30 March 2018

Army Public Health Weekly Update

Army Public Health Center

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Contents

U.S. MILITARY

- Army seeks changes to chemical weapons disposal in Colorado
- Here is the Mattis guidance and Pentagon study behind the Trump transgender decision
- Live-fire training ignited blaze at Fort Carson, officials say
- ‘Suspicious packages’ received at military installations in Washington area
- Trump pushes out Shulkin at VA, nominates Jackson as replacement
- VA video telemedicine mHealth app to provide easy care access
- Veterans with ‘bad paper’ discharges now eligible for mental health services

GLOBAL

- Brown scientists identify a new class of antibiotics with the potential to treat MRSA
- Favipiravir in high doses may be effective against Ebola
- How fast can an outbreak be detected?
- Increase in global antibiotics consumption driven by income gains
- Meet your interstitium, a newfound “organ”
- NIH study may help explain why iron can worsen malaria infection
- Scientists warn 90% of hepatitis B sufferers remain unaware of silent killer
- Study in pregnant women hints at pertussis protection from flu vaccination
- The curious case of the growing placebo effect
- Why the medical community is concerned about a genetic testing boom

INFLUENZA

- APHC: U.S. Army Influenza Activity Report
- ECDC: Flu News Europe
- NHRC: Operational Infectious Diseases - Weekly Surveillance Report
- USAFSAM & DHA: DoD Global Respiratory Pathogen Surveillance Program

VETERINARY/FOOD SAFETY

- Consent decree issued against MyNicNaxs, maker of dietary supplements
- South African Listeria outbreak tied to processed meat grows
WELLNESS

- Can pecans protect heart health?
- Eating grilled or well-done meat, fish tied to high blood pressure risk
- Obesity continues to rise for nearly all age groups
- Obesity, overweight tied to shorter life, more years with heart disease
- The Army trains for everything, but can it condition soldiers to eat well?
- Your rubber ducky is probably crawling with bacteria, scientists say

USAFRICOM

- Angola: Drug shortages cripple Angola’s health service
- Nigeria: Lassa fever
- Somalia: Cholera

USCENTCOM

- Afghanistan: Afghan army faulted for sloppiness with blood-type testing
- Yemen: UNICEF predicts fresh outbreak of deadly cholera in Yemen

USEUCOM

- Europe: *Candida auris* cases in Europe on the rise, with 620 since 2013
- United Kingdom: ‘Our greatest fear’: Highly drug-resistant gonorrhea United Kingdom: ‘a confirmed by health officials
- United Kingdom: Tuberculosis rates in England fall by third in six years

USNORTHCOM

- Canada: Canada’s Inuit battle ‘exceptional’ rates
- U.S.: A lesbian and bisexual women’s health page was removed from a U.S. government website. This is a pattern.
- U.S.: EPA staffers get talking points playing down human role in climate change
- U.S.: Flawed vaccine not to blame for whooping cough resurgence
- U.S.: Green groups sue to stop EPA rule change for plant emissions
- U.S.: Hurricane Harvey’s toxic impact deeper than public told
- U.S.: Infectious disease deaths decline across U.S., but not evenly
- U.S.: Puerto Rico mental health crisis on the rise six months after Hurricane Maria
- U.S.: Testing for hepatitis C lags with baby boomers despite high infection rate
- U.S.: U.S. science agencies set to win big in budget deal

USPACOM

- China: Toxic smog in China created by air pollution and sandstorms
- Southeast Asia: Review finds high prevalence of drug-resistant *Acinetobacter* in SE Asia

USSOUTHCOM

- Brazil: More than 200 new yellow fever cases reported in Brazil
- South America: A measles outbreak in ailing Venezuela is threatening Colombia and Brazil
Zoonotic Disease
2016

The most frequently identified zoonotic diseases among Army Active Duty and beneficiaries are tick-borne and most of these cases occurred in Eastern and Northeastern states.

The top 4 zoonotic diseases captured in veterinary records are tick-borne.

A total of 5,067 mosquito pools from military installations in the United States were tested for West Nile virus in 2016; all positive pools were Culex spp.

In 2016, 4,189 ticks were tested. Of the 1,020 Ixodes spp. that were tested, 280 (27%) were positive for Borrelia burgdorferi, the Lyme disease pathogen. Of 2,677 Amblyomma americanum ticks tested for Ehrlichia chaffeensis, 27 ticks (1%) were positive.

U.S. MILITARY

Army seeks changes to chemical weapons disposal in Colorado

23 March — The U.S. Army wants to change the way it destroys part of its huge stockpile of obsolete chemical weapons in Colorado, but some people worry that could increase the chances of contamination escaping into the air. The Army’s Pueblo Chemical Depot is eradicating 780,000 shells filled with thick liquid mustard agent — many of them dating to the Cold War — under an international treaty banning chemical weapons. The Army built a highly automated, $4.5 billion plant to do the work, but officials said this week they want to buy two closed detonation chambers for about $30 million each to destroy 97,000 problematic mortar shells. The plant has also experienced a series of setbacks and is currently shut down. It still has to complete an environmental impact assessment and get state and local permits before proceeding. Army Times

Here is the Mattis guidance and Pentagon study behind the Trump transgender decision

24 March - Late Friday, the White House announced President Donald Trump’s final decision on transgender forces — that most should not be allowed to serve. The president formed his views based on a February 2018 memo from Defense Secretary Jim Mattis, and Mattis’ recommendations were based on a Pentagon study the defense secretary requested last summer. Trump’s decision on the issue is here. Mattis’ February 2018 memo to the president is here. The Pentagon study Mattis based his decision on is here. ... Four federal court cases are challenging Trump’s transgender ban, and several interim decisions by judges in those cases have struck down parts of the administration’s transgender policy. ... [G]iven those cases, there would likely be no immediate impact on transgender service. Military Times

