31 August 2018

Army Public Health Weekly Update

Army Public Health Center

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Army Medicine Campaign Research to Practice Education Seminar

The Army Medicine Campaign Research to Practice Education Series for military providers and staff covers medical readiness topics such as injury prevention, health promotion, and physical performance optimization. The series is held five times a year on Defense Collaboration Services (DCS) and is co-sponsored by APHC Injury Prevention and OTSG Physical Performance Service Line. Continuing Medical Education (CME) credits will be available.

The next webinar is on Monday, 17 September 2018 from 1300-1410 (ET).

PRESENTATIONS:
1. Using Movement Quality Screening to Assess Risk of Injury: Does it Work? (Presenter: Dr. Daniel Clifton)
2. Strategies for Implementing Successful Injury Prevention Programs (Presenter: Dr. Sarah de la Motte)

More information

U.S.: Senate passes big spending bill with increased public health funding

USSOUTHCOM

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U.S. MILITARY

Many enlisted women suffer adverse mental health effects after combat injury, study finds

23 August - Within a year after suffering a combat-related injury in Iraq or Afghanistan, 40 percent of military women were diagnosed with a mental health condition, according to a new study. Of particular concern is that enlisted women were more likely to have a diagnosis of a mental health disorder and had "significantly lower quality of life" than the women officers studied, said Judy Dye, a researcher with the Naval Health Research Center. More than 1,000 military women have experienced combat-related injuries in Iraq and Afghanistan, said Dye. Researchers included any military woman who had a combat injury while on deployment to Iraq or Afghanistan between 2003 and 2015. Military Times

Pentagon fires a warning shot against EPA’s ‘secret science’ rule

28 August - Add the U.S. Department of Defense (DOD) to the ranks of those expressing concern about the U.S. Environmental Protection Agency’s (EPA’s) plans to restrict the use of scientific research in writing new regulations. "While we agree that public access to information is very important, we do not believe that failure of the agency to obtain a publication’s underlying data from an author external to the agency should negate its use," Patricia Underwood, a senior Pentagon official in the Office of the Assistant Secretary of Defense for Energy, Installations and Environment, wrote in recent comments on the EPA proposal. ... The proposed rule—"Strengthening Transparency in Regulatory Science"—would generally limit EPA to using studies for which the underlying research data "are publicly available in a manner sufficient for independent validation," according to the text. Science

Report: LGB troops twice as likely to experience sexual assault as non-LGB population

28 August - A new study has found that military veterans who identify as lesbian, gay or bisexual are twice as likely to experience incidents of sexual assault while on active-duty
Army Vector-borne Disease Report

As of 23 August 2018, 113 confirmed cases of vector-borne diseases have been diagnosed and reported in the Disease Reporting System internet (DRSi). Approximately 47% of the cases were among Active Duty Service Members. The most frequently reported vector-borne disease to date this year is Lyme disease.

Surveillance for norovirus and enteric bacterial pathogens as etiologies of acute gastroenteritis at U.S. Military Recruit Training Centers, 2011–2016

August 2018 - An estimated 179 million cases of acute gastroenteritis (AGE) occur each year in the U.S. and AGE is commonly reported within both training and deployed U.S. military populations. Beginning in 2011, the Operational Infectious Diseases (OID) laboratory at the Naval Health Research Center (NHRC) has undertaken routine surveillance of four U.S. military training facilities to systematically track the prevalence of AGE and to establish its etiologies among U.S. military recruits. Employing both molecular and standard microbiological techniques, NHRC OID routinely assays for pathogens of direct military relevance, including norovirus genogroups I and II, *Salmonella*, *Shigella*, and *Campylobacter*. During its initial surveillance efforts (2011–2016), NHRC OID identified norovirus as the primary etiology of both sporadic cases and outbreaks of AGE among trainees.

Medical Surveillance Monthly Report

U.S. Army forms plan to test 40,000 homes for lead following Reuters report

27 August - The U.S. Army has drafted a plan to test for toxic lead hazards in 40,000 homes on its bases, military documents show, in a sweeping response to a Reuters report that found children at risk of lead poisoning in military housing. The inspection program, if implemented, would begin quickly and prioritize thousands of Army post homes occupied by small children, who are most vulnerable to lead exposure. Ingesting the heavy metal can stunt brain development and cause lifelong health impacts. The lead inspections would cost up to $386 million and target pre-1978 homes to identify deteriorating lead-based paint and leaded dust, water or soil, according to the military documents. A draft Army Execution Order says the program’s mission is to mitigate all identified lead hazards in Army post homes in the United States. In homes where dangers are detected, the Army would offer soldiers’ families “temporary or permanent relocation” to housing safe from lead hazards, it says. Reuters
U.S. is woefully unprepared for nuclear strike

28 August - The United States is not prepared to deal with the aftermath of a major nuclear attack, despite North Korea's efforts to develop nuclear weapons and the increasing tensions between nations overall. That was the blunt assessment of public-health experts who participated in a meeting last week on nuclear preparedness, organized by the National Academies of Sciences, Engineering, and Medicine. ... Since the fall of the Soviet Union in 1991, the United States's research and preparedness efforts for a nuclear strike have focused largely on the possibility of a terrorist attack with a relatively small, improvised 1-kilotonne weapon or a 'dirty bomb' that sprays radioactive material. But North Korea is thought to have advanced thermonuclear weapons—each more than 180 kilotonnes in size—that would cause many more casualties than would a dirty bomb. Scientific American top of page...

