16 February 2018

Army Public Health Weekly Update

Army Public Health Center

Contents

U.S. MILITARY

- Battlefield acupuncture? Yes, it exists, and the military is using it to fight troops’ pain
- Court determines military burn pits caused lung disease in service members
- U.S. servicewomen’s reproductive health coverage trails global counterparts, study says
- West Virginia calls in National Guard to tackle opioid crisis

GLOBAL

- Antibiotic use may be tied to rise in ‘lifestyle’ diseases
- Evidence from the field: Fractional doses of yellow fever vaccine provided protection, study finds
- FDA authorizes marketing of first blood test to aid in the evaluation of concussion in adults
- IAEA publishes guide on leadership and communication in nuclear emergencies
- Major neurological conditions have more in common than we thought, study finds
- Novel platform finds a new antibiotic class in soil
- Smallpox vaccine study yields favorable results
- WHO releases 2018 priority diseases list
- Your building might be making you sick. Joe Allen can help.

INFLUENZA

- AFHSB: DoD Seasonal Influenza Surveillance Summary
- APHC: U.S. Army Influenza Activity Report
- China reports 1st known human H7N4 avian influenza case
- ECDC: Flu News Europe
- Far-UV light efficiently kills airborne flu viruses, study finds
- Interim estimates of 2017–18 seasonal influenza vaccine effectiveness — United States, February 2018
- NHRC: Operational Infectious Diseases - Weekly Surveillance Report
- Study shows youngest kids most at risk of flu death
- Update: Influenza activity — United States, October 1, 2017–February 3, 2018
- USAFSAM & DHA: DoD Global, Laboratory-Based, Influenza Surveillance Program
VETERINARY/FOOD SAFETY

- FDA’s ‘best advice’ for food safety reflected in new Food Code
- Lactalis failed to report salmonella on a product: government official
- U.S. woman found with eye worm previously known only in cattle

WELLNESS

- Alcohol ‘more damaging to brain health than marijuana’
- Auto crash deaths multiply after April 20 cannabis parties
- Cost of U.S. opioid epidemic since 2001 is $1 trillion and climbing
- Herpes is slowly retreating, but the infection remains common
- Meth makes a comeback — and it’s purer, cheaper and much more lethal
- Study shows benefits of exercise can outweigh health effects of severe obesity
- Tobacco firms in France cheated nicotine tests: anti-smoking body
- Why do so few docs have buprenorphine waivers?

USAFRICOM

- Africa: Breakthrough as health workers can now transport vaccines without fridges
- Nigeria: WHO ramps up response to Nigeria’s Lassa fever outbreak

USCENTCOM

- Afghanistan: Afghanistan’s lone psychiatric hospital reveals mental health crisis fueled by war
- Afghanistan: Polio cases confirmed in Afghanistan
- Pakistan: Pakistan gang ‘stole spinal fluid from women’
- Yemen: Yemenis turn to herbal remedies as medicine prices soar

USEUCOM

- Europe: Measles cases in Europe tripled last year
- Germany: Could free transit lure Germans from their cars?

USNORTHCOM

- U.S.: American fertility is falling short of what women want
- U.S.: Could a rare, deadly ‘superbug’ fungus be gaining a foothold?
- U.S.: Early intervention for mental health pays off later
- U.S.: NFPA fast-tracks active shooter response standard
- U.S.: NIH funding fewer clinical trials, study suggests
- U.S.: Opioid makers paid millions to advocacy groups: U.S. Senate report
- U.S.: Ticks test positive for tularemia in San Diego County
- U.S.: Why can’t the U.S. treat gun violence as a public-health problem?

USPACOM

- Australia: Gonorrhoea ‘super-superbugs’ triple in six months
- China ends reciprocal blood donation, exacerbating the country’s chronic blood shortage problem

USSOUTHCOM

- Argentina: Argentina sees Syphilis cases triple since 2011
- Cuba: “Health attacks” on U.S. diplomats in Cuba still a mystery says new report
U.S. MILITARY

Battlefield acupuncture? Yes, it exists, and the military is using it to fight troops’ pain

10 February - The U.S. military has added the ancient holistic therapy of acupuncture to its arsenal for fighting opioid abuse in the ranks. The practice, which first originated in China about 8,000 years ago, provides immediate relief for acute and chronic pain, and, without the risk of addiction, can be used without any restrictions. One of the most popular forms used in the military has been dubbed ‘battlefield acupuncture,’ or BFA, because it’s simple to administer and easily transportable, according to Dr. Richard Niemtzow, who developed BFA in 2001. With BFA, service members can continue to participate, unimpaired, in work and life. Military Times

top of page...

Court determines military burn pits caused lung disease in service members

15 February - The thousands of U.S. military personnel and private contractors whose health was compromised by the dense black smoke of burn pits -- and who were then denied proper treatment - may finally be vindicated by a recent court ruling. A judge under the U.S. Department of Labor’s Office for Workers’ Compensation Programs decreed last month that open-air burn pits -- where thousands of chemicals were released into the air after trash and other waste were incinerated at American military bases in Iraq and Afghanistan -- are connected to lung disease, Fox News has learned. The decision marks a victory for the nearly 64,000 active service members and retirees who have put their names on a Burn Pit Registry created by the Veterans Administration. ... [A] line of the ruling obtained by Fox News [states] “Ms. Landry need not introduce affirmative medical evidence to show working conditions caused the alleged harm. She need only show working conditions which could conceivably cause the harm alleged.” Fox News

top of page...

