Published by
Army Public Health Center

17 March 2017

Army Public Health Weekly Update

U.S. Military | Global | Influenza | Veterinary/Food Safety | Wellness | Contact Us
USAFRICOM | USCENTCOM | USEUCOM | USNORTHCOM | USPACOM | USSOUTHCOM

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

Approved for public release, distribution unlimited.

U.S. MILITARY

- Brig. Gen. Scott Dingle to lead Army Regional Health Command-Atlantic
- Mattis: ‘Climate change’ is a national security threat
- Military medicine promotes global health security with partner nations in West Africa
- OEF/OIF vets have high rates of exposures
- U.S. military MDs not prepared to care for trans patients

GLOBAL

- 5 things you probably didn’t know about Ebola
- B vitamins may have ‘protective effect’ against air pollution
- Can drones deliver emergency defibrillators?
- Nanoscience discovery may slow spread of disease outbreaks, flu viruses
- NIH-funded scientists deploy CRISPR to preserve photoreceptors in mice
- Pregnant women’s sex hormones waver with phthalate exposure
- Progress in treating hearing loss
- Rapid blood pressure drops in middle age linked to dementia in old age
- Stockholm tied for world’s least polluted capital: WHO
- Two-part Ebola vaccine offers long-lasting protection
- Water scarcity needs “urgent and massive response” in North Africa and Near East
- ZIKA VIRUS
- CDC adds 4 countries to interim travel guidance related to Zika virus
- Estimated incubation period for Zika virus disease
- Zika warning is issued over sperm banks in the Miami area

INFLUENZA

- AFHSB: DoD Seasonal Influenza Surveillance Summary
- APHC: U.S. Army Influenza Activity Report
- China: Bird flu death toll rises to 161 in worst outbreak since 2009
- ECDC: Flu News Europe
- NHRC: Febrile Respiratory Illness Surveillance Update
- USAFSAM & DHA: DoD Global, Laboratory-Based, Influenza Surveillance Program
VETERINARY/FOOD SAFETY

- FDA wins permanent injunction in *Salmonella* case
- Iran: Canine shelter takes on Tehran stray dog problem — humanely
- Soldiers provide preventative care to horses in Kuwait
- Spain finds atypical mad cow case, sees no trade curbs

WELLNESS

- Colorado supplement makers ordered to cease operations
- Employees who decline genetic testing could face penalties under proposed bill
- Few teens receive effective treatment for opioid addiction
- Gluten-free diets may be tied to an increased risk of Type 2 diabetes
- Lethal opiates delivered by mail from China, killing addicts in the U.S.
- Nursery products to blame for rise in infant injuries, study finds
- Out of the gate, health and research apps face-plant
- Severe hypoglycemia linked to increased risk of death in people with diabetes
- Study flags later risks for sleep-deprived kids
- Study identifies African-specific genomic variant associated with obesity
- Un-sweetened: How a Maryland county cut soda sales without a soda tax
- Weight loss, especially with surgery, tied to lower risk of heart failure
- What your therapist doesn’t know

USAFRICOM

- Africa: Lassa fever – Benin, Togo and Burkina Faso
- Burkina Faso: In a remote West African village, a revolutionary genetic experiment is on its way
- Burundi: Burundi says malaria reaches epidemic proportions
- Ethiopia: Death toll reaches 72 in Ethiopia landfill collapse
- Kenya: Kenya doctors end strike after deal with government
- Mozambique: Mozambique cholera outbreak spreading, more than 1,200 infected

USCENTCOM

- Syria: How many health workers have been killed in Syria?
- Syria: Six years into Syria’s war, rebel areas face deepening medical crisis

USEUCOM

- Europe: ECDC reports spike in yellow fever from South America travel
- Europe: EU chemical agency says weed killer glyphosate not carcinogenic
- Romania: Measles outbreak kills 17 unvaccinated children in Romania

