24 August 2018

Army Public Health Weekly Update

Army Public Health Center

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U.S. MILITARY

DoD Inspector General to examine open burning of explosives

17 August - The Department of Defense’s Office of Inspector General announced it is investigating the military’s practice of open burning and detonating hazardous explosive materials on its properties, as well as its oversight of contractors performing open burning at sites in the United States and its territories. The IG’s investigators will evaluate select active DoD ammunition plants or other facilities where open burning and open detonation are used to dispose of excess conventional ammunition and explosives. They also will collect data about inactive sites. Announced Aug. 10 on its website, the project will examine whether DoD’s activities comply with relevant environmental and related laws, and also the policies used at the active sites. The evaluation will begin in August 2018; it was initiated by a congressional request. Occupational Health and Safety

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Paratrooper in Alaska jump suffers serious injuries

17 August - A paratrooper at Joint Base Elmendorf-Richardson, Alaska, suffered severe injuries during a drop exercise, an Army spokesman said. Anchorage television station KTVA reports the injury occurred Thursday at the base’s Malemute Drop Zone. The soldier was from the base’s 4th Brigade Combat Team, 25th Infantry Division, said Lt. Col. Martyn Crighton. The injured soldier was flown to Providence Alaska Medical Center with serious but non-life-threatening injuries. Crighton says an investigation is in progress. Army Times

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Report: VA may have mishandled thousands of sexual assault cases

21 August - Veterans Affairs officials may have improperly denied benefits to thousands of military sexual assault victims in recent years due to paperwork and procedural mistakes, according to a department inspector general report released Tuesday. Investigators estimate that during a six-month stretch in 2017, VA officials may have wrongly refused benefits in more than 1,300 cases, potentially traumatizing victims seeking help that previous administrators had promised. "(The Veterans Benefits Administration) did not always fulfill its obligation to help veterans prove their military sexual trauma-related claims," the report stated. ... In response, VA officials have promised a review of all denied military sexual trauma claims dating back to October 2016, with a goal of updated decisions by fall 2019. They also promised updated training for hundreds of claims processors and managers, to avoid similar problems in the future. Military Times

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The Army wants more male sexual assault survivors to file reports

22 August - Sexual assault prevention training has long focused on male perpetrators and female victims, but knowing that research finds that more men than women are sexually assaulted while serving in the military, the Army is making a pivot toward tackling male-on-male sexual violence. Central to the effort will be a "male survivor tour," a program conceived of in 2016, that will finally get on the road next year, officials say. A cornerstone of that effort is a Digital Survivor of Sexual Assault training module, which immerses a student in a conversation with a real soldier. The story and answers are pre-recorded, but the technology is responsive enough that the program can search about 2,000 possible responses and provide the correct one, based on a student’s question. For now, the soldier in that trainer is former Spc. Jarett Wright, who in 2012 went public with his story of rape and hazing while deployed to Iraq with the 1st Cavalry Division. Army Times

Transgender veterans don’t have worse health

17 August - Transgender military veterans do not have worse health than cisgender veterans, a recent U.S. study suggests. Transgender people have long served in the U.S. military but were banned from serving openly until 2016, when President Barack Obama’s administration lifted the ban. President Donald Trump’s administration has sought to reinstate the ban, citing civilian research indicating that transgender people require more medical care. ... [Researchers] analyzed data from the Behavioral Risk Factor Surveillance System, an annual telephone health survey managed by the U.S. Centers for Disease Control and Prevention. ... Reporting in Health Affairs, the authors say they expected transgender veterans to have worse health than cisgender veterans. “(But) in contrast to our primary hypothesis and prior research, we found few differences in health among veterans,” they write. The only significant difference was that transgender veterans were more likely to have at least one disability compared to cisgender veterans, despite similar access to health care. Reuters

Update: Medical evacuations, active and reserve components, U.S. Armed Forces, 2017

July 2018 - In 2017, a total of 626 medical evacuations of service members from the U.S. Central Command area of responsibility were followed by at least one medical encounter in a fixed medical facility outside the operational theater. There were more medical evacuations for mental health disorders than for any other category of illnesses or injuries. Annual rates of medical evacuations attributable to battle injuries decreased from 3.5 per 1,000 deployed person-years [dp-yrs] (n=317) in 2013 to a low of 0.73 per 1,000 dp-yrs (n=28) in 2016, and then increased to 1.4 per 1,000 dp-yrs (n=53) in 2017. Annual rates of medical evacuations attributable to non-battle injuries and illnesses were relatively stable
Two New Community Resource Guide Installations

The APHC CRG Management Team coordinated and published the addition of Walter Reed Military Medical Center and Camp Darby, Italy to the Enterprise CRG platform. The Enterprise CRG is a one-stop shop of all readiness, resilience, and Health of the Force programs and resources across the Army.

U.S. senators demand answers from Army after Reuters report on lead poisoning

17 August - Four U.S. senators on Friday urged the Army to detail the steps it is taking to safeguard children from lead poisoning, citing a Reuters investigation into hazards on military bases. ... The letter, written by Democratic Senators Tim Kaine and Mark Warner of Virginia, along with Republican Senators David Perdue and Johnny Isakson of Georgia, came a day after Reuters reported that more than 1,000 young children tested at military clinics had elevated lead levels between 2011 and 2016. The Reuters investigation also found that several military bases had not been reporting children’s blood test results to state health departments, violating state laws and creating public health blind spots. The Army said those test results are now being reported. Reuters

