fluctuations in bat population - to work out where diseases like Ebola and Zika are most likely to pop up. ... Raj Panjabi of Last Mile Health has used mobile phones to stitch together a rural health network in Liberia that not only monitors diseases but treats them, too. ... [D]uring the Ebola outbreak, MSF, the Wellcome Trust and Institut Pasteur set up local laboratories that provided ... sequencing in real time. Soon, that capability could be provided by a hand-held device linked to a smartphone, speeding up diagnosis still further. [Wired](#)

ZIKA VIRUS

Case counts in the U.S.

- Zika virus disease and Zika virus congenital infection are nationally notifiable conditions.
- This update from the CDC Arboviral Disease Branch includes provisional data reported to ArboNET for January 01, 2015 – December 7, 2016. [CDC](#)

U.S. States	U.S. Territories
<ul style="list-style-type: none">• Locally acquired mosquito-borne cases reported: 185• Travel-associated cases reported: 4,389• Laboratory acquired cases reported: 1• Total: 4,575<ul style="list-style-type: none">◦ Sexually transmitted: 38◦ Guillain-Barré syndrome: 13	<ul style="list-style-type: none">• Locally acquired cases reported: 33,712• Travel-associated cases reported: 126• Total: 33,838*<ul style="list-style-type: none">◦ Guillain-Barré syndrome: 50 <p>*Sexually transmitted cases are not reported for US territories because with local transmission of Zika virus it is not possible to determine whether infection occurred due to mosquito-borne or sexual transmission.</p>

More data show Zika viremia in mothers, fetal infection link

7 December - Spanish researchers today reported more evidence of Zika replication in the fetus or placenta, describing persistent viremia lasting more than 100 days after symptom

onset in a mother of a baby born with microcephaly. In other developments, Florida reported five more local Zika cases, all involving people who were sick earlier this fall, and researchers from England who reviewed studies on the effectiveness of mosquito control methods found weak evidence for some of the common strategies. [CIDRAP](#)

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INFLUENZA

APHC: U.S. Army Influenza Activity Report

For the week ending 26 November 2016 (Week 47):

Respiratory syncytial virus (RSV) continues to be the most reported positive laboratory specimen among MTFs.

- **ILI Activity:** Army incident ILI outpatient visits in week 47 were 2% lower than the same week last year.
- **Influenza cases:** No hospitalized influenza cases were reported to APHC through DRSi in week 47. At this same time during the last influenza season, three influenza-associated hospitalizations were reported.
- **Viral specimens:** During week 47, 82 of 641 (13%) laboratory specimens tested positive for respiratory pathogens. RHC-P reported most (44%) of the influenza A-positive specimens, followed by RHC-A and RHC-C (both 33%). RHC-E and CENTCOM did not report any positive specimens. [APHC](#)

CDC: Flu View - Weekly U.S. Influenza Surveillance Report

During week 47 (November 20-26, 2016), influenza activity increased slightly, but remained low in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported by public health laboratories during week 47 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased slightly, but remained low.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.

[CDC](#)

ECDC: Flu News Europe

Week 47/2016 (21–27 November 2016)

- Influenza activity remained low, but has started to increase in some countries.
- The number of virus detections among sentinel surveillance specimens increased to

16% of the total tested and indicates increasing regional activity.

- The majority of viruses detected this week were influenza A(H3N2).

[European Center for Disease Prevention and Control/WHO](#)

NHRC: Febrile Respiratory Illness Surveillance Update

For the week ending 2 January 2016:

- Influenza: No new cases of NHRC laboratory-confirmed influenza among US military basic trainees.
- FRI surveillance at all eight U.S. military basic training centers indicated FRI rates were elevated at Fort Benning and MCRD Parris Island.

[Naval Health Research Center](#)

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VETERINARY/FOOD SAFETY

CSPI wants cancer warning label on processed meat

6 December - The Center for Science in the Public Interest (CSPI) is calling on the USDA to put a warning label on processed meat and poultry products telling consumers that eating those foods is associated with an increased risk of colorectal cancer. Bacon, ham, hot dogs, and other processed products would have that label. The regulatory petition CSPI filed yesterday cites the findings of the International Agency for Research on Cancer, which found in 2015 that processed meat is "carcinogenic to humans." The study found that eating 50 grams per day of processed meat raises the risk of developing that particular kind of cancer by about 18%. A typical serving size of those meats is about 55 grams.