USNORTHCOM

- U.S.: Beyond Lyme - New tick-borne diseases on the rise
- U.S.: Deadly fungal infection that doctors have been fearing now reported in U.S.
- U.S.: Federal health department would face a nearly 18 percent cut
- Flea-borne bacterial disease spreading wider in Texas
- U.S.: New guideline will allow first-year doctors to work 24-hour shifts
- U.S.: Patients lose sight after stem cells are injected into their eyes
- U.S.: Plaintiffs in U.S. lawsuit say Monsanto ghostwrote Roundup studies
- U.S.: What hospitals waste
One Health: APHC Quarterly Magazine

The Spring edition of One Health includes articles on the 75th anniversary of APHC, community resource guides, and Army fatigue.

USPACOM

- Asia: Looming threat of Asian tobacco companies to global health
- China: Paying for cleaner air; study finds many in China willing to invest a portion of income for cleaner environment
- India: Food, drink giants plot fightback as India looks to tighten rules
- Philippines: Duterte’s new anti-drug ‘super agency’ includes health, education, welfare

USSOUTHCOM

- PAHO reports 600 new chikungunya cases

U.S. MILITARY

Brig. Gen. Scott Dingle to lead Army Regional Health Command-Atlantic

8 March - Brig. Gen. R. Scott Dingle, deputy chief of staff for staff operations at the U.S. Army Medical Command, has been named commanding general of the military branch’s Regional Health Command-Atlantic, the Defense Department announced Tuesday. He previously served as director of healthcare operations at the Office of the Surgeon General and commander of the 30th Medical Brigade in Germany before he joined MEDCOM’s G-3/5/7 office in 2015. ExecutiveGov

DoD expands drug testing of recruits

10 March - The revised policy allows applicants who test positive to reapply after 90 days if the particular service allows it, but an individual who tests positive on the second test, regardless of drug type, is permanently disqualified from military service. Effective April 3, drug testing done of all applicants for military service is expanding to include the same 26-drug panel used for active military members, the Defense Department’s director of drug testing and program policy, Army Col. Tom Martin, announced. DoD News reported that this change "is due to the level of illicit and prescription medication abuse among civilians, as well as the increase in heroin and synthetic drug use within the civilian population.” Occupational Health & Safety

Mattis: 'Climate change' is a national security threat

14 March - In a clash with President Trump’s environmental team, Defense Secretary Jim Mattis has declared that climate change is a threat to national security and one military planners must consider in drawing up strategies. According to a report from ProPublica, Mattis told Democratic senators that climate change is real and "can be a driver of instability.” Washington Examiner
**Integrative Health Care and U.S. Military Personnel, Veterans, and their Families**

This spring, the National Center for Complementary and Integrative Health, part of the National Institutes of Health, is hosting a series of events on integrative health and U.S. military personnel, veterans, and their families.

**MARCH 27, 2017**
-- 10:00 a.m. ET: Presentation, “Promoting Resilience in Military Families: After Deployment, Adaptive Parenting Tools,”
-- 2:00 p.m. ET: Facebook Live Q&A Session

**APRIL 10, 2017**
-- 10:00 a.m. ET: Presentation, “Pain and Opioid Management in Veterans: Evidence, Lessons Learned, and Future Directions in the Use of Collaborative and Integrated Care Approaches”
-- 2:00 p.m. ET: Facebook Live Q&A Session

**APRIL 25, 2017**
-- 1:00 p.m. ET: Facebook Live Q&A Session on “Mind and Body Approaches and Military Personnel and Their Families”

**More information**

---

**Medical evacuations, active and reserve components, U.S. Armed Forces, 2013–2015**

February 2017 - From 1 January 2013 through 31 December 2015, a total of 3,912 medical evacuations of service members from the U.S. Central Command area of responsibility were followed by at least one medical encounter in a fixed medical facility outside the operational theater. Overall, there were more medical evacuations for mental disorders than for any other category of illnesses or injuries. Among all service members, annual rates of medical evacuations attributable to battle injuries decreased from 3.4 per 1,000 deployed person-years (dp-yrs) in 2013 to a low of 0.7 per 1,000 dp-yrs in 2015. Annual rates of medical evacuations attributable to non-battle injuries and illnesses were relatively stable during 2013–2014 but decreased by 43.1% in 2015. [Medical Surveillance Monthly Report](#)

