27 April 2018

Army Public Health Weekly Update

Army Public Health Center

U.S. Military | Global | Influenza | Veterinary/Food Safety | Wellness | Contact Us

USAFRICOM | USCENTCOM | USEUCOM | USNORTHCOM | USPACOM | USOUTHCOM

Subscription or Comments

If you wish to be added to the APH Weekly Update mailing list, removed from the mailing list, or if you have comments or questions about the update, please contact us.

We welcome your comments. Please feel free to share this update with others who may be interested.

Contents

U.S. MILITARY

- Adjusting suicide rates in a military population: Methods to determine the appropriate standard population
- All 4 service chiefs on record: No harm to units from transgender service
- Coccidioidomycosis, active component, U.S. Armed Forces, 2007–2017
- Military Health System acknowledges risk
- Military sex assault reports jump 10 percent
- Self-report survey data significantly improve predictions of violent crimes in U.S. soldiers
- ‘Whole again’: A vet maimed by an I.E.D. receives a transplanted penis

GLOBAL

- Chikungunya severity patterns mimic dengue, malaria
- Dose entire population with anti-malaria drugs to eradicate disease – study
- Drone distribution of sterile mosquitoes successfully tested
- Giving antibiotics to healthy kids in poor countries: Good idea or bad idea?
- Hearing loss tied to higher risk of accidental injuries
- Rare bee offers hope of clean alternative to toxic chemicals
- Scientists have a promising new approach for treating drug-resistant tuberculosis
- Shoebox-sized lab can diagnose infectious diseases from a drop of blood
- The military paid for a study on sea level rise. The results were scary.
- The vaccine dilemma: how experts weigh benefits for many against risks for a few
- With 250 babies born each minute, how many people can the Earth sustain?

INFLUENZA

- AFHSB: DoD Seasonal Influenza Surveillance Summary
- APHC: U.S. Army Influenza Activity Report
- NHRC: Operational Infectious Diseases - Weekly Surveillance Report
- USAFSAM & DHA: DoD Global Respiratory Pathogen Surveillance Program

VETERINARY/FOOD SAFETY

- Here’s what you should know about the hepatitis A outbreak in Kentucky and Michigan
- How migratory birds are moving Lyme disease to new places and peoples
- NIH study finds no chronic wasting disease transmissibility in macaques
- Romaine lettuce *E. coli* outbreak becomes the biggest U.S. outbreak in 12 years
- *Listeria* strain at South Africa’s Tiger Brands’ plant
- Trends in food recalls finds recalls increased significantly between 2004 and 2013

**WELLNESS**

- Adherence to CDC recommendations for the treatment of uncomplicated gonorrhea — STD Surveillance Network, United States, 2016
- ‘Adrenal support’ supplements may contain unsafe ingredients
- As opioid prescriptions fall, prescriptions for drugs to treat addiction rise
- Common allergic conditions linked to mental health
- Exercise may help make heart younger
- FDA cracks down on sales of Juul tobacco products to minors
- Global study finds 44 genetic risk factors for major depression
- In real life, SPF 100 sunscreens may work better than SPF 50
- Maryland National Guard distributes drug disposal pouches
- New toxic shock study touts bad tampon advice, expert says
- Predictive analytics pointing VA to veterans at risk of suicide
- Rep. Tim Walz calls on VA to study medical marijuana use for veterans
- Vaping tied to higher risk that teens will try marijuana

**USAFRICOM**

- Namibia: Namibia cuts malaria rates by more than 90 percent
- Sierra Leone: The forgotten Ebola survivors of Sierra Leone
- South Africa: Prevalence of drug-resistant tuberculosis and imputed burden in South Africa

**USCENTCOM**

- Afghanistan: Emergency alerts loom as drought takes hold in war-torn Afghanistan
- Syria: Sheer number of attacks on health facilities in Syria shocks researcher

**USEUCOM**

- Europe: Vaccination is Europe’s greatest public health asset
- Scotland: Assessment of health care, hospital admissions, and mortality by ethnicity

**USNORTHCOM**

- U.S.: Airborne dust threatens human health in Southwest
- U.S.: Birth rate for adolescent moms drops to lowest ever
- U.S.: Bronx - Legionnaires’ disease cases being investigated in Co-op City
- U.S.: Fort Campbell investigating possible mumps cases
- U.S.: Lawmakers air pros, cons of shifting stockpile oversight to ASPR
- U.S.: New York to expand use of doula to reduce childbirth deaths
- U.S.: Pruitt unveils controversial ‘transparency’ rule limiting what research EPA can use
- U.S.: The geography of health in America
- U.S.: Tick control program reveals high level of infection in white-footed mice

**USPACOM**

- Australia: Antibiotic resistant super gonorrhea spreading fast as 2 cases detected in Australia
- China/India: Too many men
- Papua New Guinea: Papua New Guinea’s critical HIV drugs shortage sparks warning that people may die

**USSOUTHCOM**

- Venezuela: Malaria on rise in crisis-hit Venezuela, WHO says
Adjusting suicide rates in a military population: Methods to determine the appropriate standard population

18 April - The choice of the standard population is important when calculating adjusted rates for a military population: results can influence policies and funding allocations for programs and initiatives for suicide prevention. We describe the methodological considerations and decision-making process used in choosing a standard population for adjusting rates to compare suicide among US Army soldiers and the general US population. We examined 5 different standard populations, using the direct method to adjust annual suicide rates for the Army and the US population, 2004 to 2015, for age and for age and sex. The pattern of the Army and US population age- and sex-adjusted rates remained consistent with crude rates when adjusted to any of the Army standard population distributions. Using an Army distribution as the standard population produces suicide rates consistent with routine messaging about suicide trends among Army soldiers.