GLOBAL

Chagas disease heart damage underrecognized

21 August - There is work to be done regarding awareness of cardiomyopathy resulting from Chagas disease in areas where it is not traditionally endemic, including the U.S., according to the American Heart Association (AHA). This chronic tropical disease now affects more than 300,000 people in the U.S., especially immigrants. The protozoan infection can be asymptomatic or can progress to dilated cardiomyopathy with heart failure, ventricular arrhythmias and conduction disturbances, stroke, and other systemic or pulmonary embolisms. ... One major need is an early biomarker for the diagnosis of Chagas disease, [Maria Carmo Pereira] Nunes' group emphasized. Med Page Today

Fractional-dose yellow fever vaccination — advancing the evidence base

16 August - ... The WHO published its official position on fractional-dose yellow fever vaccination in June 2017. The agency recommends fractional-dose vaccination during a yellow fever outbreak only if there is a shortage of full-dose vaccine and emergency-response needs exceed the capacity of the global stockpile. Furthermore, it is still recommended that some groups, such as children less than 2 years of age and pregnant women, receive the full-dose vaccine. ... Because of limited data on duration of protection,
fractional-dose vaccination also does not qualify people for international travel under the International Health Regulations. ... Without assurances that a fractional-dose vaccine provides the same lifetime protection as a full-dose vaccine, people who receive fractional doses will need to be revaccinated before traveling to countries where yellow fever is endemic. New England Journal of Medicine

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**Hearing aids are finally entering the 21st century**

September 2018 - ... Only six companies make most of the world’s hearing aids, and they sell them directly through hearing specialists. That’s one reason the price of hearing aids hasn’t dropped over time, the way most electronics do: the medical professionals you have to go through account for a significant fraction of the cost. Bottom line: many people who need them don’t get them. ... [T]he President’s Council of Advisors on Science and Technology, under Barack Obama [pursued] a radical agenda: deregulating hearing aids. The result passed last year with bipartisan support. It requires that the FDA develop a new category of over-the-counter hearing aids, including safety and reliability standards. The new law, Lin says, will lower the price and remove obstacles to innovation—and so help more patients. “People widely expect that companies like Bose, Samsung and Apple could all enter the market now,” he observes. Scientific American

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**Lifestyle factors linked to brain health of young adults**

22 August - Researchers from the University of Oxford, in collaboration with researchers from Canada and the Universities of Bristol and London, have used advanced magnetic resonance imaging to investigate whether factors such as blood pressure, fitness, smoking and alcohol intake during young adult life are associated with changes in the blood vessels inside the brain. The British Heart Foundation and Wellcome Trust funded study, which took place at the Cardiovascular Clinical Research Facility at Oxford’s John Radcliffe Hospital, involved 125 young adults between the ages of 18 and 40 years. Participants with healthier cardiovascular risk profiles, such as those with optimal blood pressure who are following the UK’s Chief Medical Officers' public health guidelines for exercise participation and lower alcohol intake were found to have higher density of blood vessels in the brain as well as higher brain blood flow and fewer white matter hyperintensity lesions; which have been associated with a higher risk of stroke and dementia in later life. Medical Xpress

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**NIH begins clinical trial of live, attenuated Zika vaccine**

16 August - Vaccinations have begun in a first-in-human trial of an experimental live, attenuated Zika virus vaccine developed by scientists at the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health. The trial will enroll a total of 28 healthy, non-pregnant adults ages 18 to 50. ... The laboratory used genetic engineering techniques to create a chimeric virus, made by combining genes from multiple viruses. ... The chimeric virus is live but attenuated, or weakened, so it cannot cause disease
CDC Yellow Book 2018

CDC Health Information for International Travel (commonly called the Yellow Book) is published every two years as a reference for health professionals providing care to international travelers and is a useful resource for anyone interested in staying healthy abroad. The fully revised and updated CDC Yellow Book 2018 codifies the U.S. government’s most current travel health guidelines, including pretravel vaccine recommendations, destination-specific health advice, and easy-to-reference maps, tables, and charts.

RDMD attacks rare diseases with data mined from health records

20 August - RDMD aggregates and analyzes medical records and sells the de-identified data to pharmaceutical companies to help them develop medicines. In exchange for access to the data, patients gets their fragmented medical records organized into an app they can use to track their treatment and get second opinions. ... RDMD CEO Nancy Yu [says], “There are over 7,000 rare diseases and growing, yet <5% of them have an FDA-approved therapy. . . it’s a massive problem.” While data infrastructure supports development of treatments for more common diseases like cancer and diabetes, rare diseases have been ignored because it’s wildly expensive and difficult to collect the high-quality data required to invent new medicines. But “RDMD generates research-grade, regulatory-grade data from patient medical records for use in rare disease drug R&D,” says Yu. The more data it can collect, the more pharma companies can do to help patients. Tech Crunch

Researchers are developing vaccines for human parasites

16 August - Helminthic parasites, like hookworm and liver flukes (schistosomiasis), affect an estimated 1 billion people worldwide. Infection from hookworm and schistosomiasis result in a combined loss of as much as 92 million disability-adjusted life years annually. Little progress has been made to relieve this global burden and eradicate these parasites until now. A partnership between the George Washington University (GW) School of Medicine and Health Sciences and the Texas Children’s Hospital Center for Vaccine Development has led to development of several hookworm and schistosomiasis vaccine candidates. Science Daily

Toxin at heart of drug recall shows holes in medical safety net

22 August - A toxin inadvertently produced in the manufacture of a widely prescribed medicine but not spotted for years raises questions about regulators’ ability to detect risks in a sprawling global drug supply chain increasingly reliant on factories in China. China’s Zhejiang Huahai Pharmaceutical) which produces bulk ingredients for drugmakers, told its customers in late June it had found NDMA in its valsartan, an off-patent blood pressure drug originally developed by Novartis. The discovery means that some of the 10 billion pills containing valsartan sold worldwide last year to prevent heart attacks and strokes had traces of N-nitrosodimethylamine (NDMA), classified as a probable human carcinogen. No one has been reported as sickened by the toxin, once used in the production of liquid rocket fuel. Regulators and industry experts say the toxin almost certainly was introduced when Huahai changed the way it produced valsartan in 2012 - a modification that was
signed off on by the European body that sets standards. Subsequent inspections by European, U.S. and Chinese regulators also found no problem. Reuters