U.S. servicewomen’s reproductive health coverage trails global counterparts, study says

13 February - American servicewomen receive “below average” reproductive health coverage compared to their counterparts serving in the armed forces of many other countries, a study released Tuesday says. In particular, access to abortions by U.S. women in uniform is far more limited compared to those who serve in almost two dozen countries that researchers rated “exceptional,” from Canada and the United Kingdom to Nepal,
Turkey and South Africa, according to the study published by Ibis Reproductive Health, a nonprofit research organization. ... Among other countries rated exceptional were Denmark, France, Norway, Portugal, Israel, Singapore, Australia and New Zealand. The Defense Department's military health system covers abortions only in the cases of rape, incest or when a pregnant woman's life is in danger. That coverage became available with the inclusion of the so-called Shaheen Amendment in the 2013 National Defense Authorization Act. Stars and Stripes

West Virginia calls in National Guard to tackle opioid crisis

9 February - In Huntington, W.Va., the guard has been called in to help tackle the opioid crisis — which the governor has described as a disaster. “We have to stop this terrible drug epidemic,” West Virginia Gov. Jim Justice said. ... Huntington has been called the overdose capital of America, with double the national average of overdoses, due in part to the decline of the coal industry, a lack of jobs and the easy availability of the drugs. ... The guard is flying its Lakota helicopters on reconnaissance missions in coordination with local police, providing eyes in the sky during busts and while serving warrants. But its primary role is technical and analytical support. Guardsman, who asked not to be identified, are manning hotlines and working on computers inside Huntington Police Department’s Criminal Investigation Bureau, helping track down dealers and drug networks so cops can focus on the street. Fox News

Antibiotic use may be tied to rise in 'lifestyle' diseases

8 February - Martin Blaser, MD, doesn’t dispute the fact that antibiotics have saved innumerable lives and revolutionized medicine. But when he looks at the global increases in recent decades of non-communicable diseases like diabetes, asthma, and obesity, and the concordant rise in antibiotic use, he sees a troubling connection. ... For Blaser ... the link between antibiotic overuse and the rise in metabolic conditions revolves around the human microbiome—the collection of microorganisms that reside within us. Observational data from human cohort studies and experiments in mice, he believes, provide persuasive evidence that the amount of antibiotics that humans are using—by recent estimates more than 70 billion antibiotic doses annually—are changing the bacterial diversity in the human microbiome, and those changes are contributing to changing physiology. CIDRAP
Evidence from the field: Fractional doses of yellow fever vaccine provided protection, study finds

14 February – A 2016 emergency yellow fever vaccination campaign that had to resort to using smaller than standard doses because of a global vaccine shortage appears to have protected the people who were vaccinated, a new study suggests. People who received a fractional dose — one-fifth the standard size — showed strong immune responses a month after they received the single dose of vaccine, the authors reported in the New England Journal of Medicine. While the study ... is not the first to provide hints that fractional doses of yellow fever vaccine are effective, it was the first such study undertaken outside the artificial confines of a laboratory. STAT

FDA authorizes marketing of first blood test to aid in the evaluation of concussion in adults

14 February - The U.S. Food and Drug Administration today permitted marketing of the first blood test to evaluate mild traumatic brain injury (mTBI), commonly referred to as concussion, in adults. The FDA reviewed and authorized for marketing the Banyan Brain Trauma Indicator in fewer than 6 months as part of its Breakthrough Devices Program. ... Availability of a blood test for concussion will help health care professionals determine the need for a CT scan in patients suspected of having mTBI and help prevent unnecessary neuroimaging and associated radiation exposure to patients. ... Today's action supports the FDA’s Initiative to Reduce Unnecessary Radiation Exposure from Medical Imaging. FDA

IAEA publishes guide on leadership and communication in nuclear emergencies

15 February - A new publication in the IAEA Nuclear Energy Series is titled "Leadership, Human Performance and Internal Communication in Nuclear Emergencies." It highlights the importance of the human factor during crisis situations, according to the UN agency. IAEA says nuclear emergencies are extremely rare, but when they do happen, appropriate leadership qualities, human performance capabilities and internal communication mechanisms are essential to minimize their consequences. Occupational Health and Safety

Major neurological conditions have more in common than we thought, study finds

8 February - Different neurological conditions like autism, schizophrenia and bipolar disorder appear to have more in common than scientists thought they did. A new study finds that they have important similarities at a molecular level. And understanding the
molecular basis of those disorders could help in developing better treatments. These conditions are diagnosed by how a patient behaves. ... In a large-scale study, they measured RNA in 700 tissue samples from the brains of people with autism, schizophrenia, bipolar disorder, major depression and alcoholism, and compared them with tissue of people without these disorders. RNA can show which genes are turned on and off in the tissue. "With these new genomic molecular measurements, we're actually able to understand what is shared and what is distinct" about these disorders, says [Dan] Geschwind. NPR