American Journal of Public Health

All 4 service chiefs on record: No harm to units from transgender service

24 April - Air Force Chief of Staff Gen. Dave Goldfein told Congress Tuesday he was not aware of any negative effects from transgender personnel serving, joining all three other service chiefs in a rare public split with President Donald Trump over the issue. Sen. Kristen Gillibrand, D-N.Y., as she had with the top military leaders of the Army, Navy and Marine Corps when they appeared before the Senate Armed Services Committee for their budget hearings, used the opportunity to question Goldfein as to whether he was aware of any "issues of unit cohesion, disciplinary problems or issues of morale resulting from open transgender service." ... Goldfein said he was not aware of any issues with transgender service members, but emphasized that each case is unique. Goldfein said among the transgender service members he had talked to, he had found a "commitment to serve by each of them." Military Times

Coccidioidomycosis, active component, U.S. Armed Forces, 2007–2017

April 2018 - During 2007–2017, there were 574 incident cases of coccidioidomycosis among active component service members, with an overall unadjusted incidence rate of 3.9 cases per 100,000 person-years (p-yrs). Compared to their respective counterparts, the overall rates were highest among those aged 40 years or older, Navy members, enlisted service members, and those in healthcare occupations. Overall incidence rates were similar for
2018 Army Public Health Course

Register now for the 2018 Army Public Health Course (held Aug. 6-10 at Joint Base McGuire-Lakehurst-Dix, New Jersey).

The 2018 Army Public Health Course will provide attendees with the most current public health information topics and improve core competencies for Public Health efforts across all of DoD.

Registration

Military Health System acknowledges risk

23 April - The military’s failure to assure that patients needing complex, high-risk surgical procedures are treated in hospitals with practiced, experienced surgical teams may extend beyond those highlighted in a *U.S. News & World Report* investigation, officials said Monday. The *U.S. News* report, published Thursday, examined data from every Military Health Service hospital worldwide from 2012 through 2016 and found that surgeons at virtually every hospital perform complex procedures in such small numbers that they may be putting their patients at risk. The procedures include weight-loss surgery, hip replacement, knee replacement, mitral-valve repair, surgery to patch abdominal aortic aneurysms, carotid-artery standing and operations to remove cancers of the esophagus, pancreas and lung. ... Acting Assistant Secretary of Defense for Health Tom McCaffery on March 28 asked the Defense Health Board to examine the military’s policies on complex procedures after being made aware of the U.S. News investigation.

U.S. News And World Report

Military sex assault reports jump 10 percent

25 April - U.S. officials say reports of sexual assaults across the military jumped by nearly 10 percent in 2017, a year that saw a massive online nude-photo sharing scandal rock the services, triggering greater awareness of sexual harassment and other similar complaints. The overall increase was fueled by a nearly 15-percent surge in sexual assault reports in the Marine Corps, according to officials familiar with the data. The Marines were at the center of last year’s online investigation by the Naval Criminal Investigative Service, and launched a large public campaign to raise awareness of inappropriate behavior and beef up enforcement of social media rules and conduct. The Navy and the Air Force saw increases of more than 9 percent in reported sexual assaults, while the Army went up 8 percent.

Military Times
Self-report survey data significantly improve predictions of violent crimes in U.S. soldiers

21 April - ... A new study provides evidence that self-reported data can substantially improve predictions of who is at risk of committing physical or sexual crimes. ... "I am part of a research group that is studying risk factors for suicide and related outcomes among U.S. Army soldiers," said Ronald Kessler, the ... corresponding author of the study. ... The researchers administered a New Soldier Survey to 18,838 men and 2,952 women who were beginning Basic Combat Training. ... Kessler previously found that a machine learning model of administrative Army data could predict which soldiers would subsequently commit a violent crime. The new study found that including the self-report data resulted in better predictions of physical violence perpetration by men, sexual violence perpetration by men, and sexual violence victimization of women. “The use of administrative data in conjunction with self-report survey data collected from new soldiers makes it possible to pinpoint a relatively small proportion of soldiers who account for high proportions of several negative outcomes,” Kessler told PsyPost. PsyPost

‘Whole again’: A vet maimed by an I.E.D. receives a transplanted penis

23 April - In a 14-hour operation, a young military veteran whose genitals were blown off by a bomb received an extraordinary transplant: a penis, scrotum and portion of the abdominal wall, taken from a deceased organ donor. The surgery, performed last month at Johns Hopkins Hospital, was the most complex and extensive penis transplant to date, and the first performed on a combat veteran maimed by a blast. ... How many men might need this type of transplant is not known. Data from the Defense Department show that more than 1,300 men sustained so-called genitourinary injuries in Iraq and Afghanistan, and that 31 percent of those injuries involved the penis. About 20 percent of the penile injuries were considered severe — but how many might warrant a transplant is not clear. Women in the military have also suffered genitourinary and reproductive injuries, but they are less common. The New York Times

Chikungunya severity patterns mimic dengue, malaria

25 April - A study today in Clinical Infectious Diseases tracked two waves of chikungunya infections in Nicaragua, demonstrating that outbreak intensity is linked to more severe
clinical presentations of the mosquito-borne disease. Researchers designed a prospective cohort study based in Managua to track the disease in 4,353 children ages 2 to 14 years from 2014 to 2016. ... The first epidemic wave in 2014-2015 was smaller (95 cases) than the second wave in 2015-2016 (444 cases). ... The researchers used clinical observation of symptoms, including joint pain, fever, muscle pain, and headache to gauge severity, with the second epidemic showing a higher proportion of symptomatic infections and a higher odds of systemic symptoms in patients, the authors said. CIDRAP News Scan (first item)

top of page...

Dose entire population with anti-malaria drugs to eradicate disease – study

25 April - Malaria could be quickly eliminated in south-east Asia by an all-out effort to dose whole populations with drugs that treat the disease, regardless of whether people have symptoms or are healthy, say experts. The radical programme may be the best way to outpace rapidly spreading resistance to anti-malarial drugs, they believe. The risk to the rest of the world is significant, we can't let resistance to the drugs get out of control. An experimental programme which involved giving drugs to 365,000 people in malarial “hotspots” across 18,000 square kilometres of Myanmar has succeeded in substantially reducing and even sometimes clearing malaria completely from villages. The Oxford University team who ran the study believe this “nuclear option” is urgently needed to wipe out malaria in south-east Asia before growing resistance to the best drugs now available – the artemisinin compounds – spreads to India and Africa. The Guardian

top of page...