Veterans can now file class-action lawsuits against VA

24 August - A federal court ruling this week opened the possibility for veterans to file suit against the Department of Veterans Affairs as a class rather than individuals, a move that advocates say could dramatically shift how legal cases against the bureaucracy are handled. The ruling, Monk v. Wilkie, came from the U.S. Court of Veterans Appeals. The eight-justice panel ultimately ruled against the plaintiff's claim that their case should proceed as a class-action suit, arguing it failed to meet previously established standards for such legal consideration. But they did say that in “appropriate cases” in the future, class-action lawsuits would be entertained. ... In private lawsuits, individuals must prove specific harm or damage to their personal situation in order to win judgment. But in class-action lawsuits, plaintiffs can show illegal or harmful activity against a larger group, bringing with it different standards for correction. Military Times top of page...

GLOBAL

2018 world population data sheet with focus on changing age structures

24 August - The world population will reach 9.9 billion by 2050, up 2.3 billion or 29 percent from an estimated 7.6 billion people now, according to projections by Population Reference Bureau (PRB) included in the 2018 World Population Data Sheet. PRB estimates the 2018 worldwide total fertility rate (TFR, or average births per woman over their lifetime) at 2.4; the global TFR has been declining for the past few decades but remains high enough to generate continued population growth. ... The world population will also continue to age, with variations by country. By midcentury, projections indicate that 16 percent of the world population will be ages 65 and older, up from 9 percent now. The percentage of people in...
this age bracket in the world's more-developed countries is projected to reach 27 percent, up from 18 percent now, while the percentage of adults ages 65 and older in less-developed countries is projected to double to 14 percent. The Population Bureau

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Air pollution exposure harms cognitive performance, study finds

27 August - Researchers investigating the effects of air pollution conducted math and verbal tests over the course of multiple years on more than 25,000 people in 162 Chinese counties. They matched those results with pollution conditions at the time of each test, and found sobering results. In paper published Monday in Proceedings of the National Academy of Sciences, scientists found that pollution is linked to a significant decline in cognition, and that the impact increases with age. NPR

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23 August - Alcohol use is a leading risk factor for death and disability, but its overall association with health remains complex given the possible protective effects of moderate alcohol consumption on some conditions. With our comprehensive approach to health accounting within the Global Burden of Diseases, Injuries, and Risk Factors Study 2016, we generated improved estimates of alcohol use and alcohol-attributable deaths and disability-adjusted life-years (DALYs) for 195 locations from 1990 to 2016, for both sexes and for 5-year age groups between the ages of 15 years and 95 years and older. ... Alcohol use is a leading risk factor for global disease burden and causes substantial health loss. We found that the risk of all-cause mortality, and of cancers specifically, rises with increasing levels of consumption, and the level of consumption that minimises health loss is zero. These results suggest that alcohol control policies might need to be revised worldwide, refocusing on efforts to lower overall population-level consumption. The Lancet

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Experts call for reversing the decision to deny the Ebola vaccine to pregnant women

27 August - The exclusion of pregnant and lactating women from an effort to vaccinate people exposed to the Ebola virus in the current outbreak is wrong, indefensible, and should be reversed, three public health experts wrote Monday in an opinion article published in STAT. The Johns Hopkins University experts argued it is unfair to deny pregnant and lactating women the experimental vaccine if they wish to take it, given the
great risk Ebola poses to them. The fatality rate is 80 percent or higher for pregnant women who contract Ebola, and nearly all survivors miscarry. The decision was made by the Democratic Republic of the Congo’s health ministry, based on the advice of two expert panels that advise it on use of experimental Ebola therapies and vaccines. But the DRC’s position echoes the recommendations of the World Health Organization on how to use Merck’s still-unlicensed Ebola vaccine. STAT

Fitbit's 150 billion hours of heart data reveal secrets about health

27 August - ... [Fitbit] has now logged 150 billion hours’ worth of heart-rate data. From tens of millions of people, all over the world. The result: the biggest set of heart-rate data ever collected. Fitbit also knows these people’s ages, sexes, locations, heights, weights, activity levels, and sleep patterns. In combination with the heart data, the result is a gold mine of revelations about human health. ... The first observation from Fitbit’s data: Women tend to have higher resting heart rates than men. “Because women tend to be smaller,” says Emir-Farinas, “their heart is smaller, and the heart needs to work harder to make sure that blood is circulating and it’s being provided to all vital organs.” What’s weird, though, is that your RHR goes up as you approach middle age, and then goes down again later — and that’s something scientists hadn’t witnessed with such specificity before the Fitbit study. Yahoo!

Heavy metals may pose another health risk: heart disease

30 August - Heavy metals like arsenic and lead are known to be toxic in high doses, and some of these metals increase the risk of cancer. But now, a new meta-analysis draws attention to an underappreciated risk of heavy metal exposure: heart disease. The meta-analysis found that exposure to arsenic, lead, copper or cadmium — even at low levels — was tied to an increased risk of heart disease. These findings highlight the need to tackle the problem of heavy metal exposure, which can occur through the environment or in certain jobs. The problem disproportionately affects people in low- and middle-income countries but can also affect those in high-income countries, the researchers said. Live Science