**Military medicine promotes global health security with partner nations in West Africa**

9 March - … As part of the Joint West Africa Research Group (JWARG), the team [of Military Health System leaders] traveled to several medical research and clinical training facilities in Nigeria, Liberia and Ghana, where U.S. military medical experts are helping to strengthen important biosurveillance and clinical response capabilities. They also took the opportunity to meet with military and public health leaders in each nation to discuss how to continue the momentum of recent successes. [Health.mil](#)

**OEF/OIF vets have high rates of exposures**

March 2017 - Recent U.S. veterans have high rates of potentially harmful environmental exposures which are linked to an increased likelihood of respiratory conditions, such as asthma. … The research, led by the VA’s Post-Deployment Health Epidemiology Program, analyzed national health survey responses from about 20,000 veterans supporting the wars in Iraq and Afghanistan. About 13,000 veterans were deployed and 7,000 were nondeployed. Results indicated that both groups had high rates of potentially hazardous respiratory exposures, including dust and sand, burning trash, petrochemical fumes, oil fires or industrial pollution. … The study found that veterans with any respiratory exposure were more likely to have asthma, sinusitis or bronchitis. It also noted that 23% of deployed veterans and 28% of nondeployed veterans with any respiratory exposure reported those diseases. [U.S. Medicine](#)

**U.S. military MDs not prepared to care for trans patients**

15 March - While the majority of U.S. military doctors surveyed at a meeting last year felt they could provide “nonjudgmental” care to people who are transgender, most said they have received little or no training on transgender care. Nearly 90 percent of the doctors said they had not received enough training to prescribe hormones to help patients prepare for a gender transition. The prevalence of gender dysphoria in the military “seems to come as a surprise to people,” said lead author Dr. Natasha Schvey, of the Uniformed Services
Classified Version of the Weekly Update

An Army Public Health Weekly Update is available with articles classified up to the SECRET level from the USAPHC SIPRNet site: http://phc.army.smil.mil Look under Hot Topics & Current Issues.

To access this version, you will need a SECRET clearance and a SIPRNet account.

GLOBAL

5 things you probably didn’t know about Ebola

7 March -
1. At the start of the Ebola outbreak in West Africa, a maternity hospital was forced to close.
2. Surgical symptoms can be mistaken for Ebola. ... Ebola patients have an incubation period of 21 days and initial signs and symptoms can be nausea, vomiting, fever, and/or generalized aches and pains. Unfortunately, most of these are non-specific and are especially common in some surgical conditions.
3. Two of the 10 surgeons in Sierra Leone died of Ebola during the outbreak. Prior to the Ebola outbreak in West Africa there were only 10 surgeons in Sierra Leone for a population of 6 million. Ebola caused the death of two of them, 20% of the workforce. ...
4. Despite the risks, it is possible to safely operate during an outbreak. ...
5. Official guidelines for surgical care and Ebola are still lacking.

Johns Hopkins University Press

B vitamins may have 'protective effect' against air pollution

14 March - B vitamins may offer some protection against the impacts of air pollution, a small scale human trial suggests. Researchers in the US found that high doses of these supplements may "completely offset" the damage caused by very fine particulate matter. The scientists involved say the effect is real but stress the limitations of their work. ... Ten volunteers were tested initially exposed to clean air while given a placebo to measure their basic responses. The same volunteers were later tested with large doses of B vitamins while exposed to air containing high levels of PM2.5. The researchers found that a four week B vitamin supplementation limited the PM2.5 effect by between 28-76% at ten gene locations. They found a similar reduction in impact on the mitochondrial DNA, the parts of cells that generate energy. BBC News

Can drones deliver emergency defibrillators?