[Food Poisoning Bulletin](#)

Hundreds of wild horses to be relocated from Louisiana military base to Dallas area for adoption

6 December - Hundreds of wild horses from a military base in Louisiana are being relocated to North Texas in an effort to find them new owners. The operation is being managed by the Humane Society of North Texas, according to KXAS-TV (NBC 5). It is moving the herd of nearly 400 horses from the Fort Polk Joint Readiness Training Center in Vernon Parish, La., to the Humane Society's location in Decatur. ... Army officials said there were previously around 700 horses and donkeys living on and around Fort Polk, but many of the donkeys were stolen, according to the Humane Society of North Texas. ... The army decided to move them because they were too close to the military base and all the weaponry contained within it, which wasn't safe for the horses or military staff. [Dallas News](#)

India: Brucellosis spreads, 22 heads of cattle, 5 humans affected

4 December - An outbreak of Brucellosis, a highly contagious disease in cattle, in Kolar a couple of months ago had triggered panic across the state. The veterinary department had quarantined the infected livestock and ruled out further spread of the disease. But within a month, as revealed by the state government, the disease had silently spread to other parts of the state – and this time, not just among animals, but humans too. So far, five people have been infected by the bacterial disease in Bagalkot. [Bangalore Mirror](#)

Japan mercury-poisoning victims demand tests, 60 years later

7 December - Six decades after "Minamata disease" mercury poisoning was first discovered, victims and their advocates are demanding tests for food toxicity and illnesses be carried out to help identify patients. Such tests could have greatly reduced the number of victims if done earlier, said Toshihide Tsuda, a doctor whose civil lawsuit demanding such tests was rejected by the Tokyo District Court on Wednesday. Tsuda sued the Japanese government to demand it conduct tests for methyl mercury poisoning. He vowed to appeal the court's decision backing the government, which generally has chosen not to conduct such tests. Minamata disease, one of Japan's worst environmental disasters, refers to mercury poisoning from eating fish and shellfish. Thousands of people were sickened or crippled by neurological disorders from the mercury leaks into Minamata Bay and nearby waters by chemical company Chisso Corp., which continued for more than a decade. Affected babies were born with severe deformities. Advocates of the victims have been trying since 1956 for the right to demand such tests, which can only be mandated by the government. [AP](#)

Researchers find worrisome CRE on U.S. swine farm



5 December - Researchers today report identifying bacteria carrying a highly transmissible antibiotic-resistance gene in a US livestock operation, a finding that suggests a troubling new path for the spread of the drug-resistant pathogens. ... [Investigators] say they recovered 18 isolates of multiple Enterobacteriaceae species harboring the beta-lactamase gene IMP-27, which confers resistance to carbapenem antibiotics, from the environment of an industrial US swine operation. All of the isolates carried the gene on what the researchers say is a highly mobile piece of DNA that can spread to a broad range of bacteria. ... [T]his is the first time they have been identified in US livestock. ... Although the researchers say bacteria harboring the gene were not found in any of the pigs and are unlikely to have entered the food supply, the findings raise concerns about the possibility of foodborne transmission of CRE, which could expose consumers to the dangerous pathogens and have an impact on human health. [CIDRAP](#)

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WELLNESS

A handful of nuts is good for your health

6 December - A handful of nuts a day may be enough to reduce the risk for death from heart disease and other ills. In a review combining data from 20 prospective studies, researchers found that compared with people who ate the least nuts, those who ate the most reduced the risk for coronary heart disease by 29 percent, for cardiovascular disease by 21 percent and for cancer by 15 percent. There was also a 52 percent reduced risk for respiratory disease, 39 percent for diabetes and 75 percent reduced risk for infectious disease in those who ate the most nuts. Most of the risk reduction was achieved by eating an average of about one ounce of nuts a day, the amount in about two dozen almonds or 15 pecan halves. There was little decrease in risk with greater consumption.

[The New York Times](#)

Caesarean births 'affecting human evolution'

6 December - The regular use of Caesarean sections is having an impact on human evolution, say scientists. More mothers now need surgery to deliver a baby due to their narrow pelvis size, according to a study. Researchers estimate cases where the baby cannot fit down the birth canal have increased from 30 in 1,000 in the 1960s to 36 in 1,000 births today. Historically, these genes would not have been passed from mother to child as both would have died in labour. Researchers in Austria say the trend is likely to continue, but not to the extent that non-surgical births will become obsolete. [BBC News](#)

Can you get too much protein?