Live-fire training ignited blaze at Fort Carson, officials say

26 March - Live-fire training started the fire on Fort Carson that burned about 400 acres on post and about 2,900 acres off post, according to post officials. The blaze ignited March 16 at the Colorado post while infantry and helicopter units were training for an upcoming deployment, officials said in a news release. The next day, the Carson Midway Fire spread to private property and destroyed three houses, forcing the evacuation of about 250 homes.
The Mosul Trauma Response: A Case Study
February 2018

The Mosul trauma response was novel for several reasons. It marked the first time that WHO played the lead role in coordinating trauma care in conflict; the first time a trauma system for civilians was attempted in such a setting; and the first time that the UN sent humanitarians within minutes of the frontline to deliver trauma care in close coordination with the military. Furthermore, it was the first time a private, for-profit medical organization was contracted by WHO (or any other agency, to our knowledge) to provide trauma care in a conflict setting.

Despite the conditions, training continued because the soldiers were preparing to deploy overseas, officials said. The fire was extinguished by March 22. Army Times


March 2018 - Mental health disorders have historically accounted for significant morbidity, healthcare utilization, disability, and attrition from military service. From 2007 through 2016, a total of 853,060 active component service members were diagnosed with at least one mental health disorder and 115,378 were diagnosed with mental health problems related to family/support group problems, maltreatment, lifestyle problems, or substance abuse counseling. Annual rates of incident diagnoses of at least one mental health disorder decreased by approximately 6.2% during the period. Most of the incident mental health disorder diagnoses were attributable to adjustment disorders, depressive disorders, and anxiety disorders. ... [R]ates of incident mental health disorders were generally higher among females and Army members, and declined with increasing age. Medical Surveillance Monthly Report

‘Suspicious packages’ received at military installations in Washington area

27 March - The Defense Department said Monday evening that suspicious packages had been received at military installations in the Washington region and were being investigated. In a statement, the department said “we are tracking the delivery of suspicious packages to multiple military installations in the National Capital Region.” ... According to media accounts, the packages may have been received at as many as six sites. The sites included Joint Base Anacostia-Bolling in the District and at Fort Belvoir, in Virginia, according to the accounts. In addition, an NBC news report indicated that “similar” packages were located at mail processing facilities for both the CIA and the White House. No injuries were reported, and information about the contents of the packages was not immediately available. The Washington Post

Trump pushes out Shulkin at VA, nominates Jackson as replacement

29 March - President Donald Trump ousted Veterans Affairs Secretary David Shulkin on Wednesday in response to heavy criticism and nominated his personal physician, Rear Admiral Ronny Jackson, to replace him in the latest turnover among Trump’s team. White House officials, speaking on condition of anonymity, said Shulkin had become a distraction.
How Science Is Solving Health Issues at All Stages of Life

This issue of Wired is all about how science and technology are extending, optimizing, and disrupting every stage of human life. Geneticists and biotechnologists are reengineering our bodies. Ubiquitous screens, apps, VR devices, and social media are transforming how we experience the world. We are a species rewritten, so it’s time to chronicle how that’s playing out for each generation.

due to a constant wave of speculation about his future and said he would be leaving in the next day or two. They said an undersecretary at the Department of Defense, Robert Wilkie, will be the acting secretary. … Jackson, a rear admiral of the U.S. Navy, has been working as a presidential physician since the George W. Bush administration, and has been the lead doctor monitoring Trump’s health since Trump became president. … A Texas native who has been on active duty since 1995, Jackson served during the U.S.-led war in Iraq as an emergency medicine physician in Taqaddum, Iraq. Reuters

VA video telemedicine mHealth app to provide easy care access

27 March - The Department of Veterans Affairs (VA) Mobile Health program has released the VA Video Connect application, an mHealth application that will provide veterans with access to real-time telemedicine services. The VA Video Connect application enables veterans to join virtual medical rooms from any location and participate in video healthcare visits with their providers. The app provides a viable alternative method of care, especially for veterans living in rural areas with limited access to VA healthcare facilities and those with restricted mobility or other barriers to accessing care. Using encryption to ensure a private and secure session, the app allows Veterans to access their providers during a scheduled date and time, just as they would at a face-to-face appointment. mHealth Intelligence

Veterans with ‘bad paper’ discharges now eligible for mental health services

27 March – A new federal law will allow … veterans with “bad paper” discharges to be eligible for long-term mental health care for the first time, and thus reduce their suicide risk. … The legislation was included in the federal budget signed last Friday by President Trump. The new law affects veterans with an “other than honorable (OTH)” discharge, a status increasingly given for minor offenses. The U.S. Department of Veterans Affairs usually denies benefits to veterans with OTH discharges, even though Congress stipulated in 1944 that only severe conduct that would lead to court martial and dishonorable discharges should disqualify veterans from basic VA care. … Under the new law, veterans with OTH discharges who either served in combat areas, were victims of military sexual trauma, or operated drones are eligible for VA mental health and behavioral health care. The law also requires the Armed Forces to give mental health screenings to all military members with an OTH status. Hartford Courant
Brown scientists identify a new class of antibiotics with the potential to treat MRSA