INFLUENZA

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

2017-2018 Influenza Season Week 32 ending August 11, 2018

- Novel Influenza A Virus: An additional four human infections with novel influenza A viruses were reported by three states (California [2], Michigan [1], and Ohio [1]). All four persons were infected with an influenza A(H1N2) variant (A(H1N2)v) virus. Three patients reported exposure to swine at an agricultural fair during the week preceding illness onset, while one patient attended an agricultural fair but no contact with swine was reported. Three of the patients were children < 18 years of age and one patient was an adult < 25 years of age. No patients were hospitalized and all are recovering or have fully recovered from their illness. No human-to-human transmission has been identified.

- Pneumonia and Influenza (P&I) Mortality Surveillance: Based on National Center for Health Statistics (NCHS) mortality surveillance data available on August 16, 2018, 5.3% of the deaths occurring during the week ending July 28, 2018 (week 30) were due to P&I. This percentage is below the epidemic threshold of 5.8% for week 30.

NHRC: Operational Infectious Diseases - Weekly Surveillance Report

16 August - Febrile respiratory illness cases:

- Military Recruits - 30 positive of 67 tested
- CDC Border Infectious Disease Surveillance and Zika Surveillance - 3 positive of 6 tested
- DoD Beneficiaries – 6 positive of 13 tested. Naval Health Research Center

Study finds no tie between pH1N1 vaccine, narcolepsy except in Sweden

17 August - A study involving data from nine countries has found that, other than elevated narcolepsy levels after 2009-10 pandemic flu vaccination campaigns in Sweden, there was no association between narcolepsy and AS03- or MF59-adjuvanted 2009 H1N1 (pH1N1) flu vaccines in children or adults. ... [S]cientists said they used electronic health databases to
conduct a dynamic retrospective cohort study to assess narcolepsy incidence before and during pH1N1 virus circulation—and after pH1N1 vaccination campaigns—in Canada, Denmark, Spain, Sweden, Taiwan, the Netherlands, and the United Kingdom. In addition, they used a case-control study design to evaluate the risk of narcolepsy following AS03- and MF59-adjuvanted pH1N1 vaccines in Argentina, Canada, Spain, Switzerland, Taiwan, and the Netherlands. ... The researchers found no change in narcolepsy rates in any period in single-study sites except in Sweden and Taiwan. In Taiwan, narcolepsy incidence increased after wild-type pH1N1 virus circulation, and in Sweden it increased after the start of pH1N1 vaccination. CIDRAP News Scan (second item)

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WHO: Influenza Update

20 August - In the temperate zones of the southern hemisphere, influenza activity remained elevated in South America and continued to decrease in Southern Africa. Influenza activity remained below seasonal threshold in Australia and New Zealand and at inter-seasonal levels in most of temperate zone of the northern hemisphere. Reports of influenza activity were reported as decreased in some countries of tropical America. Worldwide, seasonal influenza subtype A viruses accounted for the majority of detections. WHO
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VETERINARY/FOOD SAFETY

32 children's medicines recalled over contamination

23 August - A maker of children’s medicines has issued a voluntary recall for over two dozen of its products over a “microbial contamination” that could result in life-threatening infections. The FDA announced that King Bio, which has not reported any injuries or illnesses as a result of the contamination, issued the recall on Wednesday. [Affected products, which were produced between August 2017 and April 2018, include medications intended to relieve cough, fever, ear aches, teething, flu and stomach aches.] Fox News
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China pig cull tops 20,000 as African swine fever deepens farm crisis

22 August - China’s pig cull topped 20,000 animals on Wednesday as officials try to halt an outbreak of deadly African swine fever (ASF) in the world’s largest pig market, already reeling from a year-long price rout. Nearly 15,000 hogs have been culled in Lianyungang city in eastern Jiangsu province as of Aug. 20, local authorities said, after the third case of the highly contagious disease was found at the weekend, the third in two weeks. China’s
first reported outbreaks of ASF - a disease for which there is no vaccine - have stoked concerns about its spread and potential damage to demand for pork, a staple of the nation’s diet. Reuters

Consumers Union concerned about heavy metals in baby food

20 August - Consumers Union, the organization behind Consumer Reports, is concerned about heavy metals content in toddler and baby foods. They are asking the FDA to take steps to protect children from these contaminants in their food supply. Heavy metals, such as cadmium, lead, and inorganic arsenic, can cause serious health problems in babies and toddlers. … Consumer Reports’ food safety team analyzed 50 nationally distributed foods made for babies and toddlers. Those foods included baby cereals, packaged fruits and vegetables, packaged entrees, and packaged snacks. They found that every product had measurable levels of at least one of those heavy metals. About 68% of the products had “worrisome levels” of at least one heavy metal. More than 90% of parents with children under the age of three use these foods at least occasionally. Among the 50 foods tested, 15 would pose potential health risks to a child who regularly ate just one serving or less per day. Food Poisoning Bulletin

Fresh Express announces expert panel to help industry solve Cyclospora

22 August - Fresh Express, whose produce has been tied to a large McDonald’s-related outbreak of cyclosporiasis cases, yesterday announced it has formed a “blue ribbon” panel to study the Cyclospora parasite with the aim of reducing outbreaks in fruits and vegetables. … “Recent Cyclospora outbreaks, with limited evidence as to how they originated, have perplexed federal and state public health officials as well as food safety experts throughout the fresh produce industry, including Fresh Express,” said Fresh Express President John P. Olivo in a news release. “The purpose of the Fresh Express Blue-Ribbon Panel is to assemble an interdisciplinary group of independent scientific experts to better understand Cyclospora’s mode of action and how the industry can better guard against future outbreaks.” CIDRAP News Scan (second item)