Novel platform finds a new antibiotic class in soil

13 February - In a laboratory on New York's Upper East Side, Sean Brady, PhD, and his colleagues at Rockefeller University have spent the last decade developing a method of uncovering ... antibiotics residing within the world's soil. ... Brady and his colleagues have been using a culture-independent discovery platform that enables them to extract, clone, and sequence DNA from soil samples without having to grow bacteria in the lab. ... Brady and his colleagues report on the discovery of a class of antibiotics ... called malacidins. ... [T]he team [produced] enough malacidins to test their antibacterial activity. In vitro experiments indicated that malacidins were able to kill gram-positive bacteria in the presence of calcium, and in tests on rats that had methicillin-resistant Staphylococcus aureus (MRSA) skin infections, topical administration of the molecules resulted in sterilization of the wound, with no significant signs of toxicity. In addition, Brady and his colleagues were unable to induce resistance to the malacidins. CIDRAP

Smallpox vaccine study yields favorable results

7 February - Officials from Bavarian Nordic yesterday announced the results of a successful Phase 3 clinical trial led by USAMRIID that demonstrated the safety and efficacy of the company's investigational, non-replicating smallpox vaccine, IMVAMUNE®. The product is being developed as an alternative to the current U.S. licensed replicating smallpox vaccine, ACAM2000®, which cannot be used by certain populations, including people with atopic dermatitis and HIV. ... [T]he peak neutralizing antibodies induced by IMVAMUNE were shown to be twofold higher than those stimulated by ACAM2000, demonstrating a statistically superior immune response. ... Following the second vaccination, those who had developed a protective immune response showed either a reduced take [pustule, scab and scar] or none at all. This also was achieved in the USAMRIID-Bavarian Nordic study. EurekAlert! 

WHO releases 2018 priority diseases list

15 February - The World Health Organization has published its second list of prioritized diseases, identifying which diseases and pathogens should be prioritizes for research and development in public health emergency contexts. ... Experts say that, given their potential
to cause a public health emergency and the absence of efficacious drugs and/or vaccines, there is an urgent need for accelerated research and development for these:

- Crimean–Congo haemorrhagic fever
- Ebola virus disease and Marburg virus disease
- Lassa fever
- Middle East respiratory syndrome coronavirus (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS)
- Nipah and henipaviral diseases
- Rift Valley fever
- Zika
- Disease X

According to WHO, Disease X "represents the knowledge that a serious international epidemic could be caused by a pathogen currently unknown to cause human disease.

**Occupational Health and Safety**

**Your building might be making you sick. Joe Allen can help.**

14 February - ... [Joe] Allen is working to transform design and construction of indoor spaces by revealing how ventilation, temperature, lighting, and noise affect health. His team [wrote] a series of papers that proved [that indoor] air quality influences job performance. **The CogFX studies ... showed a direct link between cognitive function and indoor environment.** In the study’s first phase, 24 participants worked for six days in a simulated office while researchers regulated the room’s concentrations of volatile organic compounds (VOCs), the chemicals released from things such as carpets and surface cleaners. They also set ventilation rates and carbon dioxide levels, re-creating the conditions of green and green+ certified buildings and conventional office space. Then they put subjects to the test. ... Participants’ cognitive function was significantly affected in all nine areas tested, including focused-activity levels, information usage, and strategy. Crisis-response scores were 97 percent higher at the green office setting compared with that of conventional office space, and 131 percent higher at the green+ office setting. **The Harvard Gazette**

**INFLUENZA**

**AFHSB: DoD Seasonal Influenza Surveillance Summary**

For Week 5:

- NORTHCOM: Influenza activity decreased in some states, but still remained moderate to high in several states.
- EUCOM: Influenza activity in EUCOM remained similar to last week with Italy continuing to experience moderate activity.
• PACOM: Influenza activity in PACOM continued to vary by country, but remained high in the Republic of Korea during week 05.
• CENTCOM and AFRICOM: Influenza activity was high in Afghanistan, but minimal in other CENTCOM locations with available data.
• SOUTHCOM: Influenza activity remained minimal in Honduras for week 05.

DHA - Armed Forces Health Surveillance Branch

APHC: U.S. Army Influenza Activity Report

For the week ending 3 February 2018 (week 5):
The total number of positive respiratory specimens, hospitalizations, and influenza-like illness outpatient visits decreased in week 5 compared to week 4. Since week 4, the overall number of total positive specimens decreased by 10%; influenza A positive specimens decreased by 21%, but influenza B positive specimens increased by 29% from week 4. Influenza-associated hospitalizations decreased by 14% since last week, and influenza-like illness outpatient visits decreased by 1%. Despite these decreases, several more weeks of this influenza season remain. Continue personal precautions by avoiding anyone who is experiencing symptoms, staying home from school or work if symptoms develop, and seek treatment within 48 hours of symptom onset. APHC

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

During week 5 (January 28-February 3, 2018), influenza activity increased in the United States.
• Viral Surveillance: The most frequently identified influenza virus subtype reported by public health laboratories during week 5 was influenza A(H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories remained elevated.
• Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
• Influenza-associated Pediatric Deaths: Ten influenza-associated pediatric deaths were reported. CDC

China reports 1st known human H7N4 avian influenza case

14 February - The Chinese National Health and Family Planning Commission (NHFPC) reported confirming a human case of avian influenza A (H7N4). According to the NHFPC, this is the first case of human infection with avian influenza A (H7N4) in the world. The case involved a 68-year-old female patient living in Liyang in Changzhou of Jiangsu Province
who developed symptoms on December 25, 2017. She was admitted to hospital for medical treatment on January 1 and was discharged on January 22. She had contact with live poultry before the onset of symptoms. All her close contacts did not have any symptoms during the medical surveillance period. According to a report from the Chinese Center for Disease Control and Prevention, upon analysis, the genes of the virus were determined to be of avian origin. Outbreak News Today

ECDC: Flu News Europe

Week 5/2018 (29 January - 4 February, 2018)

- Influenza activity was widespread in the majority of reporting countries.
- Both influenza virus types A and B were co-circulating with a higher proportion of type B viruses. Different proportions of circulating influenza virus types and A subtypes were observed between countries. Proportions of specimens positive for influenza viruses were increasing in the eastern part of Europe.
- Of the individuals sampled, on presenting with ILI or ARI to sentinel primary healthcare sites, 57% tested positive for influenza viruses, a slight increase compared to the previous week (54%).