Drone distribution of sterile mosquitoes successfully tested

24 April - The International Atomic Energy Agency announced that it and its partners have successfully tested releasing sterile mosquitoes from drones as a method that could help to suppress the insects that spread Zika and other diseases. IAEA partnered with the Food and Agriculture Organization of the United Nations and has worked with the Swiss-American non-profit group WeRobotics for the past year to develop a drone-based mosquito release mechanism to apply the Sterile Insect Technique to control insect pests, with testing of the system done in Brazil during March 2018. Occupational Health and Safety

top of page...

Giving antibiotics to healthy kids in poor countries: Good idea or bad idea?

25 April - ... Researchers enrolled 190,238 healthy children and, over a period of two years, gave half of them four doses of the antibiotic azithromycin and half of them a placebo. The children lived in three sub-Saharan countries: Malawi, Niger and Tanzania. The results showed a 14 percent reduction in deaths among children age five and younger who
received the antibiotic, though the researchers don’t know exactly why the antibiotics had this effect. In Niger, a country with one of the highest childhood mortality rates in the world, the success was even more dramatic: antibiotic use reduced deaths in children under age five by 18 percent. But there’s a potential trade-off. Giving antibiotics to a community of healthy children could eventually result in a number of diseases becoming resistant to those drugs. NPR

**Hearing loss tied to higher risk of accidental injuries**

24 April - People who have a lot of trouble hearing may be almost twice as likely to experience an accidental injury as individuals with excellent or good hearing, a U.S. study suggests. Each year from 2007 to 2015, researchers surveyed about 272,000 adults from across the country. Among other things, the survey asked people how they rated their own hearing and whether they had suffered an accidental injury within the previous three months. ... Compared to people who described their hearing as “excellent,” people who reported a little trouble hearing were 60 percent more likely to have an accidental injury during the study, and people with “moderate” difficulty hearing were 70 percent more likely to have injuries. When people reported a lot of trouble hearing, they were 90 percent more likely to have an accidental injury. Reuters

**Rare bee offers hope of clean alternative to toxic chemicals**

19 April - When Veronica Harwood-Stevenson gambled her life savings on research into a rare species of bee, she had no way of knowing whether it would pay off. The 33-year-old New Zealander, a trained reproductive biologist, had a hunch that the cellophane-like substance in which the *Hylaeus* bee breeds its larvae could replace toxic chemicals used in plastics. ... Tests revealed that as well as being waterproof, the bee's nest lining was resistant to fire and certain acids, giving it a wide range of potential uses. ... Harwood-Stevenson hopes the final product would go on sale within five years and have a commercial and social impact. The Thomson Reuters Foundation

**Scientists have a promising new approach for treating drug-resistant tuberculosis**

25 April - In research that promises a new approach to treating an age-old human scourge, scientists have found a way to weaken the bacterium that causes tuberculosis and boost its vulnerability to drugs that are rapidly losing their power to cure. ... Its aim: to disrupt the production of the TB bacterium's waxy outer shell and make the pathogen vulnerable to a host of hostile forces, including antibiotic medicines whose effectiveness has begun to wane after years of misuse. In petri dishes, an agent that disrupted the formation of the TB bacterium's fatty protective coating not only delivered a lethal blow, it suppressed the
bacterium's penchant for finding a way to bounce back. And in mice infected with tuberculosis, exposing TB's innards had a more subtle effect: It boosted the killing power of rifampicin, the antibiotic that is a first-line of defense against TB. *Los Angeles Times*

**Shoebox-sized lab can diagnose infectious diseases from a drop of blood**

26 April - Researchers from the University of Toronto have created a shoebox-sized laboratory that can do blood testing in remote, low-resource settings, quickly determining from a drop of blood whether a person has antibodies to specific infectious diseases. The device, which they called the MR Box—short for measles and rubella, the first diseases for which they tested—is still being fine-tuned. But their hope is that eventually it could be used to test for a variety of diseases, for both outbreak control and research purposes, in parts of the world where conventional lab support is hours—or farther—away, the scientists reported Wednesday. *Scientific American*

**The military paid for a study on sea level rise. The results were scary.**

25 April - More than a thousand low-lying tropical islands risk becoming “uninhabitable” by the middle of the century—or possibly sooner—because of rising sea levels, upending the populations of some island nations and endangering key U.S. military assets, according to new research published Wednesday. The threats to the islands are twofold. In the long term, the rising seas threaten to inundate the islands entirely. More immediately, as seas rise, the islands will more frequently deal with large waves that crash farther onto the shore, contaminating their drinkable water supplies with ocean saltwater, according to the research. ... The study focused on a part of the Marshall Islands in the equatorial Pacific Ocean. ... The research also has ramifications for the U.S. military, whose massive Ronald Reagan Ballistic Missile Defense Test Site sits, in part, on the atoll island of Roi-Namur — a part of the Marshall Islands and the focus of the research. *The Washington Post*

**The vaccine dilemma: how experts weigh benefits for many against risks for a few**

23 April - ... [L]ast week’s decision by an expert committee [advised] the World Health Organization to sharply scale back use of a controversial vaccine called Dengvaxia, the first to protect against dengue infection. Two years ago, many of the same experts concluded
the vaccine was safe to use in children 9 and older in places where dengue infection is almost unavoidable — even though there were strong theoretical concerns the vaccine might put some vaccinated kids at higher risk of developing a severe form of dengue. ... Late last year, theory was shown to be reality. After reviewing the data, the WHO’s Strategic Advisory Group of Experts on Immunizations — known as the SAGE — shifted its stance, recommending last week that the vaccine be given only to children who test positive for a previous dengue infection. A point-of-care blood test doesn’t currently exist, leaving the vaccine’s future in limbo for now. STAT

With 250 babies born each minute, how many people can the Earth sustain?

