4 August 2017

Army Public Health Weekly Update

Army Public Health Center

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The Army’s Net Zero policy builds on sustainable practices and incorporates emerging best practices to minimize energy use, water consumption, and waste generation on its installations.

This paper provides an approach for conducting a public health review of installation and medical treatment facility Net Zero and sustainability projects in order to assist Army leaders with identifying and mitigating risks to public health.

Age-period-cohort analysis of colorectal cancer, service members aged 20–59 years, active component, U.S. Armed Forces, 1997–2016

July 2017 - ... The objective of this report was to better understand the time-varying elements (age, period, and birth cohort effects) in the epidemiology of colorectal cancer among the active component of the U.S. Armed Forces. During 1997–2016, there were 1,108 incident cases of colorectal cancer among service members aged 20–59 years, corresponding to an overall incidence rate of 4.3 per 100,000 person-years (p-yrs). Rates were particularly high among men (4.4 per 100,000 p-yrs) and non-Hispanic black service members (5.3 per 100,000 p-yrs). Overall crude incidence of colorectal cancer increased in an exponential fashion with increasing age groups until the oldest age group (55–59 years), in which the increase was attenuated. No birth cohort or period effects were identified in the age-period-cohort analysis. Medical Surveillance Monthly Report

Breath analyzer tracks metabolism for soldiers, athletes

28 July - A low-cost personal metabolic sensor is under development for use by the military as well as athletes. MIT Lincoln Laboratory is collaborating with the U.S. Army Research Institute for Environmental Medicine to design the Carbon dioxide/Oxygen Breath and Respiration Analyzer (COBRA), which enables individuals to make on-demand metabolic measurements simply by breathing into it. The device uses indirect calorimetry (IC) to calculate individual energy expenditure and metabolic rates. This method measures the ratio of carbon dioxide to oxygen in exhaled breath, which can be used to measure the levels of carbohydrates and fats being used by the body to meet metabolic energy needs. Such energy expenditure rate data are valuable for setting reasonable physical standards within the military. Electronics 360

Congressmen’s letter presses DOD on water contamination

1 August - A trio of local congressmen continues to press the military about chemicals being found in drinking water across the country, including in Bucks and Montgomery counties. Congressmen Brian Fitzpatrick, R-8, of Middletown, Pat Meehan, R-7, of Upper Darby, and Brendan Boyle, D-13, of Northeast Philadelphia, have been questioning the Department of Defense about a class of chemicals called perfluorinated compounds, which were ingredients in firefighting foams used for decades at hundreds of military bases.
trio sent a new letter to the DOD on Tuesday, questioning why the military continued to use the foams after learning they were dangerous rather than switching to another foam.

Bucks County Courier Times

Dangerous pollutants in military’s open burns greater than thought, tests indicate

2 August - The federal government appears to have significantly underestimated the amount of lead, arsenic and other dangerous pollutants that are sent into the air from uncontrolled burning of hazardous waste at the Radford Army Ammunition Plant in Virginia, according to a draft of a long-awaited report compiled by researchers at the Environmental Protection Agency. The report details results from air sampling done last September and October at the Radford plant above an open field where piles of waste from the manufacture of weapons explosives are set afire daily. The plumes drift directly towards an elementary school and residents a little more than a mile away, but the Army and regulators have long maintained that the pollution level is safe, based on its computer-modeled estimates. Now, it turns out, some of those estimates were wrong. The data shows that five substances were found at levels greater than the EPA's models had predicted, meaning that previous health-risk analyses completed by regulators for the burns at Radford did not fully take into account the potential exposure of the surrounding population. ProPublica

iMedicalApps: Combat trauma app a home run

28 July - Deployed Medicine may become the ultimate combat medicine app for military and non-military providers. ... The app contains the most current version of the Tactical Combat Casualty Care (TC3) guidelines, which function as the "bible" of military combat medicine for providers deployed downrange. ... Additionally, the app contains videos of all the critical combat procedures described in the guidelines, PDFs for all key references, and quality podcasts discussing key issues with the practice of deployed medicine. The app is produced by the Defense Health Agency, and content is by the guideline authors/committee. MedPage Today

iMedicalApps: Military to monitor soldiers' health via smartphones

31 July - The Defense Advanced Research Projects Agency (DARPA) has announced a new program that seeks to use passively collected data from mobile devices to monitor the health of soldiers. ... They want to be able to monitor the health of soldiers, predicting illnesses and other issues that may affect combat readiness. And they are doing this by using sensors on mobile phones that will passively collect this information. DARPA’s Warfighter Analytics using Smartphones for Health (WASH) is one example. ... [T]hey are specifically excluding data collected through peripherals like smartphone-connected blood pressure monitors. The general idea here is to find a way to use data that are already available without asking soldiers to do anything more. MedPage Today
The U.S. military indeed spends a lot on Viagra—because it helps veterans with PTSD

28 July - ... According to the Defense Health Agency, quoted by the Military Times, in 2014 alone military beneficiaries (active military personnel, veterans, and dependents) filled 1.8 million prescriptions for erectile dysfunction drugs, such as Viagra, Cialis and Levitra. ... In many cases, erectile dysfunction is a consequence of post-traumatic-stress disorder (PTSD), a condition that disproportionately affects active troops and veterans. Veterans—both men and women—with PTSD have a high likelihood of developing sexual dysfunction, according to a 2015 study in The Journal of Sexual Medicine. A 2002 study in Urology found that 85% of male veterans with PTSD suffered erectile problems; among veterans without PTSD the rate was 22%. Quartz