Measles is returning to a range of places — but not for the same reasons

23 August - According to the World Health Organization (WHO), there were more than 40,000 cases of measles—including 37 deaths—across Europe in just the first six months of 2018. That’s a huge jump: in all of last year, there were 23,927 cases, and only 5,273 the year before. More than half of those 2018 cases were found in Ukraine, while six other countries (Serbia, France, Italy, Russia, Georgia and Greece) have each topped 1,000 cases. The U.S. numbers are less alarming—107 cases, across 21 states and the District of Columbia—but they
too represent an uptick over the past few years, if still a long way from the 667 cases in 2014. Time

Military scientists have discovered a new malaria drug that could help eradicate the disease — and it’s hitting shelves soon

27 August - A new malaria drug that could help eradicate [malaria] has been approved by the Food and Drug Administration and will be considered for the Defense Department’s use. Two different forms of the new drug Tafenoquine have been approved by the FDA for the prevention and treatment of malaria. ... The new Tafenoquine drugs are:

- Krintafel, a single dose treatment for the cure of the Plasmodium vivax form of malaria, approved July 20. ...
- Arakoda is a preventive malaria drug taken for the three days before travel, then weekly, during time in areas known to have mosquitoes infected with the malaria parasite. ... It protects against all malaria, including Plasmodium falciparum, which is a serious, deadly form of malaria.

Tafenoquine ... is “highly effective” in the prevention of malaria, because it attacks the malaria parasite during multiple stages of its life cycle. Military Times

Reversing influences of intergenerational stress offers hope for addressing public health

27 August - Researchers have shown for the first time in an animal model it is possible to reverse influences of parental stress by exposing parents to behavioral interventions following their own exposure to stress. This study has important public health implications for preventing future generations from bearing influences of stressors their parents faced before the children were conceived. ScienceDaily

Specific flavor of Children’s Advil recalled due to dosage mislabeling

27 August - A specific flavor of Children’s Advil has been voluntarily recalled due to a dosage mislabeling issue, Pfizer Consumer Healthcare announced. According to the pharmaceutical company, it’s voluntarily recalling Children’s Advil Suspension Bubble Gum Flavored 4 fluid ounce bottles because the dosage cup provided is marked in teaspoons and the instructions on the label are described in milliliters. Fox 5

Study provides an early recipe for rewiring spinal cords

30 August - For many years, researchers have thought that the scar that forms after a spinal cord injury actively prevents damaged neurons from regrowing. In a study of rodents,
scientists supported by the National Institutes of Health showed they could overcome this barrier and reconnect severed spinal cord nerves by turning back the neurons' clocks to put them into an early growth state. Once this occurs, neurons could be induced to regrow across the scarred tissue. The research was supported by the National Institute of Neurological Disorders and Stroke (NINDS), part of NIH. NIH

The math of malaria: Drug resistance 'a numbers game' of competing parasites

28 August - A new mathematical model for malaria shows how competition between parasite strains within a human host reduces the odds of drug resistance developing in a high-transmission setting. But if a drug-resistant strain does become established, that same competition drives the spread of resistance faster, under strong selection from antimalarial drug use. "It's basically a numbers game," says Mary Bushman, who developed the model for her Ph.D. thesis in Emory University's Population Biology, Ecology and Evolution Graduate Program. "When you already have multiple strains of malaria within a population, and a drug-resistant strain comes along, it will usually go extinct simply because it's a late-comer. Whichever strain is there first has the advantage." Phys.org

What makes a human brain unique? A newly discovered neuron may be a clue

27 August - Scientists have taken another step toward understanding what makes the human brain unique. An international team has identified a kind of brain cell that exists in people but not mice. ... The finding could help explain why many experimental treatments for brain disorders have worked in mice, but failed in people. It could also provide new clues to scientists who study human brain disorders ranging from autism to Alzheimer's disease to schizophrenia. ... The brain cells have been named "rose hip neurons" by a team at the University of Szeged in Hungary, which played a key role in the discovery. NPR

INFLUENZA

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

2017-2018 Influenza Season Week 33 ending August 18, 2018

- Novel Influenza A Virus: An additional four human infections with novel influenza A viruses were reported by two states (California [2] and Ohio [2]). All four persons
were infected with influenza A(H1N2) variant (A(H1N2)v) viruses and became ill with respiratory symptoms in early August 2018. These patients were children < 18 years of age, were not hospitalized, and all are recovering or have fully recovered from their illness. Three patients reported exposure to swine at an agricultural fair during the week preceding illness onset. One patient reported no contact with swine and no attendance at an agricultural fair in the week preceding illness. It is possible that limited human-to-human transmission occurred. No ongoing 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 23, 2018, 5.2% of the deaths occurring during the week ending August 4, 2018 (week 31) were due to P&I. This percentage is below the epidemic threshold of 5.8% for week 31. CDC

China has withheld samples of a dangerous flu virus
27 August - For over a year, the Chinese government has withheld lab samples of a rapidly evolving influenza virus from the United States — specimens needed to develop vaccines and treatments, according to federal health officials. Despite persistent requests from government officials and research institutions, China has not provided samples of the dangerous virus, a type of bird flu called H7N9. In the past, such exchanges have been mostly routine under rules established by the World Health Organization. Now, as the United States and China spar over trade, some scientists worry that the vital exchange of medical supplies and information could slow, hampering preparedness for the next biological threat. The New York Times

NHRC: Operational Infectious Diseases - Weekly Surveillance Report
23 August - Febrile respiratory illness cases:
- Military Recruits - 20 positive of 49 tested
- CDC Border Infectious Disease Surveillance and Zika Surveillance – 4 positive of 8 tested
- DoD Beneficiaries – 4 positive of 12 tested. Naval Health Research Center