WELLNESS

America’s invisible pot addicts

20 August - … [Cannabis-use disorders] are becoming more common: The share of adults
with one has doubled since the early aughts, as the share of cannabis users who consume it daily or near-daily has jumped nearly 50 percent—all “in the context of increasingly permissive cannabis legislation, attitudes, and lower risk perception,” as the National Institutes of Health put it. Public-health experts worry about the increasingly potent options available, and the striking number of constant users. ... They argue that state and local governments are setting up legal regimes without sufficient public-health protection, with some even warning that the country is replacing one form of reefer madness with another, careening from treating cannabis as if it were as dangerous as heroin to treating it as if it were as benign as kombucha. The Atlantic

Autism and DDT: What one million pregnancies can — and can’t — reveal

16 August - Mothers with high levels of the pesticide DDT in their blood during pregnancy are more likely to bear children who develop autism, according to a study of blood samples from more than one million pregnant women in Finland. ... Although the authors stress that the findings do not prove that autism is caused by DDT — whose use has been banned in many countries for decades over concerns about its effects on wildlife—it is the first such association using a direct measure of exposure to the pesticide. ... The study, published on 16 August in the American Journal of Psychiatry, also examined mothers’ exposure to another set of chemicals known as polychlorinated biphenyls (PCBs), and found no association between these substances and autism. That finding deepens questions about whether or how DDT might be linked to autism. Nature

Cycling is one of the best activities you can do to banish a bad day

21 August - ... [Researchers] analyzed the exercise and mental health of a whopping 1,237,194 adults using three years of survey data where participants reported the type of exercise they did, how much they exercised, and how many days they experienced poor mental health in the form of stress, depression, and other emotional trouble. All exercise improved overall mental health: People who exercised had two days of poor mental health days over the course of a month compared to 3.4 bad mental health days among those who performed no physical activity. ... Of the 75 types of exercise studied, team sports provided the most protection, with people playing soccer and other team sports reporting 23.3 percent fewer days of poor mental health than non-exercisers. But riding a bike, either indoors or outside, was a close second, with riders enjoying 21.6 percent fewer bad mental health days. The third activity on the mental health protection podium was aerobic or gym exercise (not including running—which was fourth on the list—or cycling). Bicycling
Depressed patients see quality of life improve with nerve stimulation

21 August - People with depression who are treated with nerve stimulation experience significant improvements in quality of life, even when their depression symptoms don’t completely subside, according to results of a national study led by researchers at Washington University School of Medicine in St. Louis. The study involved nearly 600 patients with depression that could not be alleviated by four or more antidepressants, taken either separately or in combination. The researchers evaluated vagus nerve stimulators, which send regular, mild pulses of electrical energy to the brain via the vagus nerve. ... In assessing quality of life, the researchers evaluated 14 categories, including physical health, family relationships, ability to work and overall well-being. "On about 10 of the 14 measures, those with vagus nerve stimulators did better," [principal investigator Charles R.] Conway said.

E-cigarettes can damage DNA

20 August - ... Today, researchers report that vaping may modify the genetic material, or DNA, in the oral cells of users, which could increase their cancer risk. ... [R]esearchers recruited five e-cigarette users. They collected saliva samples before and after a 15-minute vaping session and analyzed the samples for chemicals that are known to damage DNA. To evaluate possible long-term effects of vaping, the team assessed DNA damage in the cells of the volunteers’ mouths. The researchers used mass-spectrometry-based methods they had developed previously for a different study in which they evaluated oral DNA damage caused by alcohol consumption. Dator and Balbo identified three DNA-damaging compounds, formaldehyde, acrolein and methylglyoxal, whose levels increased in the saliva after vaping. Compared with people who don't vape, four of the five e-cigarette users showed increased DNA damage related to acrolein exposure.

Frequent home moves may increase a child’s risk of psychosis

22 August - Children whose families move homes frequently may be at increased risk for serious psychiatric illness. Researchers followed 1,440,383 children from birth to age 29, including data on residential moves. They found 4,537 cases of psychosis, symptoms of which can include hallucinations and delusions. The more often children under 19 moved, the greater their risk for psychosis. The largest effect was among 16- to 19-year-olds. For them, two or three moves more than tripled the risk for psychosis, and four or more nearly quadrupled the risk. After age 20, there was no association between moving and illness. The study, in JAMA Psychiatry, controlled for sex, foreign background, parental death, parental
history of severe mental illness, income and mother’s age at birth, but had no data for bullying or physical or sexual abuse. The New York Times

HPV-related cancer rates are rising. So are vaccine rates — just not fast enough.