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GLOBAL

A large-scale 'germ trap' solution for hospitals

26 July - When an infectious airborne illness strikes, some hospitals use negative pressure rooms to isolate and treat patients. These rooms use ventilation controls to keep germ-filled air contained rather than letting it circulate throughout the hospital. But, in the event of an epidemic, these rooms can quickly fill up. Now, a team led by CU Boulder researchers has found a simple, cost-effective way for medical facilities to expand this technique to better prepare for disease outbreaks. By sealing off a whole hospital wing and adjusting the existing ventilation system, hospitals can dramatically increase their capacity to contain and treat large numbers of patients with airborne illnesses. Medical Xpress

Evolutionary public health: introducing the concept

29 July - The emerging discipline of evolutionary medicine is breaking new ground in understanding why people become ill. However, the value of evolutionary analyses of human physiology and behaviour is only beginning to be recognised in the field of public health. Core principles come from life history theory, which analyses the allocation of finite amounts of energy between four competing functions—maintenance, growth, reproduction, and defence. A central tenet of evolutionary theory is that organisms are selected to allocate energy and time to maximise reproductive success, rather than health or longevity. ... Public health interventions could improve their own effectiveness by incorporating an evolutionary perspective. The Lancet

Fossil fuel subsidies racking up trillions in health costs

27 July - Health costs related to fossil fuel use outweigh taxpayer-funded subsidies by
600%, according to a new study that insists governments should stop pumping money into dirty energy sources. G20 governments spent $444 billion on oil, gas and coal subsidies in 2014 alone and have long pledged to cut this support, as countries look to decarbonise their economies in line with the Paris Agreement, Sustainable Development Goals and national goals. A new study by the Health and Environment Alliance (HEAL) estimates that the use of those same fossil fuels leads to $2.76 trillion in health costs in the G20 thanks to air pollution. $229.5bn is incurred by EU countries alone. It is estimated that fossil fuel combustion costs the lives of 6.5 million people worldwide every year, due to associated illnesses like strokes, heart attacks, cancer and lung disease. Euractiv

**Global blindness set to 'triple by 2050'**

3 August - The number of blind people across the world is set to triple within the next four decades, researchers suggest. Writing in *Lancet Global Health*, they predict cases will rise from 36 million to 115 million by 2050, if treatment is not improved by better funding. A growing ageing population is behind the rising numbers. Some of the highest rates of blindness and vision impairment are in South Asia and sub-Saharan Africa. The percentage of the world’s population with visual impairments is actually falling, according to the study. But because the global population is growing and more people are living well into old age, researchers predict the number of people with sight problems will soar in the coming decades. BBC News

**Good news on headphones and hearing loss**

27 July - Young people continue to listen to loud music on their headphones. But a reassuring new analysis found that hearing impairment rates among teens have dropped since an alarming spike in hearing loss was reported a decade ago. The study, in *JAMA Otolaryngology-Head & Neck Surgery*, examined data from nationally representative samples of thousands of American youngsters aged 12 to 19 over more than two decades. The rate of moderate hearing loss had increased to 22.5 percent in 2007-8, up from 17 percent during the period from 1988 to 1994. But it dropped to 15.2 percent in the most recent study period, in 2009-10. The New York Times

**How do refugee teens build resilience?**

30 July - What does it mean to be resilient — to be able to face trauma and get through it? You’re resilient if you’re like a stick of bamboo — able to bend with the winds rather than break in half. That’s how psychologists like to explain it. But in different cultures, the source of that strength can be very different. ... The researchers interviewed Syrian tweens and teens who had been displaced because of war. “In the West, we tend to think of resilience as inner psychological strength,” says Catherine Panter-Brick, an anthropologist at Yale University. “In the Middle East, resilience is more of a collective and social strength.” Panter-Brick and her colleagues found that, for young refugees in Jordan, friendship gives them the strength to endure. NPR
Occupational pesticide and herbicide exposure tied to lung disease

28 July - Workers exposed to pesticides and herbicides on the job may be more likely than other people to develop chronic obstructive pulmonary disease (COPD), bronchitis and other breathing problems, an Australian study suggests. With any herbicide exposure at work, people were more than twice as likely to develop COPD by middle age, and workplace pesticide exposure was associated with 74 percent higher odds of the common lung disease, researchers report in Thorax. … Each ten-year increase in occupational exposure to pesticides carried a 12 percent increased risk of COPD and a 16 percent higher risk of developing chronic bronchitis. Every extra decade of herbicide exposure, meanwhile, carried a 22 percent increased risk of bronchitis, while each ten years of insecticide exposure was associated with 15 percent higher odds of bronchitis. Reuters

Only six nations have evaluated readiness for global pandemic

31 July - Of the world’s countries, only six — three rich ones and three poor ones — have taken the steps they should have to evaluate their ability to withstand a global pandemic, according to a recent report sponsored by the World Bank. Just three wealthy countries — Finland, Saudi Arabia and the United States — have gone through two external evaluations of their readiness to face pandemics, one for human diseases and one for animal outbreaks, the study found. As of last April, only three poor countries — Eritrea, Pakistan and Tanzania — had undergone both evaluations and had described how they planned to find the money to rectify their weaknesses. The New York Times