6 December - Protein has achieved a venerated status in the dietary world for everything from building muscle to preventing weight gain. But can you get too much of a good thing? Protein powders that come in chocolate, strawberry, and cookies and cream flavors are doled out by the scoopful and mixed into smoothies, making it possible to effortlessly consume protein in amounts that far exceed dietary recommendations. A canned protein drink can contain almost as much protein as an eight-ounce steak, and snack bars or a small bag of protein chips can pack more of the macronutrient than a three-egg omelet. But while some nutritionists have encouraged the protein craze, a number of experts are urging caution. They point out that protein powders and supplements ... are a relatively new invention. The vast majority of Americans already get more than the recommended daily amounts of protein from food, they say, and there are no rigorous long-term studies to tell us how much protein is too much. [The New York Times](#)

Consumption of combustible and smokeless tobacco — United States, 2000–2015

9 December - ... Cigarette consumption in the United States has declined overall since the 1960s, but consumption of other tobacco products has not. During 2000–2015, total combustible tobacco consumption decreased 33.5%. Although total cigarette consumption

decreased 38.7%, cigarettes remained the most commonly used combustible tobacco product. Notably, total cigarette consumption was 267.0 billion cigarettes in 2015 compared with 262.7 billion in 2014, or seven more cigarettes per capita. Consumption of noncigarette combustible tobacco (cigars, roll-your-own, pipe tobacco) increased 117.1%, or 83.8% per capita, during 2000–2015. For smokeless tobacco, total consumption increased 23.1%, or 4.2% per capita. These changes in tobacco consumption demonstrate the importance of sustained tobacco prevention and control interventions, including price increases, comprehensive smoke-free policies, aggressive media campaigns, and increased access to cessation services. [Morbidity and Mortality Weekly Update](#)

Drivers beware: crash rate spikes with every hour of lost sleep

6 December - ... A report released Tuesday by the AAA Foundation for Traffic Safety suggests that drivers who sleep only five or six hours in a 24-hour period are twice as likely to crash as drivers who get seven hours of sleep or more. And the less sleep the person behind the wheel gets, the higher the crash rate, according to the findings. For instance, drivers in the study who got only four or five hours of shut-eye had four times the crash rate — close to what's seen among drunken drivers. ... The foundation based its current report on data from the NHTSA's National Motor Vehicle Crash Causation Survey. The data were drawn from police-reported crashes in which at least one vehicle had to be towed away from the accident scene, and/or emergency medical services were summoned. [NPR](#)

'Exercise boosts men's sperm count'

6 December - Doing at least half an hour of exercise three times a week may boost men's sperm count, say scientists. Men who took up running and stuck with it had more "healthy swimmers", according to the research in the journal *Reproduction*. The boost was only temporary, and began to wane within a month if the men stopped their treadmill training. Experts say it is important to strike the right balance because too much exercise can harm sperm production. [BBC News](#)

GNC enters into agreement with Department of Justice

7 December - The world's largest dietary supplement retailer, GNC Holdings Inc. (GNC), has entered into a wide-ranging agreement with the Department of Justice to reform its practices related to potentially unlawful dietary ingredients and dietary supplements, and has further promised to embark on a series of voluntary initiatives designed to improve the quality and purity of dietary supplements, the Department of Justice announced today. The non-prosecution agreement resolves GNC's liability for selling certain dietary supplements produced by a firm currently under indictment. As part of the agreement, GNC has agreed to pay \$2.25 million to the U.S. government and cooperate in dietary supplement investigations conducted by the government. A lengthy investigation ... revealed that GNC's practices related to ensuring the legality of products on its shelves were lacking.