16 March - A drone network could be deployed to speed defibrillators to bystanders trying to help people in cardiac arrest, getting the devices to the patient faster than emergency services, a recent Canadian study suggests. ... If drones were spread evenly across the region, researchers calculated that it would require 37 drones spread across 23 bases to get...
patients started on defibrillator treatment about one minute faster than they would have been if they waited for emergency services. Reuters

Nanoscience discovery may slow spread of disease outbreaks, flu viruses

14 March - Fewer mass disease outbreaks and better vaccines may result from a new nanoscience-based method for identifying emerging flu viruses developed by international scientists. ... The team’s discovery may significantly speed up identification of flu viral strains, thwarting disease spread and leading to more reliable vaccines. ... Working with various flu strains, the research team developed a system with gold nanoparticle films that is 500 times more sensitive than conventional detection methods. ... Unlike existing and expensive detection equipment, a portable identification kit designed by the researchers uses a simple colour change to identify viral strains from complex samples. This more accurate system requires only microscopic amounts of virus, allowing vaccine makers to produce targeted flu vaccines earlier. ... “Food-borne viruses such as Norwalk, hepatitis and those that cause gastroenteritis can also be quickly tested for identification in areas where outbreaks are located so they can be confined and treated.” University of Guelph

NIH-funded scientists deploy CRISPR to preserve photoreceptors in mice

14 March - Silencing a gene called Nrl in mice prevents the loss of cells from degenerative diseases of the retina, according to a new study. The findings could lead to novel therapies for preventing vision loss from human diseases such as retinitis pigmentosa. ... In all three mouse models, rod degeneration was prevented or slowed, although less benefit was achieved when the therapy was introduced in older animals. NIH

Pregnant women’s sex hormones waver with phthalate exposure

9 March - Women exposed to certain chemicals in flooring and food packaging early in pregnancy are more likely to have decreased free testosterone—hormones vital for fetal growth, according to a new study. Estrogen and testosterone drive a fetus’ genital development the first five to 18 weeks of a pregnancy. Altered levels of the sex hormones can lead to abnormalities in a baby’s genitals. ... Women with higher levels of two types of phthalates had lower levels of free testosterone, according to the study published today in the Journal of Clinical Endocrinology & Metabolism. Levels of free testosterone—the form of the hormone not bound to a protein in the blood—in the women were 12 percent lower for every 10-fold increase in the chemicals. Environmental Health News

Progress in treating hearing loss

15 March - Inside a bony structure that spirals like a snail shell in a human’s inner ear, roughly 15,000 “hair” cells receive, translate, and then ship sound signals to the brain.
Damage to these cells from excessive noise, chronic infections, antibiotics, certain drugs, or the simple passing of time can lead to irreparable hearing loss. In 2012, [researchers] identified a population of stem cells, characterized by an Lgr5+ marker, which scientists could turn into hair cells in a dish. A year later, [Albert] Edge had converted the resident population of these cells in mice into hair cells, though the ability to restore hearing using this approach has been limited. By exposing Lgr5+ cells isolated from the cochlea of mice to the small molecule cocktail, the researchers were able to create a 2,000-fold increase in the number of stem cells. Harvard Gazette

Rapid blood pressure drops in middle age linked to dementia in old age

10 March - Middle-aged people who experience temporary blood pressure drops that often cause dizziness upon standing up may be at an increased risk of developing cognitive decline and dementia 20 years later, new research suggests. The findings suggest that these temporary episodes – known as orthostatic hypotension – may cause lasting damage, possibly because they reduce needed blood flow to the brain. Previous research has suggested a connection between orthostatic hypotension and cognitive decline in older people, but this appears to be the first to look at long-term associations. Johns Hopkins Bloomberg School of Public Health News