23 April - ... UN data suggests there were about a billion people in 1800, 2 billion in 1927, 5 billion in 1987 and just over 7.5 billion today. There are on average about 250 babies born every minute – more than 130 million in a year. It is projected that there will be 11 billion people by 2100. ... Over the last 30 years, some regions have seen up to 25% more male births than female births, reflecting the persistent low status of women and girls. The consequent gender imbalance can have damaging social effects such as increased sexual violence and trafficking. Broadly speaking, the fastest population rises are being recorded in Africa and Asia, which will have 15 of the 20 most populous nations by 2050. By that year, there will be more Nigerians than Americans. By 2100, it is projected that as many as one-third of all people – almost 4 billion – will be African. At the other end of the scale, population growth has stalled – or even gone into reverse – in parts of western Europe, Japan and Russia. The Guardian

INFLUENZA

AFHSB: DoD Seasonal Influenza Surveillance Summary

For Week 15:

- NORTHCOM: Influenza activity decreased to minimal for the majority of states.
- EUCOM: Influenza activity in EUCOM ranged from minimal to low.
- PACOM: Influenza activity remained minimal in PACOM.
- CENTCOM and AFRICOM: Influenza activity remained minimal in CENTCOM locations with available data.
- SOUTHCOM: Influenza activity remained minimal in Honduras for week 15.
APHC: U.S. Army Influenza Activity Report

For the week ending 14 April 2018 (week 15):
Influenza activity continued to decrease in surveillance week 15 among laboratory specimens, hospitalizations, and influenza-like illnesses. In week 15, 6% (95) of the specimens received were positive. Of these positive specimens, 26% were positive for influenza A, 60% were positive for influenza B, and 11% were positive for RSV. Three non-AD influenza-associated hospitalizations were reported to DRSi; none were vaccinated. So far this season, 25% (49) of the influenza hospitalizations had been previously vaccinated. The percentage of influenza-like illness in week 15 went down 7% since week 14, and week 15 had 18% fewer ILI cases compared to the same week last season. The majority of cases in week 15 with ILI and positive laboratory specimens were non-AD.

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

During week 15 (April 8-14, 2018), influenza activity decreased in the United States.

- Viral Surveillance: Overall, influenza A(H3) viruses have predominated this season. Since early March, influenza B viruses have been 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 below 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.

NHRC: Operational Infectious Diseases - Weekly Surveillance Report

19 April - Febrile respiratory illness cases:
- Military Recruits - 44 positive of 78 tested
- CDC Border Infectious Disease Surveillance and Zika Surveillance - 36 positive of 82 tested
- DoD Beneficiaries – 7 positive of 34 tested.

Five A/H3 cases at 3 different recruit training centers in late March. Three of the cases were vaccinated more than 14 days prior to illness.
USAFSAM & DHA: DoD Global Respiratory Pathogen Surveillance Program

During 1 - 14 April 2018 (Surveillance Weeks 14 & 15), a total of 374 specimens were collected and received from 52 locations. Results were finalized for 356 specimens from 52 locations. The percent influenza positive for Weeks 14 and 15 were 20% and 23%, respectively. The influenza percent positive for the season is approximately 36%.

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

VETERINARY/FOOD SAFETY

Here's what you should know about the hepatitis A outbreak in Kentucky and Michigan

23 April - ... The Kentucky Hepatitis A outbreak has infected more than 300 people across multiple counties and killed at least three. The situation is even more concerning in Michigan, where more than 800 Hepatitis A cases have been reported alongside more than two dozen deaths. Indiana is also reporting a larger number of hep A infections this year compared with 2017, leading public health experts there to push vaccines for those who haven't already received immunizations. ... Hepatitis A's spread ... could theoretically be the combined effect of unvaccinated individuals and tainted substances such as food. After all, as the CDC points out, after a sharp downward trend in these viral infections for more than a decade, the reported number of cases began picking up again about five years ago.

Fortune

How migratory birds are moving Lyme disease to new places and peoples

23 April - ... [In the past] Tufts researchers found they could accurately predict the incidence of Lyme disease in people by looking at rates in dogs. ... [When John D. Scott] studied that report of 80,000 dogs and the tick-borne diseases they harbored, published in 2011, he noticed something that the study authors had not. The highest rates of infected dogs, he saw, were not along coastlines or near cut up bits of forest that are known to be hot-beds of Lyme disease. Rather, the line of highest infection closely followed invisible aerial highways used by songbirds ... on their annual north- south migration. As Scott had long believed, birds were dispersing ticks as they always had, but with a new and insidious kick; one called Borrelia burgdorferi, the Lyme disease pathogen.

Environmental Health News
NIH study finds no chronic wasting disease transmissibility in macaques

26 April - Chronic wasting disease (CWD) did not cross the species barrier to infect cynomolgus macaque monkeys during a lengthy investigation by National Institutes of Health scientists exploring risks to humans. CWD is a type of brain-damaging and fatal prion disease found in deer, elk and moose; in humans, prion diseases can take more than a decade to develop. In the study ... 14 macaques were cerebrally and orally exposed to brain matter from CWD-infected deer and elk, and then monitored for up to 13 years. ... Researchers screened tissues for prion disease ... and found no clinical, pathological or biochemical evidence suggesting that CWD was transmitted to macaques, according to their paper. ... A key public health concern is whether people who consume meat or products from CWD-infected animals are susceptible to prion disease. NIH

top of page...

Romaine lettuce *E. coli* outbreak becomes the biggest U.S. outbreak in 12 years

5 April - The current romaine lettuce *E. coli* outbreak is the most widespread *E. coli* outbreak of any kind in 12 years in the United States, according to numbers in the Centers for Disease Control and Prevention’s Wednesday update. And the CDC still pegs Yuma, Arizona-grown romaine lettuce as the outbreak’s source. Of the sick people interviewed, 95.5 percent reported eating romaine lettuce during the week before falling ill. With another 31 sick from *E. coli* O157:H7 since last Wednesday, the CDC now counts 84 people sick, with 42 hospitalized. That’s the highest number of people sick in an *E. coli* outbreak since the 2006 outbreak that sickened 199 and put 102 in hospitals. Nine people in the current outbreak have developed hemolytic uremic syndrome (HUS), the form of kidney failure that can turn *E. coli* into a killing disease. No deaths have been reported. Miami Herald

top of page...