Scientists develop scorpion 'milking machine' for disease research

31 July - Extracting venom from scorpions can be a dangerous, but rewarding, task. The poisonous secretion, while fatal to humans, contains hundreds of components that have potential uses in the health sector when they are broken down to a molecular level. In a bid to remove the venom safely, for both scorpion and extractor, a group of scientists in Morocco have developed a remote-controlled 'milking machine', which straps to the scorpion's tail and uses an electric impulse to stimulate the venom glands for the poison to be released. Reuters

Slug slime inspires scientists to invent sticky surgical glue

27 July - The European slug is average in every way: slimy, brownish, shorter than a credit card. But Arion subfuscus has a minor superpower: When it’s scared, it can glue itself to wet surfaces very well, and do so while remaining bendy. "That’s a very challenging problem in the material and also in the biomedical world," says Jianyu Li, a materials scientist with
Harvard’s Wyss Institute for Biologically Inspired Engineering. “Those represent the biggest challenge in terms of adhesive development.” For some time now, scientists have been searching for a better adhesive for surgery and wound healing. Li had been combing the scientific literature for clues to how to make a better surgical adhesive, something that could repair a delicate organ without causing the damage of stitches or staples, or the risk of air or fluid leaks. As he and his colleagues report Thursday in the journal Science, this slug-slime-inspired material could help a lot. NPR

U.S. scientists able to alter genes of human embryos

2 August - U.S. scientists have succeeded in altering the genes of a human embryo to correct a disease-causing mutation, making it possible to prevent the defect from being passed on to future generations. The milestone, reported in a paper released online August 2 in Nature, was confirmed last week by Oregon Health and Science University (OHSU), which collaborated with the Salk Institute and Korea's Institute for Basic Science to use a technique known as CRISPR-Cas9 to correct a genetic mutation for hypertrophic cardiomyopathy. Until now, published studies using the technique had been done in China with mixed results. CRISPR-Cas9 works as a type of molecular scissors that can selectively trim away unwanted parts of the genome, and replace it with new stretches of DNA. Reuters

Vaccine lessens severity of whooping cough infections

27 July - Even though vaccinations don’t always prevent whooping cough, people have milder symptoms of the respiratory illness and lower odds of serious complications with the vaccine than without it, a U.S. study suggests. More than three in four cases of whooping cough, or pertussis, occurred in people who were up to date on their vaccinations, the analysis of multistate disease surveillance data found. Babies and young children had 60 percent lower odds of severe infections, however, when they had received all recommended childhood pertussis vaccinations. And, with up-to-date vaccinations, most infected children and adults had 30 percent lower odds of severe vomiting, a hallmark of more serious infections. Reuters

ZIKA VIRUS

NYC reports 100 travel associated Zika cases in 2017

3 August - Zika virus is still a risk in New York City and city health officials remind the public to travel with caution. Through July 28, the NYC Dept. of Health & Mental Hygiene has reported 100 travel associated Zika virus cases. Broken down by borough it’s as follows: Bronx (31), Brooklyn (22), Manhattan (29), Queens (17) and Staten Island (1). In all of 2016, nearly 1000 cases were reported in the city. Nearly nine out 10 of the cases are reported in women. More than a third of the cases are linked to travel to the Dominican Republic, followed by Cuba, Jamaica, Haiti and Honduras. Outbreak News Today
Study: Saliva spread of Zika possible but unlikely

1 August - A study today in monkeys showed that, under extreme and precise circumstances, Zika virus can be transmitted via saliva. ... In the study, scientists from the University of Wisconsin-Madison used rhesus macaques with extremely high virus loads, and another set with more typical viral counts to demonstrate how and if mucosal transmission of the virus occurred in healthy monkeys. ... [The] group found that mucosal transmission of Zika is theoretically possible, but extremely unlikely under normal circumstances. All three monkeys who were exposed to high doses of Zika virus (20-fold higher than that typically found in saliva) applied directly on their tonsils developed the disease. ... None of the monkeys exposed to doses typically found in saliva contracted the disease. CIDRAP

Update: Interim guidance for health care providers caring for pregnant women with possible Zika virus exposure — United States, July 2017

28 July - CDC has updated the interim guidance for U.S. health care providers caring for pregnant women with possible Zika virus exposure in response to 1) declining prevalence of Zika virus disease in the World Health Organization’s Region of the Americas (Americas) and 2) emerging evidence indicating prolonged detection of Zika virus immunoglobulin M (IgM) antibodies. ... As the prevalence of Zika virus disease declines, the likelihood of false-positive test results increases. In addition, emerging epidemiologic and laboratory data indicate that, as is the case with other flaviviruses, Zika virus IgM antibodies can persist beyond 12 weeks after infection. Therefore, IgM test results cannot always reliably distinguish between an infection that occurred during the current pregnancy and one that occurred before the current pregnancy, particularly for women with possible Zika virus exposure before the current pregnancy. These limitations should be considered when counseling pregnant women about the risks and benefits of testing for Zika virus infection during pregnancy. CDC

Zika virus sexually transmitted in Florida, officials say

1 August - The first sexually transmitted Zika case of 2017 has been confirmed in Pinellas County, Florida, according to health officials. The Florida Department of Health made the announcement Tuesday. Health officials stressed there is no evidence that mosquitoes are transmitting Zika anywhere in the state. The infected individual was diagnosed with Zika after having sexual contact with a partner who recently traveled to Cuba and was sick with symptoms of the virus. ... The confirmation brings the total number of Zika viruses in Florida this year to 118. Fox News
INFLUENZA

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

2016-2017 Influenza Season Week 29 ending July 22, 2017:

**Novel Influenza A Virus:** Eleven human infections with novel influenza A viruses were detected in Ohio during week 29. All 11 persons were infected with influenza A (H3N2) variant (H3N2v) viruses and reported exposure to swine in a fair setting during the week preceding illness onset. Ten of the 11 patients were children less than 18 years of age and one patient was an adult aged 50-64 years. None were hospitalized and all have fully recovered from their illness.