Stockholm tied for world's least polluted capital: WHO

13 March - Data used to compile a pair of new reports by the World Health Organization (WHO) suggests that Stockholm is one of the cleanest capital cities on the planet. The "Inheriting a Sustainable World" and companion "Don’t pollute my future!" reports paint a damning picture of the impact of pollution on our health. The WHO rates the Swedish city's annual mean particulate matter with an aerodynamic diameter of 2.5 μm or less as 6 μg/m³ – the joint lowest for any capital city alongside Wellington, New Zealand. Canberra, Australia and Ottawa, Canada registered slightly higher levels of the PM 2.5 particles (7 μg/m³), as did Edinburgh, Scotland; Montevideo, Uruguay and Tallinn, Estonia (8 μg/m³). The top 10 of capitals was rounded off by Monaco and Helsinki, Finland (9 μg/m³), followed by Madrid, Spain (10 μg/m³). At the other end of the spectrum is Riyadh, Saudi Arabia – the most polluted capital with 156 μg/m³. The second worst is Delhi, India with 122 μg/m³, followed by Doha, Qatar (93 μg/m³). And the worst city in the world full stop is Zabol in Iran (217 μg/m³), according to the WHO. The Local SE

Two-part Ebola vaccine offers long-lasting protection

14 March - The world should be far better prepared for the next Ebola outbreak, with further promising results on Tuesday showing the potential of a long-lasting vaccine against the deadly virus. The two-part shot from Johnson & Johnson and Danish partner Bavarian Nordic induced a durable immune response lasting a full year in 100 percent of healthy volunteers vaccinated, researchers reported. The fact that all participants retained Ebola-specific antibodies to the end of the study does raise hope that this vaccine could induce
Water scarcity needs “urgent and massive response” in North Africa and Near East

9 March - Access to water is a fundamental need for food security, human health and agriculture, and its looming scarcity in the North Africa and Middle East region is a huge challenge requiring an "urgent and massive response," FAO Director-General Jose Graziano da Silva said in Cairo. Accessible fresh water in the region has fallen by two-thirds in the past 40 years. It now amounts to 10 times less per capita availability than the worldwide average, underscoring the need for a significant overhaul of farming systems, he added. A recent study by FAO showed that higher temperatures may shorten growing seasons in the region by 18 days and reduce agricultural yields a further 27 percent to 55 percent less by the end of this century. The rising sea level in the Nile Delta is exposing Egypt to the danger of losing substantial parts of the most productive agriculture land due to salinization. FAO

ZIKA VIRUS

CDC adds 4 countries to interim travel guidance related to Zika virus

10 March - CDC is working with other public health officials to monitor for ongoing spread of Zika virus. Today, CDC posted a Zika virus travel notice for Angola, Guinea-Bissau, Maldives and Solomon Islands. CDC has issued travel notices (level 2, "practice enhanced precautions") for people traveling to destinations with Zika. CDC

Estimated incubation period for Zika virus disease

May 2017 - Information about incubation is needed for identifying local and alternative modes of Zika virus transmission. Data from 2015–2016 for 197 symptomatic travelers with recent Zika virus disease indicated an estimated incubation period of 3–14 days. For persons in whom symptoms develop >2 weeks after travel, transmission might not be travel associated. Emerging Infectious Diseases

Zika warning is issued over sperm banks in the Miami area

13 March - Women who are considering trying to become pregnant with semen from sperm banks in the Miami-Dade County area of Florida should consider the possibility that sperm collected as far back as mid-June might be infected with the Zika virus, federal health officials said Monday. The officials said the new warning was driven by caution, not by
any evidence of infected semen from sperm banks or of babies with Zika-linked brain damage who were conceived with donated sperm. The New York Times

top of page...