*Listeria* strain at South Africa's Tiger Brands' plant

25 April - South Africa’s Tiger Brands, which faces two class action lawsuits over a listeria outbreak that has killed 180 people, said results from an independent laboratory confirmed the presence of the deadly listeria strain in one of its food factories. The government, which has been criticized for taking too long to find the cause, in March linked the outbreak to a meat product known as “polony” made by Tiger’s Enterprise Food in the northern city of Polokwane. “On 24 April 2018, Tiger Brands received confirmation of the presence of LST6 in these samples,” it said in a statement. Reuters

top of page...
Trends in food recalls finds recalls increased significantly between 2004 and 2013

26 April - The USDA and FDA have issued a report on food recall trends from 2004 to 2013. In it, they find that recalls increased significantly in that time period. The report, titled “Trends in Food Recalls: 2004-2013” was published in April 2018. Between 2004 and 2008, food recalls in the United States averaged 304 a year. Between 2009 and 2013, the annual average increased to 676 recalls. The volume of food sold in the United States during the latter time period partially explains the statistically significant increase, but other factors are involved too. During the 2009 to 2013 time frame, pathogen and risk detection technology improved substantially. In addition, regulatory oversight and enforcement increased. Finally, Congress passed the Food Safety Modernization Act and the Food Allergic Labeling and Consumer Protection Act. Food Poisoning Bulletin

WELLNESS

Adherence to CDC recommendations for the treatment of uncomplicated gonorrhea — STD Surveillance Network, United States, 2016

27 April - CDC’s treatment recommendations for gonorrhea were revised in 2012 and 2015 based on emerging antimicrobial resistance. In 2016, 81% of gonorrhea cases in seven jurisdictions were treated with the recommended regimen for uncomplicated gonorrhea (250 mg dose of ceftriaxone [IM] plus 1 g dose of azithromycin [PO]), but this varied by provider type. Providers should be aware of the national guidelines for the treatment of sexually transmitted infections. Monitoring of treatment practices is a critical public health priority to help assure that patients receive the highest quality of care, and to address the emerging threat of antimicrobial-resistant gonorrhea.

Morbidity and Mortality Weekly Report

'Adrenal support' supplements may contain unsafe ingredients

25 April - Many “adrenal support” supplements sold online as energy boosters may contain thyroid hormones and steroids that aren’t listed on the labels and can cause dangerous side effects, a study suggests. Researchers purchased the 12 most popular dietary supplements for enhancing metabolism, promoting energy, easing so-called adrenal fatigue, or providing “adrenal support.” The adrenal gland makes hormones like cortisol, which helps regulate the metabolism and manage stress, and aldosterone, which controls blood pressure. Lab tests of the supplements found they all contained thyroid hormone and most had at least one
As opioid prescriptions fall, prescriptions for drugs to treat addiction rise

19 April - The number of new monthly prescriptions for medications that treat opioid addiction nearly doubled over the past two years, according to new data, while prescriptions for opioid painkillers continued to decline. The changing calculus reflects a stepping up of efforts among policymakers and the medical establishment to address the nation’s opioid epidemic, which is killing more than 115 people every day. But it also underscores questions about whether some pain patients are now being undertreated, and whether tightened prescribing over the last few years has contributed to the surge in overdose deaths from heroin and especially fentanyl. Although the number of people taking medications to combat addiction is rising, it remains a small fraction of the roughly 2.6 million people believed to suffer from “opiod use disorder,” or addiction. The federal government has estimated that about 20 percent of them are getting some kind of treatment, but of those, only about a third are getting buprenorphine, naltrexone or methadone, the three medications approved by the Food and Drug Administration.

Common allergic conditions linked to mental health

23 April - ... A new study, published in the journal Frontiers in Psychiatry, uncovers links between mental health and the "three A's": asthma, allergic rhinitis (or hay fever), and atopic dermatitis (or eczema). ... [Dr. Nian-Sheng Tzeng and his team] took data from the Taiwan National Health Insurance Program. Across 15 years, they followed people of all ages. In total, the study involved 46,647 people with allergic diseases and 139,941 without. Dr. Tzeng's suspicions were confirmed: across the duration of the study, 6.7 percent of participants without allergic conditions developed a psychiatric condition. For those with an allergic condition, this figure rose to 10.8 percent. That's a worrying 66 percent increase. Of the three A's, eczema produced the smallest increase in risk. The researchers also showed that the use of certain asthma medications lowered the risk of developing a psychiatric disorder.

Exercise may help make heart younger

25 April - ... In a new study performed in mice, researchers ... uncovered one explanation for why exercise might be beneficial: It stimulates the heart to make new muscle cells, both under normal conditions and after a heart attack. ... The findings have implications for public health, physical education, and the rehabilitation of cardiac patients. The human heart has a relatively low capacity to regenerate itself. Young adults can renew around 1 percent of their heart muscle cells every year, and that rate decreases with age. Losing those
cells is linked to heart failure, so interventions that increase cell formation have the potential to help prevent it. Harvard Gazette

top of page...

FDA cracks down on sales of Juul tobacco products to minors

24 April - The U.S. Food and Drug Administration on Tuesday said it launched a crackdown on the sale of e-cigarettes and tobacco products to minors, particularly those developed by Juul Labs Inc. The regulator said it had issued 40 warning letters to retailers, including multiple 7-Eleven stores, for violations regarding illegal sales of Juul products, after uncovering violations through compliance checks since the beginning of March. “The FDA has been conducting a large-scale, undercover nationwide blitz to crack down on the sale of e-cigarettes – specifically Juul products – to minors at both brick-and-mortar and online retailers,” FDA Commissioner Scott Gottlieb said in a statement. Reuters

top of page...

Global study finds 44 genetic risk factors for major depression

26 April - International scientists have identified 44 genetic variants that can increase the risk of developing major depression and found that all humans carry at least some of them. The new findings could help explain why not everyone treated with antidepressants sees their condition improve, the scientists said, and could also point the way toward new medicines. In the largest study of its kind, scientists also found that the genetic basis for depression is shared with other psychiatric disorders such as schizophrenia and that a number of the variants are linked to the targets of antidepressant drugs. Reuters

top of page...