Prevention and control of seasonal influenza with vaccines: Recommendations of the Advisory Committee on Immunization Practices—United States, 2018–19 influenza season
24 August - ... Routine annual influenza vaccination of all persons aged ≥6 months without contraindications continues to be recommended. No preferential recommendation is made
for one influenza vaccine product over another for persons for whom more than one licensed, recommended, and appropriate product is available. Updated information and guidance in this report includes the following:

- Vaccine viruses included in the 2018–19 U.S. trivalent influenza vaccines will be an A/Michigan/45/2015 (H1N1)pdm09–like virus, an A/Singapore/INFIMH-16-0019/2016 (H3N2)-like virus, and a B/Colorado/06/2017–like virus (Victoria lineage). Quadrivalent influenza vaccines will contain these three viruses and an additional influenza B vaccine virus, a B/Phuket/3073/2013–like virus (Yamagata lineage).
- Following two seasons (2016–17 and 2017–18) during which ACIP recommended that LAIV4 not be used, ACIP voted in February 2018 to recommend that for the 2018–19 season, vaccination providers may choose to administer any licensed, age-appropriate influenza vaccine...
- Persons with a history of egg allergy of any severity may receive any licensed, recommended, and age-appropriate influenza vaccine.

Morbidity and Mortality Weekly Update

VETERINARY/FOOD SAFETY

Analysis ties resistant *E coli* from poultry meat to human UTIs

28 August - A new study has pinpointed a strain of *Escherichia coli* in poultry meat that could cause serious urinary tract infections (UTIs) in humans, a multicenter team of researchers reported today in the journal *mBio*. After analyzing thousands of *E coli* samples from retail meat products and human urine and blood samples collected over the course of a year in a single town, the researchers concluded that *E coli* ST131-H22, a sublineage of a pandemic, multidrug-resistant *E coli* strain that has caused serious UTIs worldwide, is prevalent in chicken and turkeys meat and could be responsible for a small percentage of human UTIs. *CIDRAP News*

Cargill recalls 25,000 lbs of possibly contaminated beef

25 August - A Cargill Meat Solutions plant in Colorado is recalling more than 25,000 pounds (11,300 kg) of ground beef that could be contaminated with E. Coli, the U.S. Department of Agriculture said. The meat carries an "EST. 86R" label inside the USDA mark of inspection and a use-by date of Sept. 5, the USDA’s Food Safety and Inspection Service said this week in a statement. It was shipped from Cargill’s facility in Fort Morgan, Colorado, to warehouses in California and Colorado, FSIS said. *Reuters*
CDC investigation notice regarding a multistate outbreak of *Salmonella* infections linked to kosher chicken

29 August - Key Points:
- CDC, public health and regulatory officials in several states, and the U.S. Department of Agriculture’s Food Safety and Inspection Service (USDA-FSIS) are investigating a multistate outbreak of *Salmonella* infections linked to kosher chicken.
- As of August 27, 2018, 17 sick people have been reported from four states (Maryland, New York, Pennsylvania, and Virginia).
- Eight people have been hospitalized, including one person whose death was reported from New York.
- In interviews, several ill people reported eating Empire Kosher brand chicken.

Grain-free, exotic dog food linked to heart disease

29 August - [Veterinarians and the U.S. Food and Drug Administration (FDA) are] investigating a potential link between boutique, grain-free diets and a heart disease called canine dilated cardiomyopathy (DCM), which had been known primarily as a genetic disorder. This summer, the FDA issued a caution against grain-free diets. Since then, many more reports have poured in. ... Canine DCM weakens the dog’s heart, Adin said, preventing it from pumping enough blood, so it enlarges to try to compensate. After a certain point, fluid backs up from the heart into the lungs, causing congestion and coughing. Other symptoms of DCM include difficulty breathing, weakness and lethargy. It can eventually “lead to congestive heart failure signs and, in some cases, sudden death,” Adin said. ... [V]ets started to find that many of the sick dogs had been on grain-free diets, high in legumes, leading up to their illnesses. *The Washington Post*

Third former Marine recruit sues food company, alleging brain, kidney damage that led to discharge

29 August - A third former Marine recruit has sued a food services provider to the service’s West Coast boot camp, alleging undercooked meat served to recruits gave him permanent brain and kidney damage, which led to his early discharge from the Corps. Tristan Abbott, 19, of Saline County, Arkansas, filed the federal civil lawsuit against Sodexo Inc. on Aug. 24, making him the third former recruit thus far to sue the Maryland-based company in connection with exposure to undercooked beef last year at Marine Corps Recruit Depot, San Diego, California. ... All three have made similar claims in court documents that they were exposed to the tainted food served by Sodexo, later developed *E. coli*-related symptoms and were hospitalized and later discharged early from the Marine Corps as a result. The trio are part of a group of at least 302 Marine recruits treated for *E. coli* exposure at both MCRD San Diego and Camp Pendleton, California, in late October 2017. *Marine Times*
Almost one in 20 U.S. adults now use e-cigarettes

27 August - Roughly 10.8 million American adults are currently using e-cigarettes, and more than half of them are under 35 years old, a U.S. study suggests. One in three e-cigarette users are vaping daily, researchers report in the Annals of Internal Medicine. ... Twenty-somethings, smokers of traditional cigarettes, unemployed adults, and people who identify as lesbian, bisexual, gay, and transgender (LGBT) are more likely than other individuals to use e-cigarettes, the study also found. Reuters