29 March - A team of researchers led by Brown University infectious disease experts and engineers has identified a new class of antibiotics that could one day help combat the alarming emergence of drug-resistant “superbugs.” ... Their research led to the identification of two synthetic retinoids, both of which demonstrated the ability to kill MRSA (methicillin-resistant Staphylococcus aureus). ... Retinoids, which are chemically related to Vitamin A, are used to treat a variety of health problems, including acne and cancer. ... The research team developed novel ways to screen a remarkable 82,000 synthetic compounds to identify those that would serve as effective antibiotics but not be toxic to humans. Ultimately, 85 compounds were identified that decreased the ability of MRSA to kill laboratory roundworms. Of those, two, both synthetic retinoids, were selected as the best candidates for further study. Outbreak News Today

classified version

Favipiravir in high doses may be effective against Ebola

28 March - High doses of favipiravir extended survival in non-human primates infected with Ebola virus, according to a new study published this week in PLOS Medicine. ... Thirteen animals were untreated and 13 were treated, beginning two days before infection, with twice daily doses of favipiravir at 100, 150, or 180 mg/kg. All animals that were untreated or treated with 100 mg/kg of favipiravir died within 10 days of infection. Two out of 5 (40%) animals treated with 150 mg/kg were still alive at day 21 of the study, and 3 out of 5 animals (60%) treated with 180 mg/kg favipiravir survived to day 21. Moreover, the study showed that the drug inhibited viral replication in a drug concentration-dependent manner. Outbreak News Today

classified version

How fast can an outbreak be detected?

23 March - ... Uganda has cut the time it takes to confirm an outbreak from an average of two weeks to an average of 2.5 days. ... Regardless, early detection and responses have led to a “significant decrease in the overall intensity and duration” of outbreaks, according to a CDC report published Wednesday in The Lancet Infectious Diseases. ... [S]cientists went to districts to help surveillance officers, hospitals and health centers identify suspect patients. If the patients met certain criteria, these health-care workers would collect a sample and send it not to a diagnostic lab in another country as before, but to Uganda Virus Research Institute in Uganda, where ... an isolated lab [had been built] specifically to test for these fevers. So they would no longer need to wait two to four weeks for specimen results. Instead, they could get a confirmation...
in one to three days usually, then launch a response within 24 hours. ... [Another new initiative] expanded the country's ability to safely transport even the most transmissible types of specimens, not just HIV and TB. Text-message updates also allowed lab staff to track the samples as they made their way on motorcycles and through the national postal service to UVRI's improved facilities. NPR

Increase in global antibiotics consumption driven by income gains

27 March - Per capita antibiotic consumption across 76 countries increased by 39 percent between 2000-2015, according to a new analysis, an increase driven largely by economic growth in low- and middle-income countries. The study ... is bad news for public health efforts to prevent the spread of antibiotic resistance by curbing unnecessary use of the drugs. The authors of the study note that access to antibiotics is important for treating infectious disease. However, "[a]s lower- and middle-income countries increase their economic growth and start to use antibiotics more, we don't want them to fall into the same trap that higher-income countries have," study coauthor Eili Y. Klein [said.] ... “While we need to reduce consumption globally, we need to do it in a safe and effective manner that still allows low-income countries access to antibiotics.” The Scientist

Meet your interstitium, a newfound "organ"

29 March - With all that's known about human anatomy, you wouldn't expect doctors to discover a new body part in this day and age. But now, researchers say they've done just that: They've found a network of fluid-filled spaces in tissue that hadn't been seen before. These fluid-filled spaces were discovered in connective tissues all over the body, including below the skin's surface; lining the digestive tract, lungs and urinary systems; and surrounding muscles, according to a new study detailing the findings. ... The researchers are calling this network of fluid-filled spaces an organ—the interstitium. ... [T]he findings appear to explain why cancer tumors that invade this layer of tissue can spread to the lymph nodes. According to the researchers, this occurs because these fluid-filled spaces ... drain into the lymphatic system. Scientific American

NIH study may help explain why iron can worsen malaria infection

29 March - Researchers at the National Institutes of Health have a possible explanation for why iron can sometimes worsen malaria infection. By studying mice and samples from malaria patients, the researchers found that extra iron interferes with ferroportin, a protein that prevents a toxic buildup of iron in red blood cells and helps protect these cells against malaria infection. They also found that a mutant form of ferroportin that occurs in African populations appears to protect against malaria. These basic findings, published in Science,
may help researchers and healthcare officials develop strategies to prevent and treat malaria infections. NIH

**Scientists warn 90% of hepatitis B sufferers remain unaware of silent killer**

27 March - About 300 million people worldwide are living with hepatitis B, yet the majority of cases remain undiagnosed or untreated, researchers have found. According to a study published on Monday in the Lancet Gastroenterology & Hepatology journal, roughly 90% of people infected by the virus, which is incurable but manageable, are unaware they have it. A vaccine that provides lifelong immunity is available, but only half of all babies globally receive it. Moreover, less than 1% of all hepatitis B-infected mothers – who are the primary source of infection, and are at high risk of passing the virus to their children – are receiving appropriate treatment. The Guardian

**Study in pregnant women hints at pertussis protection from flu vaccination**

29 March - A post hoc study in South African pregnant women who took part in a flu vaccine study in 2011 and 2012 found that flu vaccination may have had a protective effect against Bordetella pertussis. … The initial trial involved the trivalent inactivated vaccine, and it included 2,116 women—1,062 who received the flu vaccine and 1,054 who were in the placebo group. … Specimens from 11 flu vaccine recipients tested positive for pertussis, compared with 26 from placebo recipients. Also, test results were indeterminate for 10 women in the flu vaccine group and 16 in the placebo group. CIDRAP News Scan (first item)

**The curious case of the growing placebo effect**

20 March - Over the last several years, evidence has been accumulating that placebo effects are becoming more powerful. Clinical trials on a range of medications used for treating both psychological and medical problems are finding that differences in the magnitude of their impact relative to placebos are decreasing in size. … The growing potency of placebos is not limited to psychiatric drugs. When researchers started looking closely at pain-drug clinical trials, they found that an average of 27 percent of patients in 1996 reported pain reduction from new pain medications being developed relative to placebo pills. By 2013, that difference had shrunk to just 9 percent. In the last decade, more than 90 percent of painkillers developed in the United States have failed to show a significant improvement over placebos in the final stages of clinical trials. Psychology Today
Why the medical community is concerned about a genetic testing boom