In real life, SPF 100 sunscreens may work better than SPF 50

24 April - Sunscreens with a rating of SPF 100 may be more effective than ones rated SPF 50, according to a randomized trial, even though the Food and Drug Administration says that any SPF above 50 offers no additional protection. ... The reason may be that in practice, people almost never put on enough sunscreen. “If you look at the laboratory results, you don’t see much of difference between 100 and 50,” said the senior author, Dr. Darrell S. Rigel, a professor of dermatology at New York University. “But in the real world, the higher SPFs are much more forgiving, and since people are under-applying sunscreen, they’re much more likely to protect.” The New York Times

top of page...
Maryland National Guard distributes drug disposal pouches

21 April - A new tool is making it easier to safely dispose of unwanted prescription drugs. More than 90,000 disposal pouches are being distributed statewide by the Maryland National Guard. Officials hope the pouches will help keep prescription drugs off the streets. The pouches can be used as a safe alternative to discarding medication at takeback events or searching for turn-in boxes. ... When prescription drugs are put in the pouch, water is added to the powder in the bag, and the resulting mixture neutralizes the drugs, making them safe to throw away. Community organizations and businesses donated 100,000 pouches. WBAL

New toxic shock study touts bad tampon advice, expert says

24 April - A new toxic shock syndrome (TSS) study contains not only new data but some recycled misinformation on tampon use, according to a leading U.S. expert who says the incidence of the rare syndrome may be rising in some regions. In the discussion section of the study ... the authors recommend, "Long tampon carriage may also alter the structure [of the tampon] in a manner favoring S. aureus growth and TSST-1 production, advocating for short use time and frequent changing." ... Patrick Schlievert, PhD, chair of the Department of Microbiology and Immunology at the University of Iowa ... asked that the study be changed immediately (his request was denied). "The statement is absolutely false," Schlievert told CIDRAP News. "The study was fine except that one sentence, but we've known since the early 1980s that frequent changing of tampons increases, not decreases, the risk of TSS by introducing more oxygen into the vagina." CIDRAP

Predictive analytics pointing VA to veterans at risk of suicide

20 April - Early data shows the Veterans Affairs Department is finding some success with one of its suicide prevention programs. The REACH Vet program draws on the agency’s vast trove of electronic health records and uses predictive analytics to identify patients who might be at risk of suicide. It alerts VA clinicians of veterans who could benefit from more attention, and the program prompts clinicians to call and check in with their patients. ... Veterans who engaged with REACH Vet were admitted to mental health inpatient units less often, showed up to more mental health and primary care appointments and visited the VA more frequently, compared to veterans who weren't part of the program. Federal News Radio
Rep. Tim Walz calls on VA to study medical marijuana use for veterans

22 April - In another sign of the growing acceptance of marijuana in this country, the Senate's Democratic leader, Charles Schumer of New York, said last week that he would introduce legislation that would decriminalize marijuana on the federal level. His announcement came on the heels of a bipartisan proposal that would allow the Veterans Administration to study cannabis to treat chronic pain and the symptoms of PTSD. That measure was cosponsored by Republican Congressman Phil Roe of Tennessee, chair of the Veterans Affairs Committee, and Congressman Tim Walz of Minnesota, the ranking Democratic member. NPR

Vaping tied to higher risk that teens will try marijuana

23 April - Teens who use e-cigarettes may be twice as likely to smoke pot as their peers who never try vaping, a U.S. study suggests. The results, from surveys of more than 10,000 youth ages 12 to 17, add to earlier evidence suggesting that e-cigarettes may be a gateway to smoking tobacco and experimenting with drugs. In the current study, younger teens aged 12 to 14 were 2.7 times more likely to smoke pot once they tried vaping, while the odds of marijuana use were 1.6 times higher for older adolescents who used e-cigarettes. Reuters

USAFRICOM

Namibia: Namibia cuts malaria rates by more than 90 percent

23 April - Namibia highlighted historic success in cutting malaria rates by more than 90 percent, according to a statement recently issued by the African Leaders Malaria Alliance (ALMA) on the Commonwealth Heads of Government Meeting 2018 in London. Namibia’s Director of Special Disease Program, Anne-Marie Nitschke told Xinhua on Monday that the country is committed to eliminating malaria across the country in the next few years and emphasized the importance of cross border collaboration and the regional elimination efforts of the E8 partners in supporting this ambition. “Over the years we have championed in the battle against malaria with initiatives that include Indoor Residual Spraying (IRS), training and monitoring of spray teams, strengthening of electronic surveillance system as well as awareness campaign programs,” she added. Xinhua
Sierra Leone: The forgotten Ebola survivors of Sierra Leone

25 April - ... Between 2013 and 2016, the Ebola virus claimed more than 11,000 lives across West Africa. [Haja] Bah is one of about 4,000 Ebola survivors in Sierra Leone. Four years after the outbreak began devastating West Africa and two years after the World Health Organization (WHO) declared the end of the last flare-up, Bah and other survivors still cope with an array of physical and mental issues. They have channeled their frustration into a lawsuit that seeks to hold the government accountable for the support they were promised — and say they have not received. ... According to a 2016 WHO report, between 50 and 75 percent of survivors report joint and muscle pain. Many experience a range of eye problems caused by uveitis, an inflammation that can lead to blindness. Around a quarter of survivors report losing their hearing. Mental health problems such as anxiety, depression and PTSD — stemming from the trauma of the virus itself and conditions in treatment centers — are pervasive. NPR

South Africa: Prevalence of drug-resistant tuberculosis and imputed burden in South Africa

20 April - Globally, per-capita, South Africa reports a disproportionately high number of cases of multidrug-resistant (MDR) tuberculosis and extensively drug-resistant (XDR) tuberculosis. We sought to estimate the prevalence of resistance to tuberculosis drugs in newly diagnosed and retreated patients with tuberculosis provincially and nationally, and compared these with the 2001–02 estimates. ... The overall prevalence of MDR tuberculosis in South Africa in 2012–14 was similar to that in 2001–02; however, prevalence of rifampicin-resistant tuberculosis almost doubled among new cases. Furthermore, the high prevalence of isoniazid mono-resistant tuberculosis, not routinely screened for, and resistance to second-line drugs has implications for empirical management. The Lancet

USCENTCOM

Afghanistan: Emergency alerts loom as drought takes hold in war-torn Afghanistan

23 April - Afghanistan faces the threat of serious drought this year after recording the lowest snowfall and rain in years over the winter, officials said on Monday, with at least 20 of 34 provinces already suffering badly. The 20 provinces in the war-torn country saw a 60 percent shortfall in rain and snowfall during the winter season. "This year drought has reached a level that we will have to announce an emergency in several parts of the country," said Hashmat Khan Bahaduri, spokesman for the Afghanistan National Disaster
Management Authority in Kabul. ... Snowmelt is an important source of water for crops and irrigation in a country where food is scarce for many households.