**Pneumonia and Influenza (P&I) Mortality Surveillance:** Based on National Center for Health Statistics (NCHS) mortality surveillance data available on July 27, 2017, 5.3% of the deaths occurring during the week ending July 8, 2017 (week 27) were due to P&I. This percentage is below the epidemic threshold of 6.1% for week 27. [CDC](https://www.cdc.gov/flu/weekly/fluview2016-17.htm)

ECDC: Flu News Europe


- Influenza activity was at out-of-season levels in all countries. All reporting countries continued to report low intensity of influenza activity.
- Influenza viruses were detected sporadically both in sentinel and non-sentinel specimens, with only influenza type A viruses detected.
- For week 29/2017, data from the 19 countries or regions reporting to the EuroMOMO project indicated a transient increase in mortality in some countries in southern Europe, most likely due to high temperatures. [European Center for Disease Prevention and Control/WHO](https://ecdc.europa.eu/en)

NHRC: Operational Infectious Diseases - Weekly Surveillance Report

27 July - Febrile respiratory illness cases:

- Military Recruits - 58 positive of 116 tested
- CDC Border Infectious Disease Surveillance and Zika Surveillance - 10 positive of 28 tested
- DoD Beneficiaries – 10 positive of 31 tested. [Naval Health Research Center](https://nhrc.med.navy.mil/)

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Increase in antibiotic-resistant bacteria blamed on use

2 August - Three European agencies concerned about the impact antibiotic use on the increase in antibiotic-resistant bacteria are reporting new data on antibiotic consumption and antibiotic resistance across the continent. The new report comes from the European Food Safety Authority, the European Medicines Agency and the European Centre for Disease Prevention and Control. “To contain antibiotic resistance we need to fight on three fronts at the same time: human, animal and the environment,” says European Commissioner for Health and Food Safety Vytenis Andriukaitis. “This is exactly what we are trying to achieve in the EU and globally with our recently launched EU Action Plan on antimicrobial resistance. “This new report confirms the link between antibiotic consumption and antibiotic resistance in both humans and food-producing animals.” Food Safety News

New Jersey hit hard by papaya Salmonella outbreak

1 August - There are at least 12 people sickened with Salmonella Kiambu infections in New Jersey that are linked to imported Maradol papayas. there are at least 47 people sickened nationwide in this particular outbreak. Twelve people have been hospitalized so far, and one person died in New York City. Food Poisoning Bulletin

Texas raises Cyclospora totals to 160 cases

2 August - The Texas Department of State Health Services (DSHS) raised the number of Cyclospora parasite cases reported in that state to 160 yesterday, up from the 68 infections it reported on Jul 17. ... Previous outbreaks have been tied to contaminated produce, but the DSHS has not yet named a likely infection source in this outbreak. CIDRAP Food Outbreak Scan (second item)

Vibrio outbreak associated with tilapia from Seattle supermarket

1 August - A Vibrio vulnificus infection has been diagnosed in a Seattle man, who cut his hand preparing tilapia that was allegedly purchased live on July 16, 2017 from Seattle Supermarket, according to Seattle – King County Public Health. The man got sick on July 17, 2017 and is still hospitalized. His wife got sick with diarrhea and abdominal cramps, also on July 17, 2017. She was not hospitalized and is recovering. Tilapia fish obtained from Seattle Supermarket tested positive for Vibrio vulnificus bacteria. All epidemiological and laboratory evidence collected so far suggest that tilapia from Seattle Supermarket are a likely source of this outbreak. This is the second occurrence of Vibrio vulnificus associated with live tilapia. Food Poisoning Bulletin
WELLNESS

Army launches holistic health and fitness initiative

27 July - ... Currently, one in 20 Soldiers fails the Army Physical Fitness Test annually and 13 percent of Soldiers are clinically obese, according to statistics from the Army Surgeon General’s Office. ... The Army’s new campaign plan, called “Holistic Health and Fitness” focuses on improving the Soldier selection process, physical performance, performance education, and transforming and improving Soldier fitness/training centers. ... [O]ne suggestion is to have fitness centers provide box breakfasts so that Soldiers in a time crunch will not need to choose between having breakfast and working out. Higdon said HAC is also planning to attempt innovations such as requiring 15 to 50 percent of vending machines to have healthier options. ... Vegetarian and vegan options may also be added to dining hall menus. Army.mil

Binge drinking drops among teenagers

31 July - American adolescents are binge drinking less than they used to, according to a new report. “It’s good news,” said Bohyun Joy Jang, a researcher at the Institute for Social Research at the University of Michigan, and the first author of a study that appeared in the May issue of the journal Pediatrics. The bad news, Dr. Jang said, is that frequent binge drinking is not decreasing as rapidly among members of lower socioeconomic groups, African-Americans and girls. The study showed that “frequent binge drinking” — at least two occasions of drinking five or more drinks in a row over the past two weeks — decreased among American adolescents over the period from 1991 to 2015. The study found, however, that drinking rates are decreasing faster among the economically better-off, and among boys. The New York Times