Climate change will make hundreds of millions more people nutrient deficient

27 August - Rising levels of carbon dioxide could make crops less nutritious and damage the health of hundreds of millions of people, research has revealed, with those living in some of the world’s poorest regions likely to be hardest hit. Previous research has shown that many food crops become less nutritious when grown under the CO2 levels expected by 2050, with reductions of protein, iron and zinc estimated at 3–17%. Now experts say such changes could mean that by the middle of the century about 175 million more people develop a zinc deficiency, while 122 million people who are not currently protein deficient could become so. The Guardian

Components of heart healthy diet may differ from what was previously thought

28 August - The foods that make up a heart healthy diet for people worldwide may differ from what was previously thought, according to late breaking results from the observational Prospective Urban Rural Epidemiological (PURE) study presented today in a Hot Line Session at ESC Congress 20181 and simultaneously published in the Lancet. ... This study aimed to clarify the constituents of a modern and international diet that promotes heart health and longevity. A dietary quality score was developed based on foods associated with a lower risk of death in previous studies (fruit, vegetables, nuts, legumes, fish, dairy products, and meat). Participants of five studies including more than 218,000 people from over 50 countries in five continents2 were divided into five groups according to the quality of their diet. ... “People who consumed a diet emphasising fruit, vegetables, nuts, legumes, fish, dairy products, and meat had the lowest risks of cardiovascular disease and early death,” said co-principal investigator Dr Andrew Mente, of the PHRI. EurekAlert!
Few heavy drinkers get drugs to help curb alcohol use

28 August - Less than one in 10 people with alcohol use disorders get prescribed medications that help people drink less and avoid binges, a U.S. study suggests. One in four American adults binges on alcohol at least once a month, and one in 15 binges five or more times a month, researchers report in *JAMA*. For males, binging means consuming at least five standard drinks on a single occasion; for females; it means consuming four standard drinks on one occasion. Even though there are three medications approved to treat alcohol use disorders in the U.S., most people only get treated with counseling. *Reuters*

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Ketamine, a promising depression treatment, seems to act like an opioid

29 August - A new study ... found evidence that ketamine's effectiveness with depression, demonstrated in many small studies over the past decade, comes from its interaction with the brain's opioid system. "We think ketamine is acting as an opioid," says Alan Schatzberg, one of the study's authors and a professor of psychiatry and behavioral sciences at Stanford University. "That's why you're getting these rapid effects." Until now, most researchers have attributed ketamine's success to its effect on the brain's glutamate system, which is involved in learning and memory. The opioid system, in contrast, controls pain, reward and addictive behaviors. ...[I]n the past few years, ketamine has seen increasing use as an off-label treatment that doctors prescribe for patients with severe depression that doesn't respond to other drugs. *NPR*

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One in seven U.S. adults used marijuana in 2017

24 August - With more and more states legalizing marijuana, whether for medical use, recreational use, or both, increasing numbers of Americans are using cannabis. A new survey finds that one in seven had used marijuana in 2017, with smoking being the most common manner of consumption, according to a report published in the *Annals of Internal Medicine*. People were more likely to vape or to consume marijuana as an edible in states where recreational use has been legalized, researchers found in the nationally representative survey of 16,280 U.S. adults. *Reuters*

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Teen Xanax abuse is surging

24 August - ... This school year, addiction specialists say they're expecting an onslaught of teens addicted to Xanax and other sedatives in a class of anti-anxiety drugs known as benzodiazepines, or “benzos.” Many teens view Xanax as a safer and more plentiful alternative to prescription opioids and heroin — with similar euphoric effects. But addiction experts warn that the pills kids are taking, often found in their parents’ or grandparents’ medicine cabinets, can be just as deadly as opioids, especially when taken in combination
with other drugs or alcohol. And it’s much harder to kick the habit. Like any addictive substance, Xanax when used early increases the risk of addiction later in life. According to the U.S. Surgeon General’s 2016 report on drugs and alcohol, nearly 70 percent of adolescents who try an illicit drug before age 13 will develop an addiction within seven years, compared with 27 percent for those who first try an illicit drug after age 17.

The Pew Charitable Trusts

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USAFRICOM

Algeria: Algeria confirms second death from cholera, epidemic spreading to new areas

26 August - The Algerian Health authority confirmed on Saturday that two people have died of cholera, while 139 have been hospitalised as the epidemic spreads to new areas. ...In recent months, several cases of water contamination have been reported in Algerian media, from contaminated water wells and sanitation problems to fruits and vegetables being irrigated with wastewater. Gulf News

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Democratic Republic of Congo: 2 who received experimental Ebola treatment recover

25 August - Congo’s health ministry says two of the first 10 people to receive an experimental treatment for the Ebola virus in the latest outbreak have recovered, and monitoring could show what role the treatment played. The head of the World Health Organization on Saturday congratulated Congo’s government for making several experimental treatments available in this Ebola outbreak, calling it “a global first, and a ray of hope for people with the disease.” The two people received the mAb114 treatment isolated from a survivor of an Ebola outbreak in 1995. It was the first of five experimental treatments Congo approved for use in the outbreak that was declared on Aug. 1. The others are ZMapp, Remdesivir, Favipiravir and Regn3450 - 3471 - 3479. AP

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Democratic Republic of Congo: A dangerous twist to the latest Ebola outbreak