The Thomson Reuters Foundation

top of page...

Syria: Sheer number of attacks on health facilities in Syria shocks researcher

24 April - ... Dr. Rohini Haar, a public health researcher at the University of California, Berkeley, led a team that collected ground reports of attacks in 2016 in northern Syria, filed by civilians via cellphone text. Haar wanted to find out if human rights organizations were missing anything in their reports. Sending outside investigators into a country, or monitoring news reports and social media, certainly has merit, she thought. "But that doesn't capture all the stuff that goes on day to day that people don't realize is also a violation of international law," she says. ... The data ... shows a total of 200 health care-related attacks in the governorates of Aleppo, Idleb, Homs and Hama. Haar and her team focused on these provinces because they include large, historically rebel-held cities — Idleb and Aleppo — that had already sustained a lot of violence. ... In the attacks her team analyzed, 112 health-care staff and 185 patients died. NPR

top of page...

USEUCOM

Europe: Vaccination is Europe's greatest public health asset

23 April - ... Despite their outstanding track record, several EU and neighbouring countries currently face unprecedented outbreaks of vaccine-preventable diseases due to insufficient vaccination coverage rates. This is caused, in part, by misconceptions surrounding vaccination. Measles cases tripled in the EU between 2016 and 2017; in the past two years, 50 people have died due to measles and two from diphtheria. ... A number of outbreaks of vaccine-preventable diseases have been linked to health professionals. In its recent risk assessment of measles transmission, the European Centre for Disease Prevention and Control raised the alarm over the frequency of measles cases among healthcare workers. Seasonal flu vaccination coverage rates also remain significantly below the 75 per cent target for older age groups, and as a result, around 40,000 people in Europe die from complications of seasonal flu every year. The Parliament Magazine

top of page...

Scotland: Assessment of health care, hospital admissions, and mortality by ethnicity

20 April - Ethnic minorities often experience barriers to health care. We studied six
established quality indicators of health-system performance across ethnic groups in Scotland. ... These data suggest concerns about the access to and quality of primary care to prevent avoidable hospital admissions, especially for south Asians. Relatively high preventable and amenable deaths in white Scottish people, compared with several ethnic minority populations, were unexpected. Future studies should both corroborate and examine explanations for these patterns. Studies using several indicators simultaneously are also required internationally. The Lancet

top of page...

USNORTHCOM

U.S.: Airborne dust threatens human health in Southwest

24 April - ... Researchers ... have found that in the coming decades, increased dust emissions from severe and prolonged droughts in the American Southwest could result in significant increases in hospital admissions and premature deaths. "Our results indicate that future droughts driven by climate change could pose a potentially substantial public health burden in the U.S. Southwest," said Pattanun "Ploy" Achakulwisut, former Harvard graduate student and first author of the paper. "This is a climate penalty that is not yet widely recognized."

Science Daily
top of page...

U.S.: Birth rate for adolescent moms drops to lowest ever

25 April - Birth rates for young girls ages 10 to 14 in the U.S. dropped to record lows in 2016, researchers found, although they remained higher than in most other developed nations. In 2016, there were 2,253 births to girls ages 10 to 14 compared with 8,519 in 2000, for a rate of 0.2 births per 1,000 girls (down from 0.9 births per 1,000), reported T.J. Matthews, MS, and Brady E. Hamilton, PhD, both of the National Center for Health Statistics in Bethesda, Md. ... Examining demographic groups, the researchers found that the largest decline in birth rate among girls ages 10-14 was among non-Hispanic black girls (0.5 per 1,000 in 2016 compared with 2.4 per 1,000 in 2000). The rate for Hispanic girls fell from 1.7 to 0.4, and for American Indian or Alaska Native girls, from 1.1 to 0.3, respectively.

MedPage Today
top of page...

U.S.: Bronx - Legionnaires’ disease cases being investigated in Co-op City

26 April - New York City health officials announced Wednesday that they are investigating three Legionnaires’ disease cases in three connected buildings at Co-op City in the Bronx. One person has died and to others in connecting buildings have been treated and released from the hospital. Health officials urged residents of these buildings to seek treatment if
they experience symptoms of Legionnaires' disease. In addition, residents who are over 50 or have underlying medical conditions should avoid showering until the investigation is completed. Outbreak News Today

top of page...

U.S.: Fort Campbell investigating possible mumps cases

24 April - U.S. Army Public Health officials from Fort Campbell are investigating possible mumps cases among a Fort Campbell family and are working to notify personnel who may have been exposed, officials said in a news release on Tuesday. "Blanchfield Army Community Hospital sent lab results to the Tennessee Department of Health to determine if the case is mumps positive and have started notifying people who may have been exposed as a precautionary measure to limit possible exposure,” said Major Simone Edwards, Chief of Public Health Nursing at Blanchfield Army Community Hospital. WSMV

top of page...

U.S.: Lawmakers air pros, cons of shifting stockpile oversight to ASPR

24 April - The Trump administration plan to shift oversight of the nation's Strategic National Stockpile (SNS) and its $575 million budget from the Centers for Disease Control and Prevention (CDC) to the Department of Health and Human Services (HHS) Assistant Secretary for Preparedness and Response (ASPR) is set to occur in October, but some observers worry that the plan could impede deployment when supplies are needed and that decisions to acquire products might become more politicized, the Washington Post reported today. … According to the Post, some public health officials and bipartisan members of Congress raised concerns about how the change might affect the complex interplay between the federal government and the groups that distribute SNS materials: state and local health departments. CIDRAP News Scan (first item)

top of page...