INFLUENZA

AFHSB: DoD Seasonal Influenza Surveillance Summary

For Week 9:

- NORTHCOM: Influenza activity decreased to low to moderate for most of the country.
- EUCOM: Influenza activity was minimal to low across EUCOM.
- PACOM: Influenza activity remained minimal in Japan and Guam, but low activity was seen for the ROK and Hawaii.
- CENTCOM and AFRICOM: Influenza activity was minimal for locations with available data in CENTCOM.
- SOUTHCOM: Influenza activity was minimal for locations with available data in CENTCOM. DHA - Armed Forces Health Surveillance Branch

APHC: U.S. Army Influenza Activity Report

For the week ending 4 March 2017 (Week 9)
Overall, ILI and influenza A activity decreased among Army populations. The number of specimens tested for influenza A also decreased.

- ILI Activity: Army ILI (influenza-like illness) outpatient visits in week 9 were 12% lower than the same week last year.
- Influenza cases: Five hospitalized influenza-associated cases were reported to APHC through DRSi in week 9 and all were non-AD beneficiaries.
- Viral specimens: During week 9, 781 of 2518 (31%) lab specimens tested positive for respiratory pathogens. Of 539 influenza A-positive specimens, RHC-A reported 262 (48.6%), followed by RHC-C (238, 44.2%), RHC-E (20, 3.7%), and RHC-P (19, 3.5%). CENTCOM did not report any positive influenza A specimens. APHC

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

During week 9 (February 26-March 4, 2017), influenza activity decreased, but remained elevated in the United States.

- Viral Surveillance: The most frequently identified influenza virus subtype reported by public health laboratories during week 9 was influenza A (H3). 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: Eight influenza-associated pediatric deaths were reported. **CDC**

**China: Bird flu death toll rises to 161 in worst outbreak since 2009**

12 March - China reported 61 fatalities and 160 cases of human infection from H7N9 bird flu in February, the government said on Monday, much higher than in previous years and bringing the death toll in this winter's outbreaks to 161 since October. ... The data highlights the scale of the spread of the virus among humans, even after Chinese disease control experts have warned the public to stay on alert. ... The total of 140 for first two months of 2017 alone already surpasses the annual totals for avian flu in China in recent years. In 2010, 147 people died of the H1N1 strain of the virus. **Reuters**

**ECDC: Flu News Europe**

Week 9/2017 (27 February - 5 March 2017):
- Influenza activity across the region, while decreasing, remained above levels observed during the out of season period.
- The proportion of influenza virus detections among sentinel surveillance specimens decreased to 26% from 33% in the previous week.
- The great majority of detected and subtyped influenza viruses were A(H3N2) and while the proportion of type B viruses increased, as commonly seen in the second half of an influenza season, their numbers remained low.
- The number of hospitalized laboratory-confirmed influenza cases reported, primarily in people aged 65 years or older, continued to decrease. **European Center for Disease Prevention and Control/WHO**

**NHRC: Febrile Respiratory Illness Surveillance Update**

For the week ending 4 March 2017:
- Influenza: Two cases of NHRC laboratory-confirmed influenza (A/H3) among US military basic trainees.
- FRI surveillance at all eight U.S. military basic training centers indicated FRI rates were Fort Benning and Fort Leonard Wood. **Naval Health Research Center**

**USAFSAM & DHA: DoD Global, Laboratory-Based, Influenza Surveillance Program**

During 19 February - 4 March 2017 (Surveillance Weeks 8 & 9), a total of 508 specimens were collected from 49 locations. Results were finalized for 380 specimens from 46 locations. During Week 8, four influenza A(H1N1)pdm09, 109 influenza A(H3N2), one
influenza A(H3N2) & Influenza B, and 21 influenza B viruses were identified. During Week 9, three influenza A(H1N1)pdm09, 57 influenza A(H3N2), one influenza A(H3N2) & Influenza B, and 38 influenza B viruses were identified. Approximately 50% of specimens tested positive for influenza during Week 8. Approximately 43% of specimens tested positive for influenza during Week 9. The influenza percent positive for the season is approximately 35%.

US Air Force School of Aerospace Medicine & Defense Health Agency

top of page...