27 August - It was the news they’d been dreading. Last week, world health officials learned that a doctor’s wife had contracted Ebola. She is from Oicha, a town in the eastern part of the Democratic Republic of Congo that is surrounded by a violent insurgent militia called the Allied Democratic Forces. Her case is one of many in an outbreak that’s been ongoing
since the start of August. But it was the first to be confirmed in a location that is extremely
dangerous for health workers to reach because of the conflict raging in that part of the
country. So far, the number of confirmed cases — more than 80 since the start of this
month – has been in line with previous flare-ups in that country that were controlled in a
matter of months. But the dangerous twist to this outbreak is requiring health workers to
come up with creative strategies to reach those in need. NPR

Nigeria: Over 1000 infected in new Nigeria diarrhea outbreak

29 August - The Nigerian government says 1,068 people have been infected following an
outbreak of Acute Watery Diarrhea (AWD) in at least 10 local government areas of Borneo
State. Borneo State Commissioner for Health Haruna Mshelia said the disease was
becoming an epidemic, with at least 25 critically ill patients admitted at three cholera
treatment centres in the state. The commissioner said the source of the outbreak was most
likely in refugee camps that are home to thousands of Internally Displaced Persons (IDPs)
resulting from ongoing military operations against insurgent group Boko Haram.

Outbreak News Today

Republic of the Congo: Congo Republic confirms yellow fever near Angolan enclave

28 August - Congo Republic has confirmed a case of yellow fever near the border with an
Angolan enclave, the health ministry said on Tuesday, and has warned of “an emerging
event of epidemic proportions”. In all, 186 suspected cases have been detected this year,
many of which were in the western commercial hub of Pointe Noire, the head of the
government’s epidemics unit Lambert Kitembo told Reuters. ... No deaths have been
reported but the situation is being taken seriously by health officials, Kitembo said. ... [T]he
WHO said that the confirmed case was detected early last month at a health center in
Pointe Noire, where the patient with fever and jaundice was admitted for treatment. Reuters

South Africa: How Cape Town defeated Day Zero—for now

29 August - ... Back in January 2018, the Cape Town water crisis captured world headlines
while the city absorbed the realization that it might be facing day zero: the day the city
would shut off its taps and citizens would have to travel to scheduled water dispensing
points to collect a daily water ration. As officials began to release planning details, stunned
Capetonians realized that the threat they had dismissed for nearly a decade was real: After 3
consecutive years of dire rainfall shortages, they were going to run out of water. On January
1, 2018, the city announced an official limit for sustainable water use of 450 million liters per
day for the entire province and declared Level 6 water restrictions, capping household water use at 50 liters per residence per day. Over 6 months, the city issued tenders to build 3 emergency desalination plants, and reduced agricultural use by 60%. The city raised funding to research water saving and recovery technologies and water source diversification—moving away from reliance on the city’s dwindling reservoirs as the main water source.

Global Health Now

Iraq: Iraq sees spike in water-borne illnesses

29 August - Iraqi health officials say that a health crisis stemming from water pollution and a shortage of clean drinking water has worsened in recent days, as hospitals in the southern port city of Basra treat more than 1,000 cases of intestinal infections on a daily basis. The problem was exacerbated several months ago when Turkey cut back on water distributed to the Tigris and Euphrates Rivers. ... Some health officials in Basra warn that a cholera outbreak is possible due to water pollution and water-borne parasites that have made thousands of people sick in recent days. The director general of the Basra Health department, Riad Abdul Amir, told Al Hurra TV the situation continues to worsen.

VOA

Saudi Arabia: Ihram of the future: Why this bacteria-killing cloth could have global health consequences

28 August – A team of researchers at Umm Al-Qura University in the holy city [are] using nanotechnology to coat the surfaces of the large, flowery carpets [of the Grand Mosque in Makkah] used by millions of worshippers who come to the mosque. ... Thinking about what the researchers were doing, [Hamad] Al-Yami felt that if the technology could be used to keep the carpets bacteria-free, it would also be prudent to use it for the Ihram, the two cloths Muslims wear during pilgrimage. ... With millions coming to the Kingdom each year ... maintaining a healthy environment for worshippers is a key consideration for authorities. “This is why the project is important,” Al-Yami said. And as pilgrims arrive from almost every continent on earth, ensuring their health has global consequences.

Arab News

Syria: Is another Syria chemical attack imminent? Russia hints one is coming

27 August - The Pentagon Monday said it was “gravely concerned” by Russian reports that a new round of chemical attacks on Syria was imminent. Defense Ministry Spokesman Maj. Gen. Igor Konashenkov told state-run media Sunday that a chlorine attack was expected in the next two days against Idlib province, and he predicted the attack would be executed by
rebels themselves, executed from another rebel-held town about an hour south, Kafr Zita, in order to draw blame on the Syrian government. Kafr Zita was hit by chlorine in 2014 in an attack that was believed to be conducted by forces loyal to Syrian President Bashar Assad. … "We remain gravely concerned over open-source reports of a potential military offensive by the Syrian regime against civilians and civilian infrastructure in Idlib, which would result in devastating humanitarian consequences," [Pentagon spokesman Eric] Pahon said.