[The Department of Justice](#)

Hunger for change

5 December - At the same time the government urges Americans to eat healthy foods, it heavily subsidizes farmers who produce corn and other crops used in junk foods, and invests little in those who grow fruits and vegetables. The result? A pound of fresh broccoli costs about \$2 in any supermarket, while a calorie- and fat-filled cheeseburger is half that price in many fast-food restaurants. This system that makes healthy food expensive and junk food cheap should be fixed, said a panel of experts who gathered at Harvard Law School. ... The experts said a sound food policy in the United States is central to Americans' general well-being because food affects not just health, but also the economy and the environment. Industrial agriculture, which produces most of the food in the United States, damages the soil and the air, and is driving the rise of obesity, diabetes, hypertension, and other diet-related diseases across the nation. [Harvard Gazette](#)

No safe level of smoking: Even low-intensity smokers are at increased risk of earlier death

5 December - People who consistently smoked an average of less than one cigarette per day over their lifetime had a 64 percent higher risk of earlier death than never smokers, and those who smoked between one and 10 cigarettes a day had an 87 percent higher risk of earlier death than never smokers, according to a new study from researchers at the National Cancer Institute (NCI). Risks were lower among former low-intensity smokers compared to those who were still smokers, and risk fell with earlier age at quitting. ... When researchers looked at specific causes of death among study participants, a particularly strong association was observed for lung cancer mortality. Those who consistently averaged less than one cigarette per day over their lifetime had nine times the risk of dying from lung cancer than never smokers. Among people who smoked between one and 10 cigarettes per day, the risk of dying from lung cancer was nearly 12 times higher than that of never smokers. [NIH](#)

Use of e-cigarettes by young people is major concern, Surgeon General declares

8 December - Soaring use of e-cigarettes among young people "is now a major public health concern," according to a report being published Thursday from the United States Surgeon General. It is the first comprehensive look on the subject from the nation's highest public-health authority, and it finds that e-cigarettes are now the most commonly used tobacco product among youths, surpassing tobacco cigarettes. E-cigarettes, which turn nicotine into inhalable vapor, can harm developing brains of teenagers who use them, and also can create harmful aerosol for people around the user, the equivalent of secondhand smoke, the report said, citing studies in animals. [The New York Times](#)

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Africa: Five west African countries ban 'dirty diesel' from Europe



6 December – Five west African countries have announced measures to end the practice of European oil companies and traders exporting “African quality” diesel – highly polluting fuels that could never be sold in Europe. Swiss commodity traders were accused in a report published in September by Swiss NGO Public Eye of exporting fuels to

west Africa with sulphur levels that are sometimes hundreds of times higher than European levels. ... High-sulphur fuels are major contributors to respiratory diseases such as bronchitis and asthma. Last week Nigeria, Benin, Togo, Ghana, and Ivory Coast agreed to ban imports of high-sulphur diesel fuels as part of an initiative organised by the UN Environment Programme. Permitted levels of sulphur in imported diesel will fall from as high as 3,000 parts per million (ppm) in some of the countries to 50 ppm. In Europe the maximum has been 10 ppm since 2009. [The Guardian](#)

Africa: Yellow fever epidemic in Africa shows gaps in vaccine pipeline

5 December - The yellow fever outbreak in Africa this year came closer to being a disaster than is widely recognized, public health experts recently disclosed. The epidemic also revealed glaring weaknesses in the emergency vaccine supply pipeline. The first deaths in Angola were misdiagnosed as food poisoning; the global emergency vaccine stockpile was depleted before even one city was fully protected; and diagnostic laboratories were so far away that it was months before the scope of the outbreak was clear and a worldwide alarm was raised. Ultimately, the yellow fever outbreak was halted only by a huge vaccination campaign that stretched supplies by diluting doses, and even that succeeded only because some unusual donors stepped in. Brazil contributed 18 million doses of yellow fever vaccine — three times the amount in the emergency stockpile — to contain the African outbreak. Even South Sudan, one of the world’s poorest nations, gave up 400,000 doses intended for its children. [The New York Times](#)

Kenya: Nairobi striking doctors tear-gassed as patients 'walk out'

5 December - Police have fired tear gas to disperse hundreds of doctors striking in the Kenyan capital Nairobi. The medics, wearing white gowns and surgical caps, were demanding the government honour a 2013 deal to increase salaries. Dozens of mental health patients were said to have walked out of a hospital in Nairobi during the strike. Officials say the action is premature and negotiations should continue. They say doctors

have defied a court order suspending the strike until the end of this month to allow for more talks. [BBC News](#)

Madagascar: Plague - dozens of cases in Madagascar

7 December - ... The website, *Africa Review* [says]: Bubonic plague has killed at least 31 people in Madagascar's southern district of Befotaka Atsimo. Bush fires, blamed on persistent drought, have reportedly driven disease carrying rodents into villages, where they have transmitted the disease to humans. Teams from the Ministry of Public Health and the Pasteur Institute of Madagascar (IPM) were dispatched to investigate the scene Monday; however, they have not yet arrived. It is an almost inaccessible zone, there are still about thirty kilometers to walk, the *L'Express* report states. According to the general secretary of the Madagascar Ministry of Health, between 300 and 600 suspected cases are reported each year, with about 30 cases of pulmonary plague and 10 to 70 deaths. [Outbreak News Today](#)