European Center for Disease Prevention and Control/WHO

Far-UV light efficiently kills airborne flu viruses, study finds

9 February - Continual low doses of far-ultraviolet C (UVC) light can inactivate airborne influenza flu viruses, researchers from Columbia University in New York City explain today in Scientific Reports. The scientists released aerosolized H1N1 flu viruses into a test chamber and exposed them to very low doses of far-UVC light, while a control group of aerosolized viruses was not exposed to the UVC light. The far-UVC light killed the flu viruses about as efficiently as conventional germicidal UV light. "If our results are confirmed in other settings, it follows that the use of overhead low-level far-UVC light in public locations would be a safe and efficient method for limiting the transmission and spread of airborne-mediated microbial diseases, such as influenza and tuberculosis," said [the] senior author. CIDRAP News Scan (fifth item)

Interim estimates of 2017–18 seasonal influenza vaccine effectiveness — United States, February 2018

16 February - ... So far this season, influenza A(H3N2) viruses have predominated, but other influenza viruses are also circulating. Based on data from 4,562 children and adults with acute respiratory illness enrolled during November 2, 2017–February 3, 2018, at five study sites with outpatient medical facilities in the United States, the overall estimated effectiveness of the 2017–18 seasonal influenza vaccine for preventing medically attended,
laboratory-confirmed influenza virus infection was 36%.

Morbidity and Mortality Weekly Report

top of page...

NHRC: Operational Infectious Diseases - Weekly Surveillance Report

8 February - Febrile respiratory illness cases:
- Military Recruits - 7 positive of 12 tested
- CDC Border Infectious Disease Surveillance and Zika Surveillance - 98 positive of 168 tested
- DoD Beneficiaries – 19 positive of 37 tested. Naval Health Research Center

top of page...

Study shows youngest kids most at risk of flu death

13 February - A new analysis of seasonal flu deaths in U.S. children in the six seasons that followed the 2009 H1N1 pandemic reveals that children ages 2 and younger are most at risk, and of children who died, less than a third had been vaccinated against the disease. Young children’s vulnerability to flu and the gap in vaccination takes on extra significance this flu season, which has already recorded 63 pediatric flu deaths, shows no sign of a peak yet despite an early start, and has reached the flulike illness levels seen during the 2009-2010 pandemic. CIDRAP

top of page...

Update: Influenza activity — United States, October 1, 2017–February 3, 2018

16 February - ... Influenza activity in the United States began to increase in early November 2017 and rose sharply from December through February 3, 2018. Influenza A viruses have been most commonly identified, with influenza A(H3N2) viruses predominating, but influenza A(H1N1)pdm09 and influenza B viruses were also detected. Influenza illness this season has been substantial, with some of the highest levels of influenza-like illness and hospitalization rates in recent years, and elevated activity occurring in most of the country simultaneously. Elevated influenza activity is expected to continue for several more weeks. ... CDC continues to recommend influenza vaccination at this time.

Morbidity and Mortality Weekly Report

top of page...

USAFSAM & DHA: DoD Global, Laboratory-Based, Influenza Surveillance Program

During 21 January - 3 February 2018 (Surveillance Weeks 4 & 5), a total of 1,825 specimens were collected and received from 73 locations. Results were finalized for 1,460 specimens
from 72 locations. The percent influenza positive for Week 4 and 5 were both 45%. The influenza percent positive for the season is approximately 36%.

U.S. Air Force School of Aerospace Medicine & Defense Health Agency

VETERINARY/FOOD SAFETY

FDA’s ‘best advice’ for food safety reflected in new Food Code

13 February - The FDA has released an updated version of the federal Food Code. ... Significant changes to the 2017 Food Code include:

- Revised requirement for the “Person in Charge” to be a Certified Food Protection Manager;
- New section addressing the use of bandages, finger cots or finger stalls;
- Harmonized cooking times and temperatures for meat and poultry to ensure uniformity with guidance from the U.S. Department of Agriculture’s Food Safety and Inspection Service; and
- Updated procedures for retail food establishment operations to continue during an extended water or electrical outage, as long as a written emergency operation plan has been pre-approved by the appropriate regulatory authority, immediate corrective action is taken, and the regulatory authority is notified if the plan is implemented. Food Safety News

Lactalis failed to report salmonella on a product: government official

13 February - Dozens of babies fell ill after drinking baby milk contaminated with so-called Salmonella Agona produced by Lactalis, one of the world’s largest dairy groups, prompting the recall of 12 million tins. “There has been a lag between elements given to inspection services and the self-checks that we have been able to recover as part of the crisis,” the head of the French government’s food department, Patrick Dehaumont, told a Senate commission. “Salmonella Agona had been found in 2009, 2014, one on products in 2011 and other serotype in 2013 and 2014,” he added. ... More than 200 babies in France have been contaminated with Salmonella Agona since 2005, including 38 between mid-August and December last year. Reuters