FDA aims to lower nicotine in cigarettes to get smokers to quit

28 July - The Food and Drug Administration said Friday it wants to reduce the nicotine in cigarettes to make them less addictive. The unexpected announcement sent shares of tobacco companies plummeting and sparked praise among some public health advocates. If successful, the effort would be the first time the government has tried to get the Americans to quit cigarettes by reaching beyond warning labels or taxes to attacking the actual addictive substance inside. The FDA rolled out a second major announcement at the same time: It is delaying for several years a key regulation affecting cigars and e-cigarettes, including flavored vaping products that studies show are especially enticing to youth. Specifically, it postponed the requirement that such products be approved by the agency. The Washington Post
Frequent drinkers see lower diabetes risk

31 July - Frequent (though not heavy) alcohol consumption among men and women was associated with a lowered risk for diabetes, a large cohort study reported. Compared with those who drank no alcohol, men who consumed 14 drinks per week reported the lowest risk of diabetes (HR 0.57, 95% CI 0.47-0.70), according to Charlotte Holst, of the University of Southern Denmark in Copenhagen, and colleagues. The study ... found the lowest risk of diabetes among females for those who consumed nine drinks a week, compared with women who drank no alcohol (HR 0.42, 95% CI 0.35-0.51). MedPage Today

HIV pre-exposure prophylaxis can be taken as needed

31 July - Men at risk for HIV infection can safely take pre-exposure prophylaxis (PrEP) when they need it, instead of every day, suggests a new study. In a study of gay and bisexual men, researchers found that taking four doses of PrEP around the time of sexual activity cut the risk of being diagnosed with HIV by 97 percent. ... The participants and the dosing schedule used in the new study were drawn from the IPERGAY clinical trial, which was discontinued early in 2014 after the drug was found to be highly effective at protecting against HIV. "There are consistent data suggesting that on-demand PrEP before and after sex strictly following the IPERGAY dosing schedule . . . is also highly effective and could be an alternative to daily PrEP," said Dr. Jean-Michel Molina, lead author of the new study and principal investigator of the trial. Reuters

How much protein do we need?

28 July - Q. It seems that many people who are not elite athletes are now hyper-focused on protein consumption. How much protein does the average adult need to consume daily? A. The recommended intake for a healthy adult is 46 grams of protein a day for women and 56 grams for men. And while protein malnutrition is a problem for millions of people round the globe, for the average adult in developed countries, we are eating far more protein than we actually need. Most American adults eat about 100 grams of protein per day, or roughly twice the recommended amount. Even on a vegan diet people can easily get 60 to 80 grams of protein throughout the day from foods like beans, legumes, nuts, broccoli and whole grains. The Hartman Group, a consumer research firm that has been conducting a study of American food culture over the past 25 years and counting, has found that nearly 60 percent of Americans are now actively trying to increase their protein intake. The New York Times

Man of Steel recalling supplements for undeclared drug

2 August - Man of Steel is voluntarily recalling 175 lots of Man of Steel 1 and Man of Steel 2 because they contain undeclared Sildenafil. The FDA has issued a risk statement, "The product has/potentially could result in death. The groups affected are men with diabetes, high blood pressure, high cholesterol, or heart disease. Man of Steel has received reports from the FDA lab but not received any reports of adverse events related to this recall." ...
Sildenafil is the active ingredient in Viagra. Food Poisoning Bulletin

Mediterranean diet works--for upper crust

1 August - The Mediterranean diet is well known for its heart-healthy effects. ... Now a study from Italy confirms that, if you follow the diet, you really can cut your risk of cardiovascular disease. But here's the catch: the benefits seem to only occur if you're financially comfortable or well educated. ... Researchers tracked 19,000 men and women living in southern Italy during a four-year interval. After controlling for habits like smoking and exercise, the team found that volunteers who stuck more closely to the diet enjoyed greater protection against heart problems—but only for if they were college-educated, or earned more than 40,000 euros a year, or about $47,000. The scientists think that higher-income, educated individuals tend to prepare vegetables in healthier ways. ... And perhaps they're simply able to afford higher quality foods. Scientific American

The best running stride? The one that comes naturally

2 August - Runners, if you have worried about your stride, relax. It is almost certainly fine, according to a comforting new study. Researchers found that both experienced and beginning runners tend to settle into the stride that is most efficient for them. Tinkering with how you run is unlikely to be beneficial for performance and could make running more difficult, the study found. ... When the runners modified their preferred running strides, whether lengthening or shortening them, their economy generally declined. The running became physically more difficult. Interestingly, this finding held true for both the experienced and inexperienced runners, and to about the same extent. The New York Times

White House panel urges Trump to declare state of emergency over opioid crisis

31 July - The White House’s commission on combating the opioid epidemic has recommended that President Trump declare a federal state of emergency to address the crisis, a potentially significant step for an administration that has repeatedly pledged to take steps to ease the epidemic. “The first and most urgent recommendation of this Commission is direct and completely within your control. Declare a national emergency under either the Public Health Service Act or the Stafford Act,” the committee wrote in an interim report released Monday. The declaration would effectively nationalize a move that has already taken place in numerous states. Governors in Florida, Arizona, and Maryland have previously declared states of emergency, granting those governments access to millions of dollars and, in some cases, regulatory leeway in administering their responses. STAT
Kenya: As warming brings more malaria, Kenya moves treatment closer to home

1 August - When it rains in Emusala village, a person sick with a fever can find it hard to get to the nearest health center, which requires a trip along the slippery footpaths that lead to the nearest main road some 10km (6 miles) away. ... But if the fever spells the onset of malaria, rapid diagnosis and treatment are essential.