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USCENTCOM

Egypt: Egypt arrests 'organ trafficking ring'

6 December - Egyptian authorities have arrested doctors, nurses and professors suspected of being involved in an international organ trafficking ring. The arrests of at least 25 people on Tuesday also included organ buyers and middlemen, the country's Administrative Control Authority said. Authorities also found "millions of dollars and gold bullion". It is illegal to purchase organs in Egypt, but poverty drives some to sell their body parts. ... The statement on the government website added that the group was "the largest international network for trading human organs". It is said the investigation, which also involved the health ministry, focused on a group of private hospitals and health centres, both licensed and unlicensed, where transplants and organ-harvesting took place, according to the Reuters news agency. [BBC News](#)

Oman: Middle East respiratory syndrome coronavirus (MERS-CoV)

8 December - On 29 November 2016, the National IHR Focal Point of Oman reported one (1) additional case of Middle East Respiratory Syndrome Coronavirus (MERS-CoV). ... Globally, since September 2012, WHO has been notified of 1842 laboratory-confirmed cases of infection with MERS-CoV, including at least 652 related deaths. [WHO](#)

Saudi Arabia: Middle East respiratory syndrome coronavirus (MERS-CoV)

5 December - Between 12 and 27 November 2016 the National IHR Focal Point of Saudi Arabia reported nine (9) additional cases of Middle East Respiratory Syndrome (MERS)

including one fatal case. ... Globally, since September 2012, WHO has been notified of 1841 laboratory-confirmed cases of infection with MERS-CoV including at least 652 related deaths. [WHO](#)

Turkmenistan: On the waiting list for sugar, cooking oil

3 December - ... [O]ne woman told Azatlyk she went to buy sugar and cooking oil at the local state store and was put on a waiting list. When she told her story, she had already been waiting 35 days for a call saying her goods had arrived. ... When supplies do arrive, they come in small quantities, so only four or five people at a time get these basic products. And they are rationed. One family can purchase up to five liters of cooking oil and one kilogram of sugar. ... An amended version of the law on "food security" was adopted toward the end of November that required the availability of food for the population. ... According to testimony from the people who spoke with Azatlyk, not only in Dashoguz but also in the southwestern Balkan Province, that order has gone unfulfilled. The prevalence and scope of these shortages would seem to indicate it is not corruption or mismanagement that is to blame but simply a shortage of supplies. [Radio Free Europe/Radio Liberty](#)

Yemen: Yemen reports 82 cholera fatalities in recent outbreak

4 December - The Ministry of Public Health and Population in Yemen has reported additional cases of cholera in Yemen. To date, 7730 suspected cases of cholera, including 82 associated deaths have been reported (case fatality rate of 1.06%). Of these, 122 cases were laboratory-confirmed as *Vibrio cholerae* 01. ... 26 cholera treatment centres have been established in the affected governorates and surveillance for acute watery diarrhoea has been enhanced in all governorates of the country. [Outbreak News Today](#)

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USEUCOM

France: Demand from French hospitals ensures healthy trade in leeches

8 December - French hospitals have long been using leeches to prevent blood clots after surgery and their use looks set to expand as scientists say the animal could in future be used to treat problems including rheumatism and osteoarthritis. For the last 23 years, Brigitte Latrille has been cultivating leeches in her laboratory near Bordeaux, and says she is doing a roaring trade. ... At Bordeaux's CHU hospital, Professor Philippe Pelissier explained how the leeches are used - mainly to prevent blood clots arising after plastic surgery. "The principle is simple: after the repair of a finger it is necessary that the blood does its work,

and for that it must be pushed out by the venous network. The leech allows one to do this by evacuating excess blood," he said. [Reuters](#)

United Kingdom: UK pushes ahead with sugar tax



5 December - The UK government has published draft legislation for a tax on sugar-sweetened drinks, which is set to begin from April 2018. There will be two bands - one for soft drinks with more than 5g of sugar per 100ml and a higher one for drinks with more than 8g per 100ml. Ministers hope it will help tackle the nation's

obesity problem. Many companies have already begun cutting the amount of sugar in their drinks. Pure fruit juices will be exempt - but health officials stress people should limit consumption of these beverages to no more than 150ml per day. [BBC News](#)