U.S. woman found with eye worm previously known only in cattle

12 February - An Oregon woman has become the first person worldwide known to have had an eye infestation by a tiny worm species previously seen only in cattle that is spread by flies that feed on eyeball lubrication, U.S. government researchers said on Monday. U.S.
Centers for Disease Control and Prevention scientists said 14 translucent parasitic worms of the species *Thelazia gulosa*, all less than half an inch (1.27 cm) long, were extracted from the 26-year-old woman’s eye over a 20-day period before her symptoms dissipated.

*Reuters*

---

**WELLNESS**

---

Alcohol 'more damaging to brain health than marijuana'

12 February - Scientists at the University of Colorado Boulder conducted a review of existing imaging data that looked at the effects of alcohol and marijuana, or cannabis, on the brain. Their findings linked alcohol consumption with long-term changes to the structure of white matter and gray matter in the brain. The use of marijuana, however, seemed to have no significant long-term effects on brain structure. ... The team notes that any reduction in the size of white or gray matter or a loss in their integrity can lead to impairments in brain functioning. ... The study included the brain images of 853 adults who were aged between 18 and 55 years and 439 teenagers between the ages of 14 and 18. All participants varied in their use of alcohol and marijuana. *Medical News Today*

---

Auto crash deaths multiply after April 20 cannabis parties

12 February - U.S. traffic fatalities rise dramatically on the day pot smokers celebrate as “Weed Day.” In the quarter-century since High Times magazine proclaimed April 20 a time to light up and smoke marijuana, traffic fatalities have spiked 12 percent on that date, compared to one week before or after, a new study shows. “This was such a great natural experiment to examine the risk of cannabis intoxication,” said lead author Dr. John Staples, an internist and researcher at the University of British Columbia in Vancouver. Though the study could not assess whether marijuana-intoxicated drivers caused the surge in vehicle deaths on the counter-cultural “High Holiday” dubbed “4/20,” they appear to be the most likely culprits, Staples said in a phone interview. ... The impact of marijuana’s psychoactive effects on drivers is of particular concern given that six U.S. states now permit marijuana to be sold for recreational use to customers at least 21 years old. *Reuters*

---

Cost of U.S. opioid epidemic since 2001 is $1 trillion and climbing

13 February - The opioid epidemic has cost the U.S. more than a trillion dollars since 2001, according to a new study, and may exceed another $500 billion over the next three years. The report by Altarum, a nonprofit group that studies the health economy, examined CDC
mortality data through June of last year. The greatest financial cost of the opioid epidemic, according to the report, is in lost earnings and productivity losses to employers. Early deaths and substance abuse disorders also take a toll on local, state and federal government through lost tax revenue. These costs are rising. One reason for the increase ... is that more young people are being affected as the epidemic moves from prescription opioids to illicit drugs like heroin and fentanyl. NPR

Herpes is slowly retreating, but the infection remains common

9 February - The prevalence of both genital and oral herpes simplex virus infections has declined steadily since 2000. Still, roughly half of middle-aged Americans are infected. HSV-1, or oral herpes, causes cold sores around the mouth and face, and sometimes genital sores. HSV-2, genital herpes, is sexually transmitted, and causes sores around the genitals, buttocks and anus. ... According to a report published on Wednesday by the National Center for Health Statistics, 48 percent of Americans aged 14 to 49 are infected with HSV-1, down from 59 percent in 2000. About half of women in this age group are infected; 45 percent of men are infected. The older a person is, the more likely he or she is to be infected. Almost 60 percent of people ages 40 to 49 are infected with HSV-1. Rates are higher among Mexican-Americans, blacks and Asian-Americans than among non-Hispanic whites. The New York Times

Meth makes a comeback — and it’s purer, cheaper and much more lethal

13 February - ... The scourge of crystal meth, with its exploding labs and ruinous effect on teeth and skin, has been all but forgotten amid national concern over the opioid crisis. But 12 years after Congress took aggressive action to curtail it, meth has returned with a vengeance. In Oregon, meth-related deaths vastly outnumber those from heroin. At the U.S. border, agents are seizing 10 to 20 times the amounts they did a decade ago. Methamphetamine, experts say, has never been purer, cheaper or more lethal. The Seattle Times

Study shows benefits of exercise can outweigh health effects of severe obesity

12 February - According to the recent study, led by Jennifer Kuk ... individuals with severe obesity who are fit have a similar health profile to those who weigh significantly less than them. The goal of the study was to look at the benefits of cardiorespiratory fitness on cardiovascular health in populations with mild to severe obesity. The results suggest individuals with even severe obesity, or a BMI greater than 40, can be fit and healthy. ... Kuk
Tobacco firms in France cheated nicotine tests: anti-smoking body

9 February - Four tobacco companies operating in France manipulated tests to conceal the real level of nicotine and tar contained in cigarettes, endangering the lives of smokers, a French anti-smoking organization alleged in a legal complaint. The allegations by the National Committee Against Smoking (CNCT) target the French branches of Philip Morris, British American Tobacco, Japan Tobacco and Imperial Brands Plc. In its complaint, dated Jan. 24 and seen by Reuters on Friday, the CNCT says cigarettes produced by the companies contain tiny holes in the filter that are designed to ventilate the inhaled smoke under test conditions. When the cigarette is smoked by a person, however, the holes are compressed and largely covered by the smoker’s fingers or lips, causing the smoker to inhale harder and increasing the intake of nicotine and tar, the CNCT said. Reuters

Why do so few docs have buprenorphine waivers?