That’s where Nicholas Akhonya comes in. With the aid of a simple medical kit and his mobile phone, Akhonya, a trained community health volunteer, is able to diagnose villagers with malaria in their own homes, offer treatment, and refer acute cases and pregnant women to health facilities for specialized care. ... To tackle the problem, for the past two years county governments in malaria-prone areas have worked with non-governmental organizations to train community health volunteers to diagnose the disease in patients’ homes, using rapid diagnostic kits. The volunteers then treat those who test positive, and refer complicated cases to the nearest health center. VOA

Somalia: Somalia’s impossible fight against cholera

1 August - ... This is Somalia’s worst cholera outbreak in five years. So far, 71,663 cases have been counted, including more than 1,098 deaths, according to Doctor Ghulam Popal, the World Health Organization representative. In July ... 5,840 cases of acute watery diarrhoea were reported at Bandir Hospital alone. ... After nearly three decades of continuous conflict, Somalia has a barely existent government with no public health system and 800,000 people driven into unsanitary settlements by drought and insecurity. ... The extent of Somalia’s cholera crisis is likely to be a good deal worse than the official numbers suggest. There are no health clinics or hospitals for 400,000 displaced people clumped in settlements along the two main arterial roads that feed into Mogadishu. IRIN

Saudi Arabia: Saudi Ministry of Health confirms 3 new MERS cases

2 August - The Saudi Arabian Ministry of Health (MOH) reported three new cases of MERS-CoV today. All the patients are men. A 51-year-old Saudi from Dumah Al Jandal is in critical
condition with MERS-CoV (Middle East respiratory syndrome coronavirus). The probable source of his infection is listed as primary, which means it's unlikely he contracted the virus from someone else. A 57-year-old male expatriate in Jeddah is also in critical condition, and his infection source is also listed as primary. Finally, a 36-year-old Saudi man from Ad Dilam is in stable condition after being diagnosed with MERS-CoV. He had direct contact with camels, a known risk factor for contracting the virus. The new cases raise Saudi Arabia’s MERS-CoV total since 2012 to 1,685 cases, which includes 684 deaths. Seven people are still being treated for their illnesses. CIDRAP News Scan (second item)

Yemen: It’s not just cholera, officials monitoring meningitis

3 August - ... In addition to the cholera epidemic, the world’s worst, the Ministry of Health in Yemen, in collaboration with WHO, are closely monitoring the epidemiological pattern of the ongoing reported cases of meningitis in Yemen. Since the beginning of the year up to 8 July 2017, a total of 2,146 suspected cases have been reported through the electronic early warning surveillance system (eDEWS) in the country. This is nearly the total for all of 2016 (2,649). Cases of suspected meningitis have been reported in nearly all governorates of Yemen. Nearly two-thirds of the total number of reported suspected meningitis cases, 1,413 are in the under five year age group compared to 733 in the over five year age group.

Outbreak News Today

Yemen: WHO reports another 33,000 cases of cholera in Yemen

1 August - The World Health Organization (WHO) yesterday said there were almost 33,000 new cholera cases in Yemen last week, cementing the current outbreak as one of the world’s worst. From Jul 23 to 29, officials reported 32,978 suspected cholera cases and 24 deaths. Since the beginning of the second wave of the current outbreak, which began at the end of April, there have been a total of 430,401 suspected cases and 1,903 deaths. The case-fatality rate is 0.4%. Though the cases have been declining slightly in the last 6 weeks, 21 of the country’s 23 governorates are reporting cholera activity. And the portion of children under the age of 5 is increasing; that age-group now represents 21% of newly suspected cases.

CIDRAP News Scan (fourth item)

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USEUCOM

Europe: Most pathogens in Europe considered sensitive to climate change

2 August - Nearly two thirds of human and domestic-animal microbial pathogens in Europe are sensitive to climate, which suggests that the effects of climate change on infectious
diseases on the continent may be greater than previously thought, according to a new analysis of existing studies. ... [Researchers] did a systematic review of 100 human and 100 domestic-animal pathogens that have the greatest effects on human health. (A total of 157 pathogens was assessed, as 43 were in both sets.) Sixty-three percent of the pathogens were found to be climate-sensitive, and 82% of those were responsive to "primary drivers" such as rainfall and temperature, according to the report. ... Vector-borne diseases—spread by insects and ticks—were found to be the most climate sensitive, followed by those transmitted in soil, water, and food, according to the release.

CIDRAP News Scan (fourth item)

Portugal: Portugal hepatitis A outbreak tops 400 cases

1 August - In a follow-up to the hepatitis A outbreak in Portugal this year, 402 cases have been confirmed since the beginning of the year, according to local media (computer translated). The majority of cases occurred in the Lisbon and Tagus Valley regions. This is up from 322 cases one month ago. According to the latest DGS data, this outbreak, which began at the beginning of the year and affects other European countries, affected mainly men (88%) and in more than half the cases (52%) contracted it via sexual contact.