27 March - The Food and Drug Administration’s move to allow 23andMe to screen people for breast cancer risks may unleash a flood of new direct-to-consumer genetic tests. But some genetic experts and members of the medical community are raising concerns about whether consumers can truly understand the test results — and how they will handle such sensitive information. ... The company [23andMe] is hoping to expand its genetic testing offerings to allow people to understand more about how their DNA affects the risk of developing a certain disease. ... But the FDA has been cautious about allowing consumers to purchase such tests, and there are reasons the process is so rigorous. ... The FDA cautioned that a false positive “could lead a patient to undergo prophylactic surgery, chemoprevention, intensive screening, or other morbidity-inducing actions, while a false negative could result in a failure to recognize an actual risk that may exist.” In response, the company pulled some of its tests. ... [E]ven as it approved the breast cancer test, the FDA warned consumers not to make treatment decisions based on the results – and stressed that patients should follow up with a physician or genetic counselor.

top of page...

INFLUENZA

APHC: U.S. Army Influenza Activity Report

Week ending 17 March 2018 (week 17):
In week 11, 100 influenza A-positive specimens were reported by Army medical treatment facilities, which is a 31% decrease from the 145 positive specimens reported in surveillance week 10. Five hospitalized influenza-associated hospitalizations were reported in DRSi in surveillance week 11; 1 AD (Active Duty) and 4 non-AD. Two (40%) were reported as not vaccinated and three (60%) were vaccinated. The AD Service Member (SM) was vaccinated. So far this season, 174 cases have been reported to DRSi. In surveillance week 11, 12% of clinical specimens from AD SMs and non-AD beneficiaries tested positive for respiratory pathogens, of which 43% were influenza A. APHC

top of page...

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

During week 11 (March 11-17, 2018), influenza activity decreased in the United States.
• Viral Surveillance: Overall, influenza A(H3) viruses have predominated this season. However, in recent weeks the proportion of influenza A viruses has declined, and during week 11, influenza B viruses were more frequently reported than influenza A viruses. The percentage of respiratory specimens testing positive for influenza in
clinical laboratories decreased.

- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
- Influenza-associated Pediatric Deaths: Five influenza-associated pediatric deaths were reported. CDC

ECDC: Flu News Europe


- Influenza viruses continue to circulate widely in the Region with some eastern European countries that have only recently reported increased activity, experiencing a late start to the season with increased circulation of influenza type A viruses.
- Similar to the previous week, 44% of the individuals sampled from primary healthcare settings tested positive for influenza viruses, despite the peak rate for the Region occurring in week 05/2018.
- Both influenza virus types A and B were co-circulating with the majority being type B viruses and B/Yamagata continuing to be the dominant lineage.
- Similar proportions of influenza type A and B viruses were reported in patients admitted to ICU, with the majority of severe cases reported this season being due to influenza type B and occurring in persons above the age of 15 years.
- A seasonal reassortant A(H1N2) influenza virus consisting of HA and NS genes of human seasonal A(H1N1)pdm09 influenza virus and M, NA, NP, PA, PB1 and PB2 genes of human seasonal A(H3N2) influenza virus was detected in the Netherlands. As the reassortant virus genome contains a mixture of genes from currently circulating seasonal influenza viruses, no increase in virulence is expected. Having similar HA with circulating strains, the current vaccine is expected to offer protection against this reassortant.

NHRC: Operational Infectious Diseases - Weekly Surveillance Report

21 March - Febrile respiratory illness cases:

- Military Recruits - 41 positive of 85 tested
- CDC Border Infectious Disease Surveillance and Zika Surveillance - 61 positive of 121 tested
- DoD Beneficiaries – 17 positive of 38 tested. Naval Health Research Center
USAFSAM & DHA: DoD Global Respiratory Pathogen Surveillance Program

During 4 - 17 March 2018 (Surveillance Weeks 10 & 11), a total of 757 specimens were collected and received from 69 locations. Results were finalized for 664 specimens from 69 locations. The percent influenza positive for Weeks 10 and 11 were 34% and 31%, respectively. The influenza percent positive for the season is approximately 37%.

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

top of page...

VETERINARY/FOOD SAFETY

Consent decree issued against MyNicNaxs, maker of dietary supplements

29 March - A federal court ordered a Florida-based company called MyNicNaxs to stop selling drugs and dietary supplements until it complies with the Federal Food, Drug, and Cosmetic Act and other requirements. The U.S. District Court for the Middle District of Florida has entered a consent decree of permanent injunction against MyNicNaxs of Deltona Florida. The company distributed weight loss and sexual enhancement products, marketed as dietary supplements, directly to consumers online through their websites. Some of these products tested positive for undeclared active pharmaceutical ingredients.

Food Poisoning Bulletin

top of page...

South African Listeria outbreak tied to processed meat grows

29 March - The World Health Organization (WHO) yesterday reported a total of 978 laboratory-confirmed listeriosis cases in a South African outbreak that's been linked to a popular ready-to-eat processed meat product called polony, akin to bologna. The outbreak is now the largest ever reported to the WHO. Among cases with known outcomes, 183 have died. The case-fatality rate is 27%, comparable to other listeriosis outbreaks worldwide, the agency said. Forty-two percent of patients are newborns who were infected during pregnancy or delivery, the WHO said. CIDRAP News Scan (third item)

top of page...

WELLNESS

Can pecans protect heart health?