14 February - The barriers to obtaining a buprenorphine (Suboxone) waiver in the U.S. are small, but loom large in many physicians’ minds. Only 46,500 -- about 5% of the nation’s doctors -- have waivers to prescribe buprenorphine, a medication used to treat opioid addiction. ... "The current number of waivered physicians is not sufficient to ensure access to buprenorphine treatment for all individuals with opioid use disorder..." said Hannah Knudsen, PhD, of the University of Kentucky College of Medicine in Lexington. ... Early in her medical education, Alicia Agnoli, MD, MPH ... did elective training with a buprenorphine-waivered physician. "I saw a whole range of individuals struggling with their drug use," she said. "And I saw this treatment was really effective. It was not only helping their addiction, but it was engaging them with their primary care doctor and their overall health in a way that was profound." ... "We are in a culture shift; addiction treatment has not historically been part of primary care practice," she said. "Like with any culture change, we see greater gains in newer generations of physicians. Normalizing this in the training phase stands to produce more willing and capable primary care doctors." MedPage Today
Africa: Breakthrough as health workers can now transport vaccines without fridges

10 February - The World Health Organisation has approved the first carrier that doesn't require vaccine freezing during transport. The Path's Freeze-Safe innovation helps protect vaccine potency, reduces the burden on health workers, and provides cost savings to health systems. The Indian-made carrier using Path’s Freeze-Safe reference design passed WHO Performance, Quality, and Safety (PQS) laboratory tests for user independent freeze prevention, which prequalifies it for use in global immunisation programmes. This is the first low-cost carrier innovation available to address the widespread and long-standing problem of vaccines freezing in the cold chain during the "last mile" of outreach to infants and children. The carrier is on introductory field trials in Nepal. AllAfrica

Nigeria: WHO ramps up response to Nigeria’s Lassa fever outbreak

13 February - Today the World Health Organization (WHO) said it was scaling up its efforts to help Nigeria contain a growing Lassa fever outbreak. In the past 5 weeks, officials have reported as many as 450 cases (132 of them lab-confirmed) in 17 Nigerian states. So far, 43 deaths have been reported in connection to the outbreak. Lassa is a hemorrhagic fever endemic to Nigeria, usually spread by rats. In this outbreak, however, 11 healthcare workers have been infected by sick patients, 4 of them fatally. ... The WHO said it is deploying international experts to coordinate response, strengthen surveillance, provide treatment guidelines, and raise awareness on prevention and treatment. CIDRAP News Scan (second item)

Afghanistan: Afghanistan's lone psychiatric hospital reveals mental health crisis fueled by war

14 February - Nearly 40 years of violent conflict is driving a growing mental health crisis in Afghanistan. While accurate data on mental health issues are not available in Afghanistan, the World Health Organization estimates more than a million Afghans suffer from depressive disorders and over 1.2 million suffer from anxiety disorders. ... Afghanistan has only one high-security psychiatric facility, where many of the patients are often chained and sedated. The Red Crescent Secure Psychiatric Institution houses almost 300 patients
considered to be the “most dangerous,” says Sahar Zand, a reporter for the BBC who reported from the facility in Herat, the third-largest city in the country. While some patients in the hospital showed symptoms of mental health problems in childhood, “the majority of people are actually in there because they have developed psychological problems during the war because of Afghanistan’s recent history,” she tells Here & Now’s Lisa Mullins. NPR

Afghanistan: Polio cases confirmed in Afghanistan

9 February - In its latest weekly update, the Global Polio Eradication Initiative (GPEI) provided more details on two wild poliovirus type 1 (WPV 1) cases from Afghanistan that it initially reported last week. ... Afghanistan’s cases are both from Kandahar province, and the patients’ paralysis onsets were Jan 5 and Jan 6. The country now has three confirmed cases this year. The report also said another environmental sample from Kandahar province was positive for WPV1 and that a supplemental immunization campaign is slated to begin on Feb 12, targeting children in 24 provinces. CIDRAP News Scan (third item)

Pakistan: Pakistan gang 'stole spinal fluid from women'

13 February - Pakistani police have arrested four people accused of stealing spinal fluid from women. The suspects told women they had to provide blood samples to qualify for financial assistance from the Punjab government, police told BBC Urdu. However, they extracted spinal fluid instead, and attempted to sell it on the black market, police added. The gang is thought to have stolen spinal fluid from over 12 women, including a teenager. ... It is not clear how the spinal fluid would have been used on the black market. The health ministry has set up a committee to investigate the case, while the four gang members are currently in police custody. BBC News

Yemen: Yemenis turn to herbal remedies as medicine prices soar

12 February - ... Over the past three years, Yemenis seeking unproven natural remedies has become the norm in many parts of the country, he said, with a growing number looking for a cheaper way to treat their ailments. But these holistic remedies are far cry from the medical care most Yemenis received before the conflict began. More than 70 percent of the population had access to healthcare before 2015. Now, none of the country’s major hospitals provide the same level of service as before. The cost of most medicines has also risen sharply with some drugs experiencing a price hike of more than 300 percent, making it unaffordable for most families to obtain treatment. Al Jazeera
Europe: Measles cases in Europe tripled last year

12 February - A total of 14,451 measles cases were reported to the European Surveillance System from 30 countries across the European Union (EU) in 2017, more than triple 2016’s case count of 4,643. The figures come from data collected by the European Centre for Disease Prevention and Control (ECDC). According to data from the World Health Organization’s (WHO’s) European Region (which includes non-EU states), 2017 and the first part of 2018 have seen 17,584 measles cases, according to a report last week from the Pan American Health Organization (PAHO). CIDRAP

top of page...