U.S.: New York to expand use of doulas to reduce childbirth deaths

22 April - Gov. Andrew M. Cuomo announced on Sunday a series of initiatives aimed at addressing a disturbingly high rate of maternal mortality among black women, who are four times more likely to die in childbirth than white women in New York State, according to a study released last year. The plan includes a pilot program that will expand Medicaid coverage for doulas, birth coaches who provide women with physical and emotional support during pregnancy and childbirth. Studies show the calming presence and supportive reinforcement of doulas can help increase birth outcomes and reduce birth complications for the mother and the baby. The New York Times

top of page...
U.S.: Pruitt unveils controversial ‘transparency’ rule limiting what research EPA can use

24 April - Environmental Protection Agency Administrator Scott Pruitt moved Tuesday to limit what science can be used in writing agency regulations, a change long sought by conservatives. The proposed rule would only allow the EPA to consider studies where the underlying data is made available publicly. Such restrictions could affect how the agency protects Americans from toxic chemicals, air pollution and other health risks. Pruitt and proponents describe the new approach as an advance for transparency, one that will increase Americans’ trust and confidence in the research on which EPA decisions are based. … But a chorus of scientists and public health groups warn that the rule would effectively block the EPA from relying on long-standing, landmark studies on the harmful effects of air pollution and pesticide exposure. Such research often involves confidential personal or medical histories or proprietary information. The Washington Post

top of page...

U.S.: The geography of health in America

23 April - In 2016, a greater percentage of babies were born at low birthweight in Jackson County, Colorado, than anywhere else in the country. That might not seem like such a big deal these days, with modern technology powerful enough to nurse babies who are born months premature back to health. But according to the Robert Wood Johnson Foundation’s annual County Health Rankings Report, we should think twice before dismissing the importance of underweight babies. Indeed, the 2018 Key Findings Report cautions that low birthweight (LBW) is an important signifier of long-lasting health discrepancies. … Researchers dig into the lines along which various health discrepancies fall, such as birth weight, child poverty, teen pregnancy, educational attainment, unemployment, and residential segregation. What they find is that these health measures are the worst in the Southwest, Southeast, Mississippi Delta, Appalachia, and the Plains regions. Within these places, communities of color are disproportionately affected across all measures. CityLab

top of page...

U.S.: Tick control program reveals high level of infection in white-footed mice

25 April - A surprisingly high percent of the white-footed mice collected last summer in Howard County, Maryland, in an Agricultural Research Service (ARS) Areawide Integrated Tick Management Project turned out to be infected with the bacteria that cause Lyme disease. … The high rate of white-footed mice infected with Borrelia burgdorferi, the bacteria that cause Lyme disease, in Howard County—just over 50 percent of captured mice—was a little surprising to ARS project leader Andrew Li. What was more surprising, according to Li, was that collaborators doing analogous sampling of mice in New Haven County, Connecticut, found an unusually low rate of infection of about 35 percent in 2017. More
commonly, white-footed mice in Connecticut have infection rates as high as 80 percent.

Phys.org

top of page...

**USPACOM**

Australia: Antibiotic resistant super gonorrhea spreading fast as 2 cases detected in Australia

21 April - Two cases of multi-drug resistant gonorrhea are detected in Western Australia and Queensland. This came as the first patient diagnosed with the disease was cured in UK. Australia’s Department of Health said that evidence suggested that one of the two patients acquired the disease after traveling in Southeast Asia. Meanwhile, the UK patient who became the first person with the super gonorrhea strain has luckily been cured. Incidentally, the person had also contracted the infection from Southeast Asia. Dr. Gwenda Hughes, Consultant Scientist and Head of Sexually Transmitted Infection Section at Public Health England, confirmed that the man was cured by the antibiotic ertapenem. The doctor adds that the two recent cases of super gonorrhea in Australia are a timely reminder that more cases of multi-drug resistant gonorrhea are expected in the future.

Tech Times

top of page...

China/India: Too many men

18 April - Nothing like this has happened in human history. A combination of cultural preferences, government decree and modern medical technology in the world’s two largest countries has created a gender imbalance on a continental scale. Men outnumber women by 70 million in China and India. The consequences of having too many men, now coming of age, are far-reaching: Beyond an epidemic of loneliness, the imbalance distorts labor markets, drives up savings rates in China and drives down consumption, artificially inflates certain property values, and parallels increases in violent crime, trafficking or prostitution in a growing number of locations. ... Barely recognized, the ramifications of too many men are only starting to come into sight. “In the future, there will be millions of men who can’t marry, and that could pose a very big risk to society,” warns Li Shuzhuo, a leading demographer at Xi’an Jiaotong University.

The Washington Post

top of page...

Papua New Guinea: Papua New Guinea's critical HIV drugs shortage sparks warning that people may die

21 April - Papua New Guineans living with HIV may die if critical anti-retroviral drugs used to treat the virus are not restocked soon, a member of the local HIV advocacy body has warned. The amount of available drugs has fallen to low levels, and the country’s medical facilities have begun eating into what is known as its buffer stock. ... The 2018 budget,
handed down in November, allocated 3.6 million Kina ($1.43 million) to HIV/AIDS treatment
drugs, down from 8 million Kina ($3.18 million) in 2017. ... The risks of ART stopping include
drug resistance, viral rebound, increased risk of HIV transmission, and a reduction of the
amount of infection-stopping white blood cells in the system. ABC News
top of page...

**USSOUTHCOM**

Venezuela: Malaria on rise in crisis-hit Venezuela, WHO says

24 April - Malaria is spreading rapidly in crisis-hit Venezuela, with more than an estimated
406,000 cases in 2017, up roughly 69 percent from a year before, the largest increase
worldwide, the World Health Organization (WHO) said on Tuesday. Venezuelan migrants
fleeing the economic and social crisis are carrying the mosquito-borne disease into Brazil
and other parts of Latin America, the U.N. agency said, urging authorities to provide free
screening and treatment regardless of their legal status to avoid further spread. ...
Venezuelan officials reported 240,613 malaria cases in 2016, many in the gold-mining state
of Bolivar bordering Guyana, with an estimated 280 deaths, according to the WHO. The
2017 estimate has leapt to 406,000 cases - five times higher than in 2013. Reuters
top of page...
The *Army Public Health Weekly Update* does not analyze the information as to its strategic or tactical impact on the US Army and is not a medical intelligence product. Medical intelligence is available from the [National Center for Medical Intelligence](#).

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

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

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

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