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USNORTHCOM

U.S.: CDC - 19 more cases of acute flaccid myelitis

5 December - The Centers for Disease Control and Prevention (CDC) today said 19 new cases of acute flaccid myelitis (AFM) have been diagnosed since its Nov 1 update, with three newly affected states. There are now 108 cases in 36 states. While the AFM case count for 2016 is still lower than the 2014 case count (120), the CDC is concerned about the increase in cases in recent months. Last year, only 21 AFM cases were reported to the CDC.

[CIDRAP News Scan](#) (third item)

U.S.: CDC - U.S. falling short in 3 "winnable" health battles

5 December - Progress in the U.S. against obesity, food poisoning, and the spread of infections in hospitals has been uneven and disappointing, despite dedicated efforts to fight these health threats by the nation's top public health agency. The Centers for Disease Control and Prevention issued a frank self-assessment Monday of its campaign to focus on certain health problems, an effort it called "winnable battles." While there have been clear successes in areas like smoking and teen pregnancy, other areas have seen little change or even gotten worse. Particularly disappointing is the battle against childhood obesity, said Dr. Tom Frieden, the CDC's director. [CBS News](#)

U.S.: Congress passes 21st Century Cures Act, boosting research and easing drug approvals

7 December - Congress passed sweeping legislation Wednesday that boosts funding for medical research, eases the development and approval of experimental treatments and reforms federal policy on mental health care. The 94 to 5 Senate vote Wednesday followed

a 392 to 26 House vote last week. The bill, known as the 21st Century Cures Act, now heads to the desk of President Obama, who praised the bill Wednesday and said he would sign it. The bill provides for \$4.8 billion in new funding for the National Institutes of Health; of that, \$1.8 billion is reserved for the "cancer moonshot" launched by Vice President Biden to accelerate research in that field. Another \$1.6 billion is earmarked for brain diseases including Alzheimer's. Also included are \$500 million in new funding for the Food and Drug Administration and \$1 billion in grants to help states deal with opioid abuse.

[The Washington Post](#)

U.S.: Historians seek reparations for Californians forcibly sterilized

6 December - Hundreds of Californians who were forcibly sterilized based on eugenics laws in the last century might still be alive and deserve an apology and financial reparations, a new study concludes. In a Sacramento government office, historian and lead author Alexandra Minna Stern stumbled across a filing cabinet containing about 20,000 recommendations for eugenics-motivated sterilizations dating from 1919 through 1952. Stern, a professor at the University of Michigan in Ann Arbor, and her colleagues used the documents and actuarial tables to calculate that as many as 831 men, women and children slated for sterilization could still be alive and would be on average almost 88 years old. ... California had the right to sterilize Rose Zaballos [and others] under a 1909 state law authorizing reproductive surgery on patients committed to homes or hospitals and judged to have a "mental disease which may have been inherited" and was "likely to be transmitted to descendants," Stern's team writes in the *American Journal of Public Health*. [Reuters](#)

U.S.: Life expectancy in U.S. drops for first time in decades, report finds

8 December - ... The overall U.S. death rate has increased for the first time in a decade, according to an analysis of the latest data. And that led to a drop in overall life expectancy for the first time since 1993, particularly among people younger than 65. ... Now, there's a chance that the latest data, from 2015, could be just a one-time blip. In fact, a preliminary analysis from the first two quarters of 2016 suggests that may be the case, says Robert Anderson, chief of the mortality statistics branch at the National Center for Health Statistics, which released the new report. Anderson says government analysts are awaiting more data before reaching any definitive conclusions. ... On average, the overall life expectancy, for someone born in 2015, fell from 78.9 years to 78.8 years. The life expectancy for the average American man fell two-tenths of a year — from 76.5 to 76.3. For women, it dropped one-tenth — from 81.3 to 81.2 years. [NPR](#)

U.S.: Mosquito population increased 10-fold in past 50 years

6 December - Mosquito populations have increased by as much as 10-fold in New York, New Jersey, and California over the past 50 years, according to a study today in *Nature Communications*. Researchers suggest that the population boom is related to the waning

effects of the banned insecticide DDT (dichlorodiphenyltrichloroethane) and increased urbanization. Researchers ... used three mosquito-tracking databases to document population changes on both US coasts. Though they originally hypothesized the increase in bugs was because of climate change, analysis showed population changes correlated to decreasing amounts of DDT in the environment. [CIDRAP News Scan](#) (third item)