23 August - Cancers linked to the human papillomavirus have increased significantly over the last 15 years in the United States, with throat cancer now the most common HPV-related malignancy, the Centers for Disease Control and Prevention reported Thursday. More than 43,000 people developed an HPV-associated cancer in 2015, compared with about 30,000 in 1999, the CDC said. At the same time, the CDC said, HPV vaccination rates are rising — a trend that could eventually curb the increase in cancer cases. But the vaccine rate rising fast enough, experts say. Nearly half of adolescents ages 13 to 17 in 2017 had received all the recommended doses for HPV vaccination, while two thirds had received the first dose. For both groups, that was a five-percentage-point increase from the previous year. The Washington Post

Life expectancy declines seen in U.S. and other high-income countries

22 August - Life expectancy is declining in high-income countries worldwide, driven in part by the effects of the opioid epidemic on younger adults in the U.S. and the impact of a severe flu season on older adults in other nations, two new studies suggest. ... The first study looked at trends across 18 high-income countries and found that most countries experienced declines in life expectancy in 2015. ... Out of 18 countries in the study, 12 experienced life expectancy declines among men and 11 experienced life expectancy declines among women. ... A second study in The BMJ suggests, however, that the problems driving life expectancy declines in the U.S. are broader than just the opioid crisis and may extend to a wide range of causes unrelated to drug use or substance abuse. ... [T]he study found rising midlife death rates from dozens of diseases of the heart, lungs, digestive systems and other organs. It even found rising death rates during pregnancy and early childhood, Woolf said. Reuters

NIH officials: Closing treatment gaps critical to ending the U.S. HIV epidemic

21 August - ... If HIV treatment as prevention is to help us reach the goal of ending the HIV epidemic in the United States, it is critical to understand, address and bridge gaps in achieving viral suppression, NIAID Director Anthony S. Fauci, M.D., and colleagues write in an editorial commenting on an NIH-funded study published in Annals of Internal Medicine. The study found that rates of viral suppression among 31,930 adults receiving HIV care at eight clinical sites across the United States improved from 32 percent in 1997 to 86 percent
in 2015. However, these gains were not equally distributed across different demographic and clinical populations. ... [C]ertain demographic groups, such as black people living with HIV, remained less likely to be virally suppressed. Additionally, improvements in viral suppression among heterosexual individuals and people who inject drugs plateaued from 2013 to 2015. ... As the public health community strives to end the HIV epidemic in the United States, targeted treatment interventions for populations with low levels of viral suppression, paired with tailored prevention packages, will be essential, Dr. Fauci and colleagues conclude. NIH

**Prolonged sitting: Short bouts of activity reduce health risks**

19 August - A newly published meta-analysis has discovered that even short breaks from prolonged sitting can reduce some of the adverse metabolic effects associated with it. ... [L]ong periods with little exertion reduce insulin sensitivity and glucose tolerance, while increasing levels of triglycerides — the main constituent of body fat — in the blood. ... To investigate, the team assessed 44 existing studies that focused on interrupting prolonged sitting with various amounts and types of movement. ... More specifically, they were interested in the effect of up to 24 hours of prolonged sitting following a meal. They measured its influence on various factors, including glucose, insulin, and triglyceride levels, blood pressure, and vascular function. They compared these effects with individuals whose sitting was interrupted with light to moderate activity. They found that even light-intensity activity every 30 minutes had significant effects. Physical activity of any intensity was shown to reduce concentrations of glucose and insulin in the blood up to 9 hours after the meal. Similarly, levels of fat in the blood were also reduced, but this only occurred 12–16 hours after activity began. Medical News Today

**Study shows HPV, other vaccines not tied to premature menopause**

22 August - Preteen girls, teens, and young women who receive recommended vaccinations, including for human papillomavirus (HPV), have no increased risk of primary ovarian insufficiency (POI), also called premature menopause, according to a study published yesterday in Pediatrics. Published case series have suggested a potential association between HPV vaccination and POI, the authors wrote. Kaiser Permanente researchers sought to estimate the risk of POI after vaccines targeting HPV, flu, meningococcus bacteria, and tetanus, diphtheria, and pertussis (the Tdap vaccine). CIDRAP News Scan (first item)

**The military is overhauling troops’ chow as obesity rates soar**

19 August - ... Like the rest of the country, the military is grappling with high rates of
overweight and obese troops. More than 17 percent of soldiers were classified as obese in the Army's 2016 and 2017 Health of the Force reports. ... That has leaders looking for new ways to fuel their warfighters. It's part of a push toward total fitness, which means nutrition doesn't just support troops' physical needs, but their psychological health as well. ... The Army is working on providing leaders with more actionable information and strategies on its Performance Triad program to get soldiers paying more attention to their sleep patterns, activity levels and nutrition. That includes a push to integrate the program into more training courses and a cooking guide for soldiers who want to add more whole foods into their diets. Military.com

The secret to keeping black men healthy? Maybe black doctors

20 August - Black men have the lowest life expectancy of any ethnic group in the United States. Much of the gap is explained by greater rates of chronic illnesses such as diabetes and heart disease, which afflict poor and poorly educated black men in particular. But why is that? Lack of insurance? Lack of access to health care? Now, a group of researchers in California has demonstrated that another powerful force may be at work: a lack of black physicians. In the study, black men seeing black male doctors were much more likely to agree to certain preventive measures than were black men seeing doctors who were white or Asian. ... Diabetes screening was part of the health check, and 63 percent of the black men assigned to a black doctor agreed to the screening. But just 43 percent of those assigned to a doctor who was white or Asian consented to be screened. The New York Times

You’re getting very sleepy. (So is everyone else.)

21 August - Inadequate sleep causes more than $400 billion in economic losses annually in the United States and results in 1.23 million lost days of work each year, researchers have found. The impact of chronic sleeplessness in the United States far exceeds the costs in other industrialized countries. The runner-up, Japan, loses as much as $138 billion annually to sleeplessness among workers, but that represents a greater share of its economy, researchers at the RAND Corporation found. The number of individuals who sleep less than the recommended hours is increasing in the developed world. From 20 to 30 percent of these workers complain of a lack of sleep on a daily basis. The New York Times
Democratic Republic of the Congo: Congo approves more experimental Ebola treatments as cases rise