Military Times

USEUCOM

Europe: A tropical parasitic disease has invaded Europe, thanks to a hybrid of two infectious worms

28 August - Infecting an estimated 230 million people, schistosomiasis is the world's most widespread parasitic disease after malaria. But temperate latitudes were thought to be spared: Schistosome flatworms are common only in warm places in Africa, India, and South America. So parasitologist Jerome Boissier was surprised when, in a single week in 2014, physicians in France and Germany called him to report that two families who had never left Europe had developed the disease, which can cause fever, chills, muscle aches, and bloody urine. Epidemiologists later traced the cases to the Cavu River on Corsica, a French island in the Mediterranean Sea, where the patients had swum during a vacation. Scientists found that a local freshwater snail was serving as the intermediate host that's essential to the flatworms' complicated life cycle. The river is still infested: At least 120 people have become infected. And the disease is turning up elsewhere on Corsica. Science

Germany: Wildfire southwest of Berlin sets off WWII ammunition still buried in forests

24 August - Firefighters struggled Friday to tame a wildfire southwest of Berlin but had to maneuver carefully as the blaze set off old World War II ammunition that is still buried in the forests around the German capital. Flames forced the evacuation of several nearby villages and sent clouds of acrid smoke toward the German capital. The fire, which was the size of 500 soccer fields, has already set off several detonations of old ammunition, according to local lawmaker Christian Stein. Firefighters were not allowed to enter suspicious areas. … Firefighters were trying to douse the flames in areas they could not enter with water-bearing helicopters and water cannons. CBS News

Greece: West Nile virus cases in Greece jump in 2018

24 August - Eleven people have died and 107 infected by the mosquito-borne West Nile virus in Greece so far this summer, authorities said, the highest number of reported cases
since 2012. Outbreaks of the West Nile virus have been recorded in Greece since 2010, when they peaked at 262 cases including 35 deaths, according to Greece’s Centre for Disease Control and Prevention (KEELPNO). Reuters

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United Kingdom: Government proposes energy drinks ban for children

30 August - The sale of energy drinks could be banned in England to anybody under 18, amid fears they are damaging children's health, the prime minister has said. The government has launched a public consultation on its plans to make it illegal to sell the drinks to children. Energy drinks contain high levels of sugar and caffeine and have been linked to obesity and other health issues. The government is asking for views on what age the ban should apply to, but gave under 16 and under 18 as options. BBC News

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USINDOPACOM

India: Experts fear a resurgence of leprosy in India

25 August - ... In 2005, India announced the elimination of leprosy as a public health problem when the prevalence rate reached fewer than one person per 10 000 people at the national level. But experts now fear the announcement was premature. “In 2005, while we were applauding ourselves, we did not look deep enough to see the regional variations. That, in itself, should have given us a pointer that this problem was far from over”, said Vineeta Shanker, executive director of the Sasakawa–India Leprosy Foundation. ... Experts argue that the “forced elimination” of leprosy in 2005 diminished the country's ability to fight the disease and that the rhetoric led people to believe it no longer existed. ... Today, India accounts for 60% of the global burden of the disease worldwide. In 2016–17, there were 135 485 leprosy cases detected, according to the National Leprosy Eradication Programme. ... However, experts believe that this is an underestimation of the true number of cases. A sample survey conducted by the Indian Council of Medical Research between 2008 and 2011 found there could be as many as 250 000 new cases of leprosy in India each year. The Lancet

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Malaysia: Hand, foot and mouth disease cases up 127 percent in Malaysia

28 August - In an update on the hand, foot and mouth disease (HFMD) outbreak in Malaysia this year, health officials have reported a 127 percent increase in cases over 2017 for the same period. From Jan.1 – Aug. 25, 2017, the Malaysia Ministry of Health (MOH) reported 24,398 cases. During the same period this year, health officials report 55,391
HFMD cases. Outbreak News Today

U.S.: 11 sickened, 1 dead in New Hampshire Legionnaires' outbreak

30 August - Health officials in New Hampshire have confirmed 12 cases of Legionnaires’ disease, including one fatality, possibly linked to hot tubs at two different hotels.
Investigators said they expect more cases to be diagnosed and are advising people over age 50 and those with weakened immune systems to steer clear of a half-mile stretch in Hampton, WCVB reported. The fatality involved an elderly person visiting from out of state who died from complications of pneumonia, the state epidemiologist said, according to WMUR. The others likely contracted their infections between early June and mid-August, according to a news release. Investigators are focused on the hot tub facilities at the Sands Resort and the Harris Sea Ranch Motel as potential sources for the outbreak. Fox News

U.S.: As planet warms, advocates urge U.S. to set rules to protect workers from heat

27 August - ... [C]ountless workers across the country [endure] symptoms of heat stress. High temperatures can pose health threats on a daily basis, including confusion, fatigue, and dehydration. More extreme heat can lead to heat stroke and organ failure, depending on a worker’s environment and how quickly treatment is administered. In 1972, and again in 1986, and in 2016, the National Institute for Occupational Safety and Health (NIOSH) recommended that the U.S. Occupational Safety and Health Administration (OSHA) set a specific standard to prevent heat stress in workers and hold employers accountable. OSHA, however, has yet to do so. While OSHA currently offers guidelines and endorses NIOSH's criteria for a recommended standard, it has no enforceable rules specifically requiring employers to provide water, rest, shade, acclimatization programs, or training to recognize symptoms of serious heat illness. NPR