27 March - ... A number of nut types have been individually assessed for their health benefits. The most recent study in this field ... focused on the benefits of pecans on
cardiovascular health. … [T]he latest study carefully controlled the participants' diet. This meant that the researchers could add a daily handful of pecans to a standard U.S. diet and view the effects of the nut in relative isolation. However, the downside to this approach is that it could only be carried out on a small sample: 26 men and women. Each participant — all of whom were overweight or obese but otherwise healthy — spent 4 weeks on one diet then switched to spend the remaining 4 weeks on another diet. One was a control diet and the other one was roughly the same, except that 15 percent of the total calories were replaced by pecans in the latter. ... It was found that the addition of pecans to the participants' diets improved insulin sensitivity. Also, there was a positive impact on other markers of cardiometabolic disease — namely, changes in serum insulin and the function of beta cells, which store and release insulin. Medical News Today

Eating grilled or well-done meat, fish tied to high blood pressure risk

27 March - Eating beef, chicken or fish grilled or well-done is associated with a higher risk of high blood pressure, new research suggests. “Among individuals who consume red meat, chicken, or fish regularly, our findings imply that avoiding the use of open-flame and/or high-temperature cooking methods, including grilling/barbecuing, broiling, and roasting, may help reduce hypertension risk,” [says] Dr. Gang Liu. “Although some studies have suggested that higher intake of red meat, especially processed red meat, is associated with higher risk of hypertension, the associations of chicken or fish intake with hypertension risk remain inconsistent,” he explained. “These previous studies did not take into account one important factor - different meat cooking methods.” Reuters

Obesity continues to rise for nearly all age groups

27 March - Obesity rates have continued to rise, particularly among U.S. adults, over the past decade, National Health and Nutrition Examination Survey data showed. Among adults, obesity prevalence rose from 33.7% in 2007-2008 to 39.6% in 2015-2016. ... Prevalence of obesity -- defined as a body mass index (BMI) ≥30 -- rose across all age ranges and sexes during the study period, according to the research letter in the Journal of the American Medical Association. ... Alarmingly, severe obesity among U.S. adults -- defined as a BMI ≥40 -- also significantly increased overall, from around 5.7% in 2007-2008 to 7.7% in 2015-2016. All sexes and age groups individually had these increases, as well, except for those age 60 and older. MedPage Today

Obesity, overweight tied to shorter life, more years with heart disease

23 March - Researchers examined data on more than 190,000 adults from 10 different studies conducted in the U.S. over the past seven decades that looked at weight and other
factors that can influence the risk of heart disease. ... For middle-aged men 40 to 59 years old, the odds of having a stroke, heart attack, heart failure or death from cardiovascular causes was 21 percent higher for overweight individuals than for those at a normal weight, the study found. Overweight middle-aged women had 32 percent higher odds of having a heart condition or dying from it. When middle-aged people were obese, men were 67 percent more likely to have a heart attack, stroke, heart failure or cardiovascular death and women had 85 percent higher odds compared to normal-weight peers. Extremely obese middle-aged men had almost triple the risk of having a heart condition or dying from it, compared with normal-weight men, and extremely obese middle-aged women had more than twice the risk of normal-weight women. Reuters

The Army trains for everything, but can it condition soldiers to eat well?

27 March - ... [W]hile the Army can create tests that require soldiers to work out in order to pass them ... there isn’t much leadership can do when it comes to what their joes eat. “You’ve got 10 weeks to start to change behaviors, and all you can do is start to change behaviors,” Michael McGurk, head of [Center for Initial Military Training’s] research and analysis directorate, said of basic training. ... But can the Army train soldiers to eat lean proteins and veggies, the way they train them to shoot their weapons? “You can to a certain extent,” McGurk said. ... For example, at initial entry training, there isn’t a soda to be found in the dining facility. Neither is there any fried food at most of them, he added. ... “The other challenge we have is once you leave the basic training environment — or the dining facility environment — the food that is available in a rapid manner at lunch is often from places that are not as healthy as we would like,” McGurk said. Indeed, no health-conscious dining facility can compete with posts’ ubiquitous Burger King outlets in a pinch. Defense News

Your rubber ducky is probably crawling with bacteria, scientists say

27 March - Scientists now have the dirt on the rubber ducky: Those cute yellow bath-time toys are — as some parents have long suspected — a haven for nasty bugs. Swiss and American researchers counted the microbes swimming inside the toys and say the murky liquid released when ducks were squeezed contained “potentially pathogenic bacteria” in four out of the five toys studied. The bacteria found included Legionella and Pseudomonas aeruginosa, a bacterium that is “often implicated in hospital-acquired infections.” They turned up a strikingly high volume — up to 75 million
cells per square centimeter (0.15 square inch) — and variety of bacteria and fungus in the ducks. While certain amounts of bacteria can help strengthen kids’ immune systems, they can also lead to eye, ear and intestinal infections, the researchers said. STAT

**USAFRICOM**

**Angola: Drug shortages cripple Angola’s health service**

25 March - ... João Lourenço, Angola’s first new president in 38 years, has vowed to ... improve public services such as healthcare, which the government acknowledges suffers from a lack of doctors and medication. Crippled by 27 years of civil war, healthcare improved after the conflict ended in 2002 as the oil-fueled economy surged and new hospitals and clinics were built. But experts say the country failed to develop a robust system for buying and distributing medicines, or training doctors and nurses. When the price of oil tumbled in 2014, the economy stalled and the government slashed spending, exposing cracks in the public health service and leaving the population at risk. Diseases that should be disappearing after more than 15 years of peace are spreading. Tuberculosis has been declining worldwide but in Angola the incidence of TB rose 16 percent from 2002 to 2016. ... Angola suffered the world’s worst yellow fever epidemic in a generation in 2016 with about 4,000 suspected cases and 380 deaths, and the country is now in the grip of a malaria outbreak with more than 300,000 cases so far this year. U.S. News and World Report