Germany: Could free transit lure Germans from their cars?

14 February - Germany is considering free public transit in its cities in order to curb car use, as it hurries to meet the European Union’s requirements for air quality. That proposal is put forth in a letter to from the German government to the EU’s Environment Commissioner. The free transit plan is part of a range of measures suggested in the letter, including low emission zones, incentives for electric cars, and technically retrofitting existing vehicles, Reuters reports. ... Germany and eight other EU countries missed a January 30 deadline to meet the EU’s air pollution limits. If they don’t offer convincing plans to meet the pollution targets, the countries could face legal action at the European Court of Justice. NPR

top of page...

U.S.: American fertility is falling short of what women want

13 February - America’s fertility is in precipitous decline. Our team of forecasters at Demographic Intelligence projects 3.84 million births in 2017, down from about 3.95 million in 2016. And it’s likely to fall further — far short of what women themselves say they want for their family size. The latest data from the Centers for Disease Control and Prevention, reflecting births as of the year ending in September 2017, shows the total fertility rate at 1.77 lifetime births per woman, down 3.8 percent since 2015, and down 16.4 percent since its most recent peak at 2.12 in 2007. The fertility rate has increased for women over 40, and the generation of women finishing up their childbearing years now had more children than their mothers did, but that isn’t likely to be true for their daughters. The key factors driving down the birthrate are not mysterious: The pregnancy rate among young women is falling, and has been for years. The New York Times

top of page...
U.S.: Could a rare, deadly ‘superbug’ fungus be gaining a foothold?

12 February - The number of U.S. patients infected with a rare but dangerous fungal “superbug” called *Candida auris* has climbed quickly to 200 as of Dec. 31, according to the latest figures from the federal Centers for Disease Control and Prevention. In 2016, there were only seven cases of the multidrug-resistant infection on the national radar. CDC first alerted American health care facilities that year to be on the lookout for the fungus, which can cause serious medical complications when it enters the bloodstream, usually through wounds, ventilators or catheters. Patients with compromised health, especially those in hospitals and long-term care facilities, are most vulnerable. ... Most of the cases, 123, have been reported in New York. New Jersey had the second-highest tally, 48.  
*Kaiser Health News*

U.S.: Early intervention for mental health pays off later

14 February - ... Between 2006 and 2014, the rate of [emergency department (ED)] visits related to mental health/substance abuse jumped 44%. ... Two million people with serious mental illness (SMI) are jailed annually, but only about 1 in 3 is currently receiving any treatment. However, early intervention for SMI can help many people stay out of EDs and jails. That is the focus of ... a report recently released by the Substance Abuse and Mental Health Services Administration (SAMHSA). ... In the report, the committee cited the 2003 President’s New Freedom Commission on Mental Health, which concluded that America’s mental health service delivery system was “in shambles,” with “fragmented, disconnected and often inadequate” mental health services and supports. Yet a number of the commission’s recommendations still have not been implemented or only “partially realized,” the committee notes.  
*Federal Practitioner*

U.S.: NFPA fast-tracks active shooter response standard

15 February - NFPA will process NFPA 3000, Standard for Preparedness and Response to Active Shooter and/or Hostile Events, as a provisional standard, which means it would be available for use as early as April 2018. The standard is now open for input until Feb. 23, 2018. Responding to what it described as the "rising toll of active shooter and hostile events," NFPA announced Feb. 14 it is fast-tracking a new standard for unified response. The announcement says this is only the second time in NFPA’s 121-year history that provisional standard status has been authorized by the NFPA Standards Council. ... The new standard sets establishes preparedness, response, and recovery benchmarks with a focus on integrated protocol and civilian and responder safety.  
*Occupational Health and Safety*
U.S.: NIH funding fewer clinical trials, study suggests

13 February - The number of clinical trials funded by the National Institutes of Health has declined since 2005, according to a new study. ... During the same period, average trial sizes were observed to be smaller with only 10 percent of trials enrolling more than 500 participants. Clinical trials, which are research studies involving human participants, are part of NIH’s core mission. NIH-funded clinical trials can test promising treatments that may not have commercial potential and are also considered to be impartial. ... The findings ... suggest that NIH, due largely to declines in its budget in real terms, has been steadily losing its capability to support clinical trials research and conduct.  
Johns Hopkins Bloomberg School of Public Health News

top of page...