22 August - Democratic Republic of Congo has approved four more experimental treatments against the deadly Ebola virus, the health ministry said as it raced to contain an outbreak in its violence-torn east. Health authorities last week started administering the U.S.-developed mAb114 treatment to Ebola patients, the first time such a treatment had been used against an active outbreak. The health ministry said in a daily bulletin late on Tuesday that the 10 patients who received mAb114 since Aug. 11 have experienced a “positive evolution”, but the outbreak has continued to grow. The four additional treatments approved by Congo’s ethics committee are Remdesivir, made by Israel’s Gilead Sciences; ZMapp, an intravenous treatment made by San Diego’s Mapp Pharmaceutical; Japanese drug Favipiravir; and one referred to as Regn3450–3471–3479. ... Six new cases and four new deaths have been confirmed. ...That brings the total number of deaths to 59 and confirmed cases to 75 since last month. Reuters

Democratic Republic of the Congo: WHO - 13 health workers infected in DRC Ebola outbreak

21 August - The Ebola outbreak in the Democratic Republic of the Congo's (DRC's) North Kivu district continues to grow, amid new healthcare worker infections and concerns that regional violence is making surveillance and detection challenging for international aid workers. According to an update released late yesterday by the DRC's healthy ministry, Ebola cases now total 96 (5 new cases), with 69 confirmed. In addition, 55 people have died. The 5 new cases and 5 newly recorded deaths are all in Mabalako health zone. ... Tarik Jasarevic, a spokesperson with the World Health Organization (WHO), told CIDRAP News that 13 healthcare workers have tested positive for Ebola, a troubling development, because infected health workers were one of the main factors in the rapid spread of the disease during the 2013-2016 outbreak in West Africa. CIDRAP News

Rapid development in Central Africa increases the risk of infectious disease outbreaks

23 August - The Central Africa region is experiencing rapid urbanization, economic growth, and infrastructure development. These changes, while generally positive and welcome, also make the region more vulnerable to explosive infectious disease outbreaks, according to an international group of scientists. Writing in the New England Journal of Medicine, the authors, all of whom have field research experience in the region, note that efforts to build up the health care infrastructure in Central Africa are critically needed to mitigate or prevent
a large outbreak of Ebola or other infectious disease in the region. ... [Researchers] have seen the evolution of once-rutted jeep trails used to access remote villages now accessible by paved roads, typically related to the growth in logging, mining and hydroelectric industries. Road construction and similar disturbances in the jungle terrain alters ecosystems in which pathogens and their hosts reside, they note. This increases the opportunity for new infectious diseases to emerge and reduces the time it takes people to travel to and from urban areas, allowing outbreaks to spread quickly. NIH

USCENTCOM

Afghanistan: New polio case found in southern Afghanistan

17 August - A fresh polio case was detected in Afghanistan's southern province of Kandahar, bringing the total cases to seven in the country, an official said Friday. "The virus affecting an 11-month-old girl named Subhani, was found in Zhuwando Hadiro area of Arghandab district a couple of days ago, after a previously detected one in the neighboring Helmand province in late June," Abdul Shakoor Nasrat, who is in charge of Kandahar Immunity Vaccination Program, told Xinhua. By the freshly found case, the polio cases reported in the country's southern zone has reached seven; one in Helmand and the remaining six in Kandahar province, bringing the total cases to 10 countrywide, the official added. Xinhuanet

USEUCOM

Europe: Measles cases hit record high in the European Region

20 August - Over 41 000 children and adults in the WHO European Region have been infected with measles in the first 6 months of 2018. The total number for this period far exceeds the 12-month totals reported for every other year this decade. So far, the highest annual total for measles cases between 2010 and 2017 was 23 927 for 2017, and the lowest was 5273 for 2016. Monthly country reports also indicate that at least 37 people have died due to measles so far this year. ... Seven countries in the Region have seen over 1000 infections in children and adults this year (France, Georgia, Greece, Italy, the Russian Federation, Serbia and Ukraine). Ukraine has been the hardest hit, with over 23 000 people affected; this accounts for over half of the regional total. Measles-related deaths have been reported in all of these countries, with Serbia reporting the highest number of 14. WHO
Israel: Israel bans Juul e-cigarette, ‘a grave danger to public health’

22 August - Prime Minister Benjamin Netanyahu on Tuesday signed a warrant barring the import and sale of U.S. Juul e-cigarettes in Israel. Netanyahu did so at the request of Deputy Health Minister Yaakov Litzman and the recommendation of Health Ministry officials. A statement from the ministry noted that the device, has extremely high levels of nicotine and poses “a grave danger to public health.” Juul pods contain 59 milligrams of nicotine for every milliliter of liquid, much higher than the 6-30 milligrams in other e-cigarettes. The device has already been banned in the European Union for passing the permitted 20mg/ml limit. The Times of Israel

United Kingdom: Oral human papillomavirus infection in England and associated risk factors - a case-control study

19 August - This study was conducted to determine the prevalence of and associated risk factors for infection with oral high-risk human papillomavirus (HR-HPV) in adult participants within England, and to explore any association with oral mucosal buccal epithelial cell and whole blood folate concentration. ... Seven hundred participants, aged 18–60 years, were recruited from university students (n=179), university and hospital staff (n=163), dental hospital patients (n=13), Sexual Health Sheffield patients (n=122) and the general public (n=223). ... The prevalence of oral HR-HPV infection in this cohort was 2.2% (15/680) with 0.7% (5/680) positive for HPV16 or HPV18. ... Participants with oral HR-HPV infection were more likely to be a former smoker, and have a greater number of sexual and oral sexual partners. Folate status was not linked to likelihood of HPV infection. BMJ Journals