**Nigeria: Lassa fever**

23 March - From 1 January through 18 March 2018, 1495 suspected cases and 119 deaths have been reported from 19 states. ... Among the 376 cases classified as confirmed and nine classified as probable, 95 deaths were reported (case fatality rate for confirmed and probable cases = 24.7%). From 1 January through 18 March, seventeen health care workers in six states ... have been infected, four of whom have died. Since 1 January 2018, the number of Lassa fever cases increased from 10 to 70 weekly reported cases. However since mid-February, there has been a downward trend in the weekly reported number of Lassa fever cases. WHO

**Somalia: Cholera**

29 March - The ongoing cholera outbreak in Somalia started in December 2017. As of 18 March 2018, a total of 1613 cholera cases, including nine deaths (case fatality rate = 0.6%), have been reported from four regions. ... Of the 66 stool samples tested in 2018, 19 were positive for Vibrio cholerae serogroup 01 serotype Ogawa. Banadir Region is one of the regions with the highest concentration of internally displaced persons (IDPs). Lower Juba has experienced cholera outbreaks in the past; on the border with Kenya and the region has
many people who have been displaced by conflict in Middle Juba. Middle Shabelle has also previously had cholera outbreaks. Access to safe water and sanitation is limited in all of the affected regions. WHO

USCENTCOM

Afghanistan: Afghan army faulted for sloppiness with blood-type testing

23 March - Sloppy blood collection and identification by Afghanistan’s army may have led to the deaths of wounded Afghan soldiers who received the wrong blood type, a U.S. watchdog said. Its report also questioned whether blood was being properly tested for disease. Afghanistan’s Defense Ministry rejected the report. Spokesman Dawlat Waziri said on Friday that blood is tested at the hospital before being given to wounded soldiers, adding that the ministry had no record of soldiers dying because of wrong blood type. He also said blood samples from new recruits are tested in hospitals and chastised the watchdog for not sharing its ground research information with the ministry. The Special Inspector General for Afghanistan Reconstruction said in its report late Thursday that about 15,400 Afghan soldiers did not have their blood type tested before entering the army and the method of identifying the blood type of thousands more was suspect. Military Times

Yemen: UNICEF predicts fresh outbreak of deadly cholera in Yemen

26 March - Yemen is likely to be hit by another outbreak of deadly cholera within months, UNICEF’s Middle East director has warned on the eve of the third anniversary of the country’s civil war. More than 1 million children were infected by cholera last year due to lack of access to water and vaccination. UNICEF’s Geert Cappelaere said ... “Let us not fool ourselves. Cholera is going to come back. ... In a few weeks from now the rainy season will start again and without a huge and immediate investment, cholera will again hit Yemeni children.” Cappelaere said UNICEF had to negotiate for months with both sides in the war for permission to start a vaccination programme, and some military factions still banned imported solar power as a means of pumping drinking water. The Guardian
Europe: *Candida auris* cases in Europe on the rise, with 620 since 2013

29 March - From 2013 through 2017 European officials recorded 620 cases of *Candida auris*, mostly from four large outbreaks, and 110 of them (17.7%) involved bloodstream infections, according to a report today in *Eurosurveillance*. Almost all the cases were in Spain (388) and the United Kingdom (221). More than 75% (466) cases were reported as colonizations, with no apparent illness. In addition to the 110 bloodstream infections, officials documented 40 other infections, while 4 cases were of unknown status. In addition, the incidence rose in recent years, with 23 cases reported in 2015, 290 in 2016, and 303 in 2017.

United Kingdom: ‘Our greatest fear’: Highly drug-resistant gonorrhea United Kingdom: ‘a confirmed by health officials

29 March - A super-resistant strain of gonorrhea has been reported in the United Kingdom following warnings from global public health officials that the common sexually transmitted disease is becoming more difficult to treat. Health officials in England said it is the first time that a case of gonorrhea could not be treated successfully with antibiotics that are commonly used to cure it. Earlier this year, a man, who was not named, sought treatment there for symptoms that he developed a month after he had sexual contact with a woman in Southeast Asia, according to a case report from Public Health England. The bacterial infection was treated with two antibiotics, azithromycin and ceftriaxone, but subsequent tests still came back positive for the disease, the officials said.

United Kingdom: Tuberculosis rates in England fall by third in six years

24 March - New figures show rates of tuberculosis (TB) in England have declined by a third in six years, and are currently at their lowest level in 35 years. The data from Public Health England shows a 38% fall since 2012, with a 9.3% decline in cases in 2017 alone. Improved diagnosis, treatment and awareness are being credited for the fall. But England still has one of the highest rates of TB in Western Europe with just under 5,200 affected in 2017.
Canada: Canada's Inuit battle 'exceptional' rates

24 March - ... On Friday, the eve of World Tuberculosis Day, the federal government unveiled a plan to eliminate tuberculosis from Inuit Nunangat, the traditional Inuit homeland, by 2030. ... In 2016, the incidence of tuberculosis was 170.1 per 100,000 Inuit peoples in Canada, compared with just 0.6 per 100,000 Canadian-born, non-Indigenous people, the Public Health Agency of Canada reported. In its announcement, the Canadian government also said it intends to cut the prevalence of active tuberculosis by at least 50 percent by 2025. ... Ottawa said it would address social issues tied to the disease, such as housing, food security and nutrition and access to health services and put Inuit needs at the forefront of its strategy. It also earmarked $27.5m over the next five years in its 2018 budget to fight the disease in Inuit Nunangat, among other investments in health services and housing in the region. Al Jazeera

top of page...