U.S.: Opioid makers paid millions to advocacy groups: U.S. Senate report

12 February- Five opioid manufacturers including OxyContin maker Purdue Pharma LP have paid more than $10 million to advocacy groups and doctors tied to them, many of whom amplified industry messages supporting the use of the painkillers, a U.S. Senate report said on Monday. The report, released by Democratic Senator Claire McCaskill, said groups who received the donations aligned themselves with industry goals and may have played a role in an epidemic that in 2016 led to 42,000 opioid overdose deaths. ... Purdue Pharma, which on Saturday announced it would stop promoting opioids to doctors, was the biggest donor, giving $4.15 million to 12 groups from 2012 to 2017, the report said. Reuters

top of page...

U.S.: Ticks test positive for tularemia in San Diego County

15 February – Officials with San Diego County announced Tuesday that several ticks collected in routine trapping from Lopez Canyon trail in Sorrento Valley have tested positive for tularemia. ... Vector Control officials said they have been finding increased numbers of ticks this year around the county, although the ones collected in Sorrento Valley were the only ones that have tested positive for any disease. Outbreak News Today

top of page...

U.S.: Why can't the U.S. treat gun violence as a public-health problem?

15 February - After a deadly shooting, the debate always, it seems, breaks down like this: One side argues for gun control, and the other argues there is no research proving those measures work. There is, in fact, little research into gun violence at all. ... The ... impasse can be traced to 1996, when Congress passed an amendment to a spending bill that forbade the Centers of Disease Control and Protection from using money to “advocate or promote
gun control.” The National Rifle Association had pushed for the amendment, after public-health researchers produced a spate of studies suggesting that, for example, having a gun in the house increased risk of homicide and suicide. ... Medical and public-health professionals have been pushing back—more and more forcefully in recent years. ... In 2016, more than 100 medical organizations signed a letter to Congress asking to lift the Dickey Amendment. ... President Obama signed an executive order directing the National Institutes of Health to fund research into gun violence after the Sandy Hook shooting, but the program has since petered out. The Atlantic

USPACOM

Australia: Gonorrhoea 'super-superbugs' triple in six months

13 February - Cases of a strain of gonorrhoea impervious to an antibiotic have almost tripled in six months, the latest report from the National Alert System for Critical Antimicrobial Resistance (CARAlert) reveals. ... A total of 742 reports of critically resistant bacteria were collected by the early-warning system from 65 laboratories nationwide between April and September last year, a 75 per cent rise on the 423 cases reported in the same period during 2016. A spike in the number of reports of Neisseria gonorrhoeae, a bacterial strain responsible for gonorrhoea that is resistant to the antibiotic azithromycin, accounted for most of the overall increase. ... N. gonorrhoeae accounted for 47 per cent of all reports over the six-month period. The Sydney Morning Herald

China ends reciprocal blood donation, exacerbating the country’s chronic blood shortage problem

14 February - China is set to end its decades-long reciprocal blood donation system by the end of March, the Beijing News reports. On February 5, the municipal health bureau in Beijing and the city’s Red Cross association jointly announced they would stop such practice by February 10, while other parts of China, including Shanghai, Tianjin, and Wuhan, already called an end to it before the capital. While talking to the Beijing News, the National Health and Family Planning Commission of China explained that the decision was made after careful assessment of the overall blood supply status across the country. “Judging from the nationwide developments of non-remunerated blood donation, combined with experts’ research and analysis, China is ready to stop reciprocal blood donation,” the top health authority said. SupChina
Argentina: Argentina sees Syphilis cases triple since 2011

12 February - Cases of the sexually transmitted infection, syphilis, has tripled between 2011 and 2017 in Argentina, according to data from the Ministry of Health. In 2011, Argentina saw 3,875 syphilis cases and six years later in 2017, the country reported 11,709, mostly in young adults, according to a BAE Negocios report (computer translated). ... Concerning condom use in Argentina, the AIDS Healthcare Foundation (AHF) reports only 14.5 percent of people always use a condom, while 65 percent use it sometimes and 20.5 percent never use one. Outbreak News Today

Cuba: "Health attacks" on U.S. diplomats in Cuba still a mystery says new report

15 February - Doctors are releasing the first detailed medical reports about the hearing, vision, balance and brain symptoms suffered in what the State Department has called "health attacks" on U.S. diplomats in Cuba. Still missing: A clear diagnosis of just what happened to trigger their mysterious health problems. Altogether, the symptoms are similar to the brain dysfunction seen with concussions, concluded a team of specialists from the University of Pennsylvania who tested 21 of the 24 embassy personnel thought to be affected. Whatever the cause, the Havana patients "experienced persisting disability of a significant nature," the Penn team concluded. Cuba has insisted there were no attacks. ... [T]he findings are preliminary, essentially a listing of symptoms and tests. Fox News
The Army Public Health Weekly Update does not analyze the information as to its strategic or tactical impact on the US Army and is not a medical intelligence product. Medical intelligence is available from the National Center for Medical Intelligence.

External Links: The appearance of external hyperlinks does not constitute endorsement by the U.S. Army of this Web site or the information, products, or services contained therein. For other than authorized activities such as military exchanges and MWR sites, the U.S. Army does not exercise any editorial control over the information you may find at these locations. Such links are provided consistent with the stated purpose of this product.

Although we avoid links to sites that may be blocked, all sites may not be accessible from all locations. While we verify the links at the time of publication, we cannot guarantee that they will be active in the future.

Articles appearing in the Update do not necessarily represent US Army Medical Command opinions/views, policy, or guidance, and should not be construed or interpreted as being endorsed by the US Army Medical Command.

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