Outbreak News Today

The Netherlands: Dutch-led fund raises $300 million to replace U.S. funding for sexual health

28 July - An effort to help global sexual health charities losing support under the Trump administration has reached a new milestone: $300 million in fundraising. ... The "She Decides" initiative — the brainchild of one Dutch official — kicked off earlier this year, and announced $190 million in funding as of early March. Thanks to "ongoing enthusiasm," donations from nations, organizations and individuals have since continued to flow in. Norway, Sweden, Finland and the Bill and Melinda Gates Foundation (which also supports NPR) have all pledged new funding, the Dutch statement says, while Rwanda, Chad, South Africa, South Korea, Senegal, Nigeria and Mozambique have signed on as "friends" of the initiative. ... The fundraising effort began after President Trump reinstated the "Mexico City policy." That's a rule that says U.S. foreign aid cannot be sent to any organization that provides or "promotes" abortion, which can include providing information about abortion.

NPR

United Kingdom: Mental health staff recruitment plan for England

31 July - Thousands more mental health workers are to be recruited by the NHS in England, the health secretary has said. Jeremy Hunt said it was time to end the "historic imbalance" between mental and physical health services. The aim is to recruit enough nurses, therapists and consultants to treat an extra one million patients by 2020-21. But the Royal College of Nursing said the plans did not add up, and more "hard cash" would be needed if the new staff were to be trained in time. The government said an extra £1bn already promised for
U.S.: CDC antibiotics report calls for all-out stewardship efforts

28 July - A new federal report on antibiotic use and stewardship in the United States stresses the need for an all-hands-on-deck approach, calling on all stakeholders to commit to stewardship efforts. The 40-page report outlines progress and challenges for antibiotic use in outpatient settings, nursing homes, and hospitals and describes the CDC’s strategies for improving stewardship in all three sectors. It also cites examples of effective stewardship initiatives by a number of states, institutions, and health systems. ... Previous CDC estimates that antibiotic resistance contributes to 2 million illnesses and 23,000 deaths annually. CIDRAP

U.S.: Court of Appeals to EPA - Enforce the methane rule

1 August - The U. S. Court of Appeals for the District of Columbia Circuit has ruled that EPA must enforce an Obama administration rules that target methane emissions from the oil and gas drilling industry. In July, the federal court struck down EPA’s attempt to suspend protections against leaks of methane and other airborne emissions from oil and gas operations. ... On July 31, nine of the 11 judges of the D.C. Circuit Court of Appeals upheld the EPA rule, which is focuses on the oil and gas drilling industry – specifically fracking operations – and requires companies to find and fix leaks that could contribute to methane and VOC emissions. EHS Today

U.S.: HHS awards money for Flint exposure registry

1 August - The U.S. Department of Health and Human Services is giving Michigan State University $3.2 million to establish a registry of Flint, Mich., residents who were exposed to lead-contaminated water from the Flint water system during 2014-2015. The money is the first installment of a four-year, $14.4 million grant. Michigan State will use the funds in partnership with the city of Flint leadership and other community organizations, clinical partners and educators, and stakeholders that serve Flint residents. They will address community health concerns related to lead exposures, monitor health outcomes among registrants, and expand efforts to reduce and eliminate lead in the community. Occupational Health & Safety
U.S.: Maine raises smoking age to 21 after lawmakers override veto

2 August - Maine will become the fourth state to raise the smoking age to 21 and will adopt stricter regulations on the sale of electronic cigarettes after lawmakers on Wednesday voted overwhelmingly to override the governor’s veto. Gov. Paul R. LePage, a Republican, had called the bill an attempt to "social engineer our lives," saying that if 18-year-olds can join the military and fight in wars, they should be allowed to decide on their own whether to use tobacco. Senator Paul Davis, a Republican who wrote the bill, said the governor’s remarks showed that he had missed the point of the legislation. “People who join the military don’t have 15-year-old kids following them around and being impressed by their actions,” Mr. Davis told reporters after the Senate’s vote on Wednesday. “It’s about the availability of cigarettes in schools.” ... Maine’s new regulations will also apply to devices like e-cigarettes, which are popular among teenagers; hookah pipes; and smoking accessories.

The New York Times

U.S.: New Jersey accepts rights for people in quarantine to end Ebola suit

27 July - A nurse who worked with Ebola patients in West Africa in 2014, only to wind up isolated in a tent behind a New Jersey hospital, ended her lawsuit against the state on Thursday with a settlement that spells out rights for people in quarantine. ... Ms. [Kaci] Hickox flew into Newark Liberty International Airport on Oct. 24, 2014, and, although she later tested negative for the deadly virus, she was nonetheless forced into quarantine and initially prohibited from seeing a lawyer or receiving visitors. ... Mr. Siegel said it became clear during negotiations that if Ms. Hickox allowed the state to escape financial liability, she could do something more important: bring about systemic change. Under the settlement, anyone quarantined in New Jersey can contest the order and has the rights to have legal counsel, to be given prior notice of any hearings and to send and receive communications.

The New York Times

U.S.: New report highlights health workers' 2015 exposures

31 July - A Houston organization named the International Safety Center released EPINet U.S. hospital surveillance data from 2015 last week. ... Compared to 2014, in 2015 participating hospitals reported a marked increase in injuries from sharps and needlesticks to training physicians (residents and interns) and an overall increase in injuries sustained in the operating room. ... A greater proportion of blood and body fluid splashes and splatters are occurring in patient and exam rooms than in years past, and almost two-thirds of them involved workers’ eyes -- a significant concern because fewer than 7 percent of the workers involved with those exposures reported they were wearing eye protection, it reported.