U.S.: Senate leader pushes for extension of coal miner healthcare

6 December - U.S. Senate Majority Leader Mitch McConnell on Tuesday said he is pushing to extend expiring healthcare benefits for retired coal miners by including a provision in a spending bill Congress hopes to pass this week. In a statement on the Senate floor, McConnell, a Republican from Kentucky, said that in conversations with House of Representatives Speaker Paul Ryan he has insisted that the Continuing Resolution include "a provision to address that issue so these retirees don't lose their healthcare benefit at the end of this year." [Reuters](#)

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USPACOM

Asia: Rohingya face health care bias in parts of Asia, study finds

5 December - Members of the Rohingya ethnic group face chronic discrimination in access to medical care in Myanmar and other Asian countries, with severe consequences for health and mortality rates, a study has found. The report, published online by ... The Lancet on Dec. 1, said the Myanmar government's role in the situation could arguably be characterized as genocide or ethnic cleansing. ... In Maungdaw and Butheetaung townships, in the area of Rakhine State where much of the recent violence against Rohingya people has occurred, there was only one physician per 158,000 people, compared with one physician per 681 people in the Buddhist-majority area around Sittwe, the state capital, the study said, citing the government data from 2013. [The New York Times](#)

Indonesia: Nearly 100 killed, hundreds hurt as quake strikes Indonesia's Aceh



7 December - Nearly 100 people were killed and hundreds injured in Indonesia on Wednesday when a strong earthquake hit its Aceh province and rescuers used earth movers and bare hands to search for survivors in scores of toppled buildings. Medical volunteers rushed in fading evening light to get people to hospitals, which were straining

to cope with the influx of injured. The Aceh provincial government said in a statement 93 people had died and more than 500 were injured, many seriously. Sutopo Nugroho of Indonesia's national disaster management agency, said a state of emergency had been declared in Aceh, which sits on the northern tip of Sumatra island. "We are now focusing on searching for victims and possible survivors," said Nugroho. His agency put the death toll at 94. [Reuters](#)

Solomon Islands: Massive 7.8 earthquake shakes the Solomon Islands in southwest Pacific Ocean

8 December - A massive earthquake erupted along a fault line near the Solomon Islands in the southwest Pacific Ocean on Thursday. The quake was originally detected as a magnitude-8 by the U.S. Geological Service, but has since been reduced to a 7.8 on the Moment-Magnitude scale. It was followed by a 5.5-magnitude quake, and aftershocks continue to roll through. Immediately after the quake, a tsunami watch was issued for Hawaii by the Pacific Tsunami Warning Center. Water height fluctuations were recorded by at least three surrounding buoys, but after investigating, the center determined there was no threat to the island state. [The Washington Post](#)

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USSOUTHCOM

Colombia: *Candida auris* infections reported in Colombia - 17 cases

6 December - The emerging multidrug-resistant fungus, *Candida auris*, has been reported in the United States, England, and a number of other countries in recent years after first reported in Japan in 2009. Now, researchers from Colombia report 17 cases in the country. The 17 clinical isolates of *C. auris* were recovered from 17 patients hospitalized in 6 institutions in the northern region of Colombia from February through July 2016. ... The cases were originally misclassified but correctly identified 27.5 days later on average. Patients with a delayed diagnosis of *C. auris* had a 30-day mortality rate of 35.2%.

[Outbreak News Today](#)

PAHO reports only 305 new chikungunya cases

5 December - For the second update in a row, the Pan American Health Organization (PAHO) late last week reported low chikungunya numbers, with only 305 new cases. Countries in the Americas, however, are well behind in their reporting to PAHO on the disease. The Dec 2 report is for epidemiologic week 48 of the year, but only six nations have reported on week 46 or more recently. Brazil, for example, which has logged about 80% of

the cases so far in 2016 and noted 100,000 new cases in early November, has not reported since week 37. ... Countries and territories in the Americas this year have now reported 441,611 suspected, confirmed, and imported cases. [CIDRAP News Scan](#) (fourth item)

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The *Army Public Health Weekly Update* is published by the Public Health Information Directorate, Army Public Health Center.