U.S.: A lesbian and bisexual women’s health page was removed from a U.S. government website. This is a pattern.

26 March - A U.S. government webpage addressing the unique health concerns of lesbian and bisexual women was taken offline sometime between Sept. 26 and Oct. 5, 2017. The link that used to point to the U.S. Health and Human Services page, titled “Lesbian and bisexual health fact sheet,” now redirects to an index that no longer includes an entry for lesbian or bisexual health. ... The change was discovered by the Sunlight Foundation’s Web Integrity Project, which is documenting federal website changes under the Trump administration. ... The agency told Politico the changes were part of a routine update. “The outdated lesbian and bisexual health pages were removed and the health content was integrated into the relevant health topics pages across the website,” an HHS spokesperson said. Quartz could not find any of the information on other pages. Quartz

top of page...

U.S.: EPA staffers get talking points playing down human role in climate change

28 March - Environmental Protection Agency staffers received a list of “talking points” this week instructing them to underscore the uncertainties about how human activity contributes to climate change. A career employee in the department’s Office of Public Affairs distributed the eight talking points to regional staffers. The list offered suggestions on ways to talk with local communities and Native American tribes about how to adapt to extreme weather, rising seas and other environmental challenges. Employees crafted the email, first disclosed Wednesday by HuffPost, on the basis of controversial — and
scientifically unsound — statements that EPA Administrator Scott Pruitt has made about the current state of climate research. The Washington Post

U.S.: Flawed vaccine not to blame for whooping cough resurgence

29 March - The surprising resurgence of whooping cough in the United States in recent years cannot be blamed on shortcomings in the current vaccine, a new study finds. Rather, incomplete coverage among children -- possibly fueled by the anti-vaccination movement -- is responsible for the pertussis increases, along with natural population turnover and slowly waning protection from the vaccine, researchers say. In the study ... the team found little evidence that the switch in the 1990s from the whole cell to the combined acellular pertussis vaccine contributed to the resurgence in whooping cough. During the 1970s and 1980s, an average of 2,000 to 3,000 pertussis cases were reported annually, according to figures from the U.S. Centers for Disease Control and Prevention (CDC). In 2003, pertussis cases in the U.S. increased to more than 10,000 for the first time in almost 4 decades, and have not dropped below this number since. MedPage Today

U.S.: Green groups sue to stop EPA rule change for plant emissions

26 March - A number of environmental groups filed a lawsuit against the Environmental Protection Agency (EPA) on Monday challenging a recent administrative decision to allow certain major industrial plants to turn off some pollution controls. The petition for review ... asks the court to reconsider the rule change by EPA that environmentalists consider a loophole for polluters under the Clean Air Act. ... In January, the agency loosened regulatory compliance standards for certain sources of air pollution previously considered "major." William Wehrum, head of the EPA’s air office, put out regulatory guidance repealing the "once in, always in" policy. That policy saw that facilities, such as power plants or factories, considered “major” sources of hazardous air pollutants were always regulated as such, even if the facilities’ owners took measures to reduce pollution. The Hill

U.S.: Hurricane Harvey’s toxic impact deeper than public told

23 March - A toxic onslaught from the nation’s petrochemical hub was largely overshadowed by the record-shattering deluge of Hurricane Harvey as residents and first responders struggled to save lives and property. More than a half-year after floodwaters swamped America’s fourth-largest city, the extent of this environmental assault is
beginning to surface, while questions about the long-term consequences for human health remain unanswered. ... Some 500 chemical plants, 10 refineries and more than 6,670 miles of intertwined oil, gas and chemical pipelines line the nation's largest energy corridor. Nearly half a billion gallons of industrial wastewater mixed with storm water surged out of just one chemical plant in Baytown, east of Houston on the upper shores of Galveston Bay. ... In all, reporters catalogued more than 100 Harvey-related toxic releases — on land, in water and in the air. Most were never publicized, and in the case of two of the biggest ones, the extent or potential toxicity of the releases was initially understated. Only a handful of the industrial spills have been investigated by federal regulators, reporters found. AP

U.S.: Infectious disease deaths decline across U.S., but not evenly

27 March - A study today ... quantifies, for the first time, infectious disease deaths in America from 1980 through 2014 at the county level, showing a downward trend in all categories except diarrheal diseases. ... [The study] highlights the disparities that exist on a county level when it comes to accessing healthcare. ... [Researchers] analyzed ... age-standardized mortality rates of lower respiratory infections, diarrheal diseases, HIV/AIDS, meningitis, hepatitis, and tuberculosis by county, year, and sex. Overall, deaths from infectious diseases dropped significantly over the study period. In 1980, infectious diseases caused 41.95 deaths per 100,000 persons. By 2014, that dropped to 34.10, a reduction of 18.7%. The drop was most significantly seen in men, who in 1980 died from infectious diseases at a rate of 56.37 deaths per 100,000 persons, but by 2014 saw that number lower to 39.22 deaths per 100,000 persons. Women's deaths from infectious diseases declined only slightly, from 33.11 to 29.97 deaths per 100,000 persons. CIDRAP


30 March - ... New data allowed estimation of diagnosed diabetes by type. In 2016, the prevalence of diagnosed type 1 diabetes was 0.55%, representing 1.3 million U.S. adults; the prevalence of diagnosed type 2 diabetes was 8.6%, representing 21.0 million U.S. adults. Non-Hispanic white adults had a higher prevalence of diagnosed type 1 diabetes than did Hispanic adults. Non-Hispanic blacks had the highest prevalence of diagnosed type 2 diabetes. Diagnosed type 2 diabetes prevalence estimates increased with age and decreased with increasing levels of educational attainment. Morbidity and Mortality Weekly Report