United Kingdom: Traveler from Mideast diagnosed with MERS in UK

23 August - A person who flew via Saudi Arabian Airlines (Saudia) last week to the United Kingdom is infected with MERS-CoV, the first such case in England in 5 years, Public Health England (PHE) confirmed today. Jenny Harries, OBE, deputy medical director at PHE, said in a press release, “A patient in hospital in Liverpool is being treated for Middle East respiratory syndrome coronavirus (MERS-CoV) infection. The patient is thought to have contracted the infection whilst in the Middle East before travelling to the UK.” The patient is in stable condition and receiving appropriate treatment, PHE said. CIDRAP News
China: Beijing enjoys the bluest skies in a decade
19 August - Beijing residents have been breathing some of the cleanest air in a decade as they begin to reap the benefits of China's anti-smog push. Of the seven lowest monthly pollution readings in the capital city since 2008, five have been recorded since the beginning of last summer, according to data gathered by the U.S. Embassy in Beijing. That's when Chinese officials ramped up enforcement of policies restricting coal burning in Beijing and surrounding areas. ... Since President Xi Jinping made fighting air pollution one of the country's main priorities, millions of northern businesses and families were forced to switch from coal to cleaner-burning natural gas for industrial power and home heating. Bloomberg

India: Kerala floods - Death toll rises to 94
17 August - The death toll in Kerala flood has increased to 94, leaving 41 injured, 11 people missing, and almost 1,65,538 people are residing in 1155 relief camps due to the natural disaster. The floods which wrecked 2857 houses, also damaged 3393 hectares of crop. The Centre has launched massive rescue and relief operations in the state owing to the flood situation which is worsening by the day. Army, Navy, Air Force, Coast Guard and National Disaster Response Force (NDRF) have been asked to mobilise additional manpower, boats and helicopters to scale up the rescue and relief operations. Food packets and drinking water are also being rushed. Kaumudi Online

South Korea: U.S. bases order curfews and closures as Soulik nears South Korea
22 August - U.S. bases in South Korea are battening down the hatches ahead of Tropical Storm Soulik, which is forecast to hit the peninsula on Thursday evening. Kunsan Air Base has ordered its airmen to shelter inside their residences by 7 p.m. and has closed the base with the exception of emergency services. Osan Air Base and Camp Humphreys sent its nonessential personnel home Thursday afternoon, and Humphreys has told them to remain home Friday. The more northern bases, including Yongsan Garrison and Camp Casey, have maintained a mostly normal schedule but will see closures to most services to assess damages Friday. Soulik, which has been downgraded from a typhoon to a tropical storm, is swinging right toward the mainland, threatening U.S. bases, the Navy's Joint Typhoon Warning Center said. Stars and Stripes

U.S.: Hurricane Lane edges closer to Hawaii, unleashing ‘potential flooding disaster’
23 August - Dangerous Category 4 Hurricane Lane is pushing ever closer to the Hawaiian Islands and has already begun unloading excessive amounts of rainfall on the Big Island.
Water from both torrential rainfall, exceeding 30 inches in some places, and battering waves, up to 25 feet on the south side of the islands, are likely to pose the biggest threat. The resulting flooding may be devastating. “The slow movement of Lane also greatly increases the threat for prolonged heavy rainfall and extreme rainfall totals,” the Central Pacific Hurricane Center, based in Honolulu, said Thursday. “This is expected to lead to life-threatening flash flooding and landslides over all Hawaiian Islands.” The Washington Post

USNORTHCOM

U.S.: CDC - There is NO current multi-state measles outbreak in U.S.

18 August - The Centers for Disease Control and Prevention (CDC) says there is no multi-state outbreak in the country currently, responding to several media accounts that there was a national outbreak. “There is NO current multi-state #measles outbreak in US, the tweet notes. “Some recent media reports misinterpreted CDC data. Number of US-reported cases in 2018 is similar to recent years & in expected range”. So far in 2018, 107 individual cases of measles have been confirmed in 21 states and the District of Colombia. This compares with recent years—In 2017, 118 people from 15 states and the District of Columbia were reported to have measles. In 2016, 86 people from 19 states were reported to have measles. Outbreak News Today

U.S.: Cost of new E.P.A. coal rules: up to 1,400 more deaths a year

21 August - The Trump administration has hailed its overhaul of federal pollution restrictions on coal-burning power plants as creating new jobs, eliminating burdensome government regulations and ending what President Trump has long described as a “war on coal.” The administration’s own analysis, however, revealed on Tuesday that the new rules could also lead to as many as 1,400 premature deaths annually by 2030 from an increase in the extremely fine particulate matter that is linked to heart and lung disease, up to 15,000 new cases of upper respiratory problems, a rise in bronchitis, and tens of thousands of missed school days. Officials at the Environmental Protection Agency, which crafted the regulation, said that other rules governing pollution could be used to reduce those numbers. The New York Times

U.S.: FDA extends EpiPen expiry date to combat shortage

21 August - The U.S. Food and Drug Administration on Tuesday extended the expiration
date of specific lots of Mylan NV’s EpiPen allergy injectors by four months to mitigate the shortage of the life-saving treatment. The decision comes at a time when the shortage has come under focus at the start of back-to-school season, and applies to specific lots of 0.3 milligram EpiPen products, after the regulator reviewed data provided by Mylan. Earlier this month, Mylan issued a warning that the devices may not always be available. The shortage has largely been due to ongoing manufacturing issues at a Pfizer plant which supplies EpiPens. Reuters

U.S.: Impact of Hurricane Harvey on health, environment still a concern a year later