Occupational Health & Safety
U.S.: Reversing course, Trump administration will not delay an Obama ozone rule

3 August - One day after 16 states sued, the Trump administration reversed its effort to delay Obama administration regulations to curb air pollution that forms smog. With no mention of the challenges from states such as California, New York, Vermont, Pennsylvania, Oregon, Rhode Island and Washington, Environmental Protection Agency Administrator Scott Pruitt, who previously said he would delay the Oct. 1 implementation date of a rule to lower the level of ozone emissions from fossil-fuel burning, said in a statement late Wednesday that he would now work “with the states through the complex designation process.” In the statement, Pruitt asserted that the Clean Air Act gave his agency “the flexibility to allow one additional year for sufficient information to support ozone designations,” and said he might take “future action to use its delay authority.”

The Washington Post

U.S.: Senate committee approves ASPR, surgeon general candidates

2 August - The Senate Committee on Health, Education, Labor and Pensions (HELP) today approved the nominations of Robert Kadlec, MD, as the next assistant secretary for preparedness and response (ASPR) in the Department of Health and Human Services (HHS) and Jerome Adams, MD, as the next US surgeon general, according to a news release from Sen. Lamar Alexander, R-Ky., committee chair.

CIDRAP News Scan (third item)

U.S.: Workplace accident death rate higher for older workers

2 August - Older people are dying on the job at a higher rate than workers overall, even as the rate of workplace fatalities decreases, according to an Associated Press analysis of federal statistics. It’s a trend that’s particularly alarming as baby boomers reject the traditional retirement age of 65 and keep working. The U.S. government estimates that by 2024, older workers will account for 25 percent of the labor market. Getting old — and the physical changes associated with it — “could potentially make a workplace injury into a much more serious injury or a potentially fatal injury,” said Ken Scott, an epidemiologist with the Denver Public Health Department. Gerontologists say those changes include gradually worsening vision and hearing impairment, reduced response time, balance issues and chronic medical or muscle or bone problems such as arthritis. In 2015, about 35 percent of the fatal workplace accidents involved a worker 55 and older — or 1,681 of the 4,836 fatalities reported nationally. U.S. News and World Report
Indonesia: Veiled marketing - Anti-smoking groups slam Indonesia's Big Tobacco

2 August - Anti-smoking groups in Indonesia have slammed Big Tobacco for promoting sales by giving retailers cash rewards, shopping vouchers and even money to renovate, urging authorities to enforce advertising curbs to safeguard public health. The country with one of the highest smoking rates in the world does have a national regulation in place to restrict cigarette advertisements, including a ban on tobacco firms promoting their products while acting as a sponsor. But it is inconsistently enforced by regional authorities. ... Cigarette companies have stepped up "veiled promotions" following a move by the Jakarta governor two years ago to ban all cigarette advertising on outdoor media, IAKMI said. 

Reuters

Malaysia: Dengue most prevalent infectious disease

2 August - Through August 1, Malaysia health authorities have reported 58,327 dengue fever cases, including 131 deaths. Selangor state has reported the most cases, accounting for 55 percent of the country total. Kuala Lumpur has reported more than 5,500 cases. Nationally, dengue fever is by far the most prevalent infectious disease in Malaysia. As the Sun Daily reports, there are 328.3 dengue cases per 100,000 population. This is followed by hand, foot, and mouth disease (152.25), leptospirosis (17.12), hepatitis B (12.60), and HIV (11.00). Outbreak News Today

Myanmar: Myanmar swine flu outbreak kills 10 as Government rushed to stop spread

31 July - Ten people have died in an outbreak of H1N1 influenza in Myanmar, a health official has said, as the Government stepped up public awareness campaigns about the swine flu virus. The latest outbreak began more than a week ago, deputy director of the infectious diseases department at the Ministry of Health and Sport, Thinzar Aung, said. Yangon — Myanmar's biggest city — is the worst affected area. Health awareness campaigns have been carried out and authorities sought to calm public fears over the outbreak, although stores have sold out of surgical masks in Yangon. Authorities have told ... Aside from those killed by the virus, 51 people have been confirmed to have contracted the disease, according to the Health Ministry. ABC News
Brazil: Brazil reports 51,000 new chikungunya cases

31 July - After several consecutive weeks reporting increases in the hundreds, the Pan American Health Organization (PAHO) reported a huge jump of 51,006 new chikungunya cases (a 57% increase), almost all of them in Brazil, according to an update published late last week. PAHO has now reported 140,569 confirmed, suspected, and imported chikungunya cases in the Americas in 2017, according to the Jul 28 update. Brazil, reporting on 6 weeks of cases, noted 50,800 new cases, bringing its 2017 total to 131,749 cases, or 94% of the total in the Americas. Brazil also reported 34 new chikungunya-related deaths, raising its fatality total to 51. No other country in the Americas has reported a chikungunya death. CIDRAP News Scan (second item)

Venezuela: Suspected diphtheria cases up in crisis-stricken Venezuela, data suggests

29 July - Diphtheria, a serious bacterial infection that is fatal in 5 to 10 percent of cases, appears to still be spreading in Venezuela amid unsanitary living conditions and shortages of basic medicines, rarely available data suggested this week. Venezuela notified the World Health Organization (WHO) of around 123 cases of suspected diphtheria between January and mid-June, bringing the total number of suspected cases in the past year to 447, according to a Cuban health ministry web page which reported the figures. The unpopular leftist government of Nicolas Maduro has largely remained silent on the deadly diphtheria outbreak, and the Health Ministry stopped regularly publishing data around two years ago as Venezuela's health sector crumbled. Reuters

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