U.S.: Puerto Rico mental health crisis on the rise six months after Hurricane Maria

27 March - Mental health issues have made a concerning rise in Puerto Rico as residents continue to grapple with massive losses and crippled infrastructure six months after their
island home was devastated by Hurricane Maria. ... In 2017, 253 Puerto Ricans committed suicide, according to a report released by the local government’s Commission for the Prevention of Suicide. Twenty suicides occurred in December, three months after the storm’s landfall. Roughly 86 percent of the deceased were men and 14 percent were women. The island nation was already battling surging mental health issues after a decade-long recession that left many unemployed and divided families due to people moving away. ... A suicide prevention hotline center near San Juan told USA Today it received up to 600 calls daily from people who reach out to discuss their losses, economic situations, or family departures for the U.S. mainland. ... In January, the hotline saw calls related to suicide double from 2,046 in August to 4,548. Attempts also jumped from 782 to 1,075 within the same timeframe. The Weather Channel

U.S.: Testing for hepatitis C lags with baby boomers despite high infection rate

27 March - Testing for hepatitis C, a major cause of liver cancer, is lagging behind among the group of Americans with the highest rate of infection: baby boomers. A study published Tuesday showed that only about 13 percent of baby boomers were tested in 2015, up just slightly from 12 percent in 2013. U.S. public health authorities recommend all people in that demographic — those born between 1945 and 1965 — be screened for hepatitis C. ... While mortality rates for many cancers are decreasing, deaths from liver cancer rose 56 percent from 2003 to 2012. The strongest single predictor of the disease is chronic hepatitis C infection. Almost 80 percent of the people in the United States who have hepatitis C infections are baby boomers. The Washington Post

U.S.: U.S. science agencies set to win big in budget deal

22 March – U.S. President Donald Trump signed the [spending] bill into law on 23 March, after the House of Representatives and the Senate voted to approve the measure. Nearly all US science agencies would see their budgets grow in 2018, under a US$1.3-trillion spending deal announced on 21 March. For the second year in a row, lawmakers in Congress seem set to ignore the steep cuts sought by President Donald Trump. The legislation would boost funding for the National Institutes of Health (NIH) to a historic high of $37 billion, $3 billion over the 2017 level. The National Science Foundation (NSF) would receive $7.8 billion, $295 million more than it received last year. ... One notable outlier to the overall trend: the Environmental Protection Agency (EPA). Congress has proposed holding the agency’s funding at $8.1 billion, even with the 2017 level. ... The Centers for Disease Control and Prevention (CDC) would receive $8.3 billion, an increase of $1.1 billion over the 2017 level. Nature
USPACOM

China: Toxic smog in China created by air pollution and sandstorms

28 March - Air quality in Beijing reached dangerous levels Wednesday as extreme smog and a sandstorm hung heavy in China’s capital city. Residents were asked to keep children indoors, secure doors and shut windows, and to wear masks and scarves when venturing outside. The amount of fine particles, known as the PM2.5 levels, was between 255 and 244 micrograms per cubic meter on Wednesday morning in Beijing. That’s a level deemed dangerous by The World Health Organization. Making matters worse, the dust alert was set to a “blue” level, the lowest of four color-coded classifications. … Max Zhang … said the end of the cold weather season, when the government provides coal-based heat … had fueled more dangerous conditions. … [O]nce the heating season ends, many industries increase their production and in turn their amount of emissions, Zhang explained. Newsweek

Southeast Asia: Review finds high prevalence of drug-resistant Acinetobacter in SE Asia

28 March - A new meta-analysis of studies that focused on multidrug-resistant (MDR) HAIs in ICUs in Southeast Asia found a high prevalence of MDR Acinetobacter baumannii, researchers report. … The investigators identified 41 studies that among them included data on 22,876 ICU patients in seven Southeast Asian countries. They report up to a 64.9% cumulative incidence of carbapenem-resistant A baumannii and up to a 58.5% incidence of MDR A baumannii among all A baumannii infections, rates that are much higher than reported in other regions. The experts also found a 23% higher death rate in MDR A baumannii, a 72% higher rate for extensively drug-resistant A baumannii, and an 82% higher rate among those with the pan-drug–resistant form of the pathogen. CIDRAP Stewardship/Resistance Scan (third item)

USSOUTHCOM

Brazil: More than 200 new yellow fever cases reported in Brazil

29 March - The Brazilian Ministry of Health yesterday noted 211 newly confirmed yellow fever cases, including 38 more deaths. From Jul 1, 2017, to Mar 28, 2018, officials have confirmed 1,131 cases of yellow fever and 338 deaths. During the same period in 2016-17, the number was much lower, at 660 cases and 210 deaths. The Ministry of Health said the
increase correlates with the arrival of yellow fever in Brazil's biggest cities, where approximately 35.8 million Brazilians have not until recently been recommended to receive the yellow fever vaccine. In the previous season, only 9.8 million Brazilians were at risk for the virus. CIDRAP News Scan (second item)

top of page...

South America: A measles outbreak in ailing Venezuela is threatening Colombia and Brazil

26 March - In 2016, after a massive, decades-long vaccination campaign, the World Health Organization declared Latin America free of measles. ... But less than two years later, a virulent outbreak in Venezuela, combined with a mass exodus from the South American country, is threatening that medical success story. According to new figures from the Pan American Health Organization, Venezuela has seen 886 cases of measles since June, including 159 cases this year alone. The second-biggest outbreak in the hemisphere this year is Brazil, with 14 cases, and all of them were imported from neighboring Venezuela. Colombia has also reported three confirmed cases, all from Venezuela. Miami Herald

top of page...