16 August - Floodwater caused most of the damage when Hurricane Harvey slammed into the Texas coast a year ago. But that region's air quality was also harmed when the Category 4 hurricane swept through the U.S. oil refining and chemical heartland. Using state data, the Environmental Integrity Project determined that Hurricane Harvey was responsible for 8.3 million pounds of unauthorized air pollution late last summer. Most were the result of industrial plants suddenly shutting down as Harvey struck, including some emergencies involving flooding, sudden power outages or lightning strikes. The large-scale pollution could have been averted if refineries and chemical plants in the region had prepared for a planned shutdown, according to an Environmental Integrity Project report released Thursday. And the state’s decision to suspend pollution reporting requirements in the aftermath of the storm has made it difficult to assess health effects. "A year after Hurricane Harvey wreaked havoc on Houston, we still don’t know the storm’s toll on human health and the environment,” said Loren Raun, chief environmental science officer for the Houston Health Department and assistant research professor at Rice University. Dallas News


24 August - ... During 2007–2012 proportional mortality ratios (PMR) for heroin-related overdose deaths (1.46) and methadone-related overdose deaths (1.34) were highest for the construction occupation group. PMRs for natural and semisynthetic opioids were highest for the extraction (1.39) and health care practitioner (1.81) occupation groups. Identification of occupations associated with drug overdose deaths further characterizes the opioid epidemic. Incorporating workplace research and targeted interventions might benefit the opioid epidemic response. Morbidity and Mortality Weekly Report

U.S.: U.S. court orders Trump administration to enforce chemical safety rule

17 August - A federal appeals court on Friday ordered the Trump administration to immediately implement an Obama-era chemical safety rule introduced in response to a
2013 explosion at a fertilizer plant in Texas that killed 15 people. The D.C. Circuit Court ruling was the latest to counter efforts under President Donald Trump, a Republican, to delay environmental regulations introduced by former President Barack Obama, a Democrat. The court ordered the Environmental Protection Agency to implement the Chemical Disaster Rule, saying the agency did not have authority to delay the rule for 20 months. ... In February, a federal court ruled that the EPA could not delay a regulation limiting methane emissions from oil and gas installations and this week a federal judge reinstated the Waters of the United States rule, which the Trump administration had delayed. Reuters

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Colombia: Chikungunya in Colombia – A description of an epidemic within the framework of a COPCORD study

15 August - During 2014 and 2015 the chikungunya virus reached Colombia unleashing an epidemic that spread throughout the whole territory. Concurrently, the Colombian Rheumatology Association was conducting a Community Oriented Program for Control of Rheumatic Diseases (COPCORD) to establish rheumatic disease prevalence in the country. Chikungunya infected patients were identified within the COPCORD population. The aim of this study was to describe the demographics, clinical characteristics and disability of patients with clinical suspicion of chikungunya infection. ... Our study showed that poverty and low socioeconomic status are associated with increased risk of chikungunya infection. Also, we found two distinctive phenotypes of chikungunya infection; those with positive chikungunya serology and typical clinical symptoms (true positives) and those with positive serology without clinical symptoms (false negatives). Finally, a distinctive clinical picture presented by chikungunya infected patients was found which should be considered as the hallmark for diagnostic clinical criteria. BioRxiv

Colombia: U.S. Navy hospital ship to comfort Venezuelan migrants

17 August - Defense Secretary Jim Mattis said Friday he would dispatch a U.S. Navy hospital ship to the Colombian coast to help treat Venezuelan refugees that have overwhelmed the Colombian medical system — the first U.S. military foray into the Venezuela crisis. "It is absolutely a humanitarian mission. We're not sending soldiers, we're sending doctors," Mattis told reporters. ... He gave no timetable for when the ship, probably the ship known as the Comfort, would set sail from its home port, likely Norfolk, Virginia. ... More than a million Venezuelans have fled food shortages and poverty in their homeland in the past 18 months, often traveling by foot and bus to neighboring Colombia and in smaller numbers to Brazil in what the United Nations sees as a refugee crisis. Both countries have tried to
shore up security along their land borders while taking in migrants. Miami Herald

Guatemala: 'Alarming' diabetes epidemic in Guatemala tied to aging, not obesity

14 August - The diabetes epidemic in Guatemala is worse than previously thought: more than 25 percent of its indigenous people, who make up 60 percent of the population, suffer from type 2 diabetes or pre-diabetes, suggests a new study published in PLOS ONE from researchers at the Penn Center for Global Health, in collaboration with the University of San Carlos in Guatemala City and the Hospitalito Atitlán. That's almost double the rate from a diabetes estimation back in 2003. The team also found that the driving force behind the epidemic is not obesity -- most often associated with an increased risk of the disease elsewhere in the world -- but aging. Science Daily

Venezuela/Brazil: Venezuelan mothers-to-be head to Brazil to give birth

22 August - Expecting Venezuelan women are leaving their country due to a lack of prenatal care, medicine and diapers and giving birth across the border in Brazil, where three Venezuelan babies are born every day. ... The massive influx of Venezuelans has overburdened social services in Roraima state and led to an increase in crime, prostitution, disease and incidents of xenophobia. “We have reached a limit. There are long lines in our hospitals, and we don't have enough equipment to attend so many people in need of medical care,” Boa Vista’s mayor, Teresa Surita, said by telephone. The 3,000 homeless and unvaccinated Venezuelans in Boa Vista have caused an outbreak of measles, a virus that had been eradicated in Brazil, Surita said. Births of Venezuelan babies at the Boa Vista maternity hospital surged to 566 last year and 571 in the first half of 2018, from 288 in 2016 when the flow of Venezuelan refugees began, the Roraima health department said. There were no births in 2015, it said. Reuters

Venezuela: Venezuela measles outbreak: 3,500 lab-confirmed cases in 2018

23 August - UN health officials reported this week that the measles outbreak in Venezuela is ongoing with measles cases reported in all states and the Capital District. Since the summer of 2017 with the confirmation of the first measles case, health authorities report a total of 4,272 confirmed measles cases, including 62 deaths. In 2018 to date, 3,545 confirmed measles cases have been reported. Outbreak News Today
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