U.S.: Detroit schools shut off water over high levels of lead, copper

30 August - The city of Detroit has shut off drinking water in all public schools after officials found high levels of lead or copper in samples from 16 out of 24 schools tested. While the superintendent said the move was “out of an abundance of caution” before school starts next week, officials believe old fixtures and aging infrastructure, not the water source, is to blame. Eighteen other schools had already been using bottled water due to quality issues. "Although we have no evidence that there are elevated levels of copper or lead in our other
schools where we are awaiting test results, out of an abundance of caution and concern for the safety of our students and employees, I am turning off all drinking water in our schools until a deeper and broader analysis can be conducted to determine the long-term solutions for all schools,” Nikolai Vitti, superintendent of Detroit Public Schools Community District, said in a statement on Wednesday. Fox News

**U.S.: FDA directs websites to stop illegally selling opioids online**

28 August - Federal health officials directed 21 websites Tuesday to stop selling what regulators say are illegal, “potentially dangerous, unapproved and misbranded” opioids online. The Food and Drug Administration has taken action against more than 70 websites selling various versions of opioid drugs, including tramadol, so far this summer. Some of the drugs they’re selling are actually a dangerous form of pressed fentanyl, the FDA said. “As we see doctors prescribe fewer opioids, we’re fearful that more and more of the new addiction is going to shift to illicit sources, and a lot of those illicit sales are taking place online,” FDA Commissioner Scott Gottlieb told CNBC’s “Squawk Box” on Tuesday. The four businesses targeted Tuesday — CoinRX, MedInc.biz, PharmacyAffiliates.org and PharmaMedics — operate the 21 websites. CNBC

**U.S.: Federal judge rules against Trump administration on 3-D gun blueprint case**

27 August - A federal judge on Monday issued a preliminary injunction continuing a prohibition on the Trump administration proposal to make available blueprints for so-called ghost guns, untraceable weapons that can be manufactured on a 3D printer, California Attorney General Xavier Becerra said. ... The injunction extends a ruling last month that barred the Trump administration from taking steps that would allow the firm Defense Distributed to disseminate 3D gun blueprints. “When the Trump Administration inexplicably gave the green light to distribute on the internet blueprints of 3D-printed, untraceable ghost guns, it needlessly endangered our children, our loved ones and our men and women in law enforcement,” Becerra said in a statement. “The Trump Administration's actions were dangerous and incompetent.” MSN News

**U.S.: New STD cases hit record high in U.S., CDC says**

28 August - In 2016, Americans were infected with more than 2 million new cases of gonorrhea, syphilis and chlamydia, the highest number of these sexually transmitted diseases ever reported, the Centers for Disease Control and Prevention said Tuesday. ... The agency's annual Sexually Transmitted Disease Surveillance Report shows that more than 1.6 million of the new cases were from chlamydia, 470,000 were from gonorrhea and nearly 28,000 cases were primary and secondary syphilis, the most infectious stages of the disease,
according to the CDC. While all of these can be cured by antibiotics, many people go undiagnosed and untreated. Only those three STDs and HIV are required by law to be reported to the CDC by physicians. When you include herpes and more of the dozens of diseases which can be transmitted sexually but which are not tracked, the CDC estimates there are more than 20 million new cases of STDs in the United States each year. CNN

U.S.: Puerto Rico governor raises Hurricane Maria death toll from 64 to 2,975

28 August - Puerto Rico’s governor on Tuesday raised the official death toll from Hurricane Maria from 64 to 2,975, in response to a new study that found the initial numbers reported were undercounted. The study, an independent investigation ordered by the local government, found that nearly 3,000 people died in the hurricane, which hit the island in September 2017. Gov. Ricardo Rossello responded to the study by the Milken Institute School of Public Health at George Washington University by officially raising the toll. The number is more than double the government's previous estimated death toll of 1,400. Fox News

U.S.: Senate passes big spending bill with increased public health funding

27 August - Late last week the US Senate passed an $857-billion "minibus" package for the fiscal year beginning on Oct 1 that increases National Institutes of Health (NIH) funding by 5.4% ($2 billion) to $39.1 billion. ... The House has until Sep 30 to pass the bill. The bill includes $550 million dedicated to the National Action Plan for Combating Antibiotic-Resistant Bacteria (CARB), up $37 million from last year's budget. The Biomedical Advanced Research and Development Authority (BARDA) would get $562 million, up $25 million from last year, and $120 million would go toward funding research on a universal flu vaccine. CIDRAP News Scan (second item)

Brazil: CDC travel alert - measles in Brazil

29 August - The Centers for Disease Control and Prevention (CDC) issued a new travel alert yesterday for Brazil due to an outbreak of measles. As of August 4, 2018, health officials in Brazil have reported over 5,000 cases of measles, of which more than 1,000 are confirmed. The majority of cases continue to be reported in the states of Amazonas and Roraima. In Amazonas State, all reported cases are Brazilian nationals and over 1,800 cases were reported in children less than 9 years old. Outbreak News Today
The Americas: Six countries in the Americas account for half of all firearm deaths

28 August – A new study reveals more than a quarter-million people died from firearm-related injuries in 2016, with half of those deaths occurring in only six countries in the Americas: Brazil, the United States, Mexico, Colombia, Venezuela, and Guatemala. A part of the Global Burden of Disease, the study assesses firearm-related mortality between 1990 and 2016 for 195 countries and territories by age and by sex. It is the most extensive study ever conducted on global firearm-related deaths. Deaths from conflict and terrorism, executions, and law enforcement shootings were not included in the total estimates. “This study confirms what many have been claiming for years – that gun violence is one of the greatest public health crises of our time,” said Dr. Mohsen Naghavi, a professor of global health at the Institute for Health Metrics and Evaluation (IHME) at the University of Washington, and first author of the study. IHME