VETERINARY/FOOD SAFETY

FDA wins permanent injunction in Salmonella case

16 March - A U.S. District Court judge in Virginia has entered a consent decree of condemnation and permanent injunction against Valley Milk Products ... the Department of Justice announced March 15. ... "As alleged in the complaint, during a 2016 inspection of Valley Milk, FDA confirmed the presence of Salmonella meleagridis in the Strasburg facility," DOJ's news release stated. "Salmonella strains were nearly identical to Salmonella strains found at the firm in 2010, 2011, and 2013. In addition, the complaint alleged that Salmonella meleagridis was also present in the firm's undistributed finished product samples. Occupational Health & Safety

Iran: Canine shelter takes on Tehran stray dog problem – humanely

16 March - The Aradkouh Stray Dogs Shelter has been hired by the Tehran city government to take a new, more humane approach to deal with the burgeoning problem of stray dogs in the capital. It's a sign of changing attitudes among officials in a country where Islamic authorities have long seen dogs as "un-Islamic" and at times still confiscate them from people who have dogs as pets and walk them in public or drive with them in their cars. ... [S]trays are rampant and a nuisance and the shelter captures 30 to 40 dogs per day. VOA

Soldiers provide preventative care to horses in Kuwait

13 March - The 195th Medical Detachment Veterinary Services Supports made a visit the Equestrian Center in the Kuwaiti Ministry of Defense last week as a "military-to-military project the United States has with its host nation of Kuwait," according to U.S. Army Central. During the visit, preventative care was given to horses because “the Kuwaiti military does not currently have a veterinarian assigned to the Equestrian Division,” said Chief Warrant
Officer 2 Margaret Pierson. “We examine their lame and ills, bi-weekly, giving out free advice that can extend their lives.” … “These soldiers maintain their clinical proficiency … while forging partnerships with the host nation.” Army Times

Spain finds atypical mad cow case, sees no trade curbs

10 March - Spain has confirmed a case of bovine spongiform encephalopathy (BSE), commonly known as mad cow disease, in the northwestern province of Castilla y Leon, the World Organisation for Animal Health (OIE) said on Friday. Routine testing showed a positive result for atypical BSE type L disease in tissue from an animal on a cattle farm in Horcajo Medianero, near the town of Salamanca. … A spokesman at Spain’s agriculture ministry said the case it detected would not lead to any restrictions on trade or affect consumers. Reuters

top of page...

WELLNESS

Colorado supplement makers ordered to cease operations

16 March - EonNutra LLC, CDSM LLC, and HABW LLC have been ordered to immediately cease operations. Three Colorado supplement manufacturers have entered a consent decree of permanent injunction with the U.S. District Court, according to a news release from the FDA. Their owner, Michael Floren, has been ordered to cease business operations immediately. … Some products said they could treat high cholesterol, hypertension, diabetes, depression, and muscle pain. The inspection also found the businesses were manufacturing and distributing misbranded and adulterated dietary supplements. Occupational Health & Safety

Employees who decline genetic testing could face penalties under proposed bill

11 March - Employers could impose hefty penalties on employees who decline to participate in genetic testing as part of workplace wellness programs if a bill approved by a U.S. House committee this week becomes law. In general, employers don't have that power under existing federal laws, which protect genetic privacy and nondiscrimination. But a bill passed Wednesday by the House Committee on Education and the Workforce would allow employers to get around those obstacles if the information is collected as part of a workplace wellness program. … In a letter sent to the committee earlier this week, nearly 70 organizations … said the legislation, if enacted, would undermine basic privacy provisions of the Americans With Disabilities Act and the 2008 Genetic Information Nondiscrimination Act (GINA). The Washington Post
Few teens receive effective treatment for opioid addiction

10 March - Just a small fraction of adolescents with opioid addiction will receive medications that can help them quit, new research shows. These medications, usually methadone or suboxone, are prescribed to reduce craving for opiates and ease withdrawal symptoms, and studies show they help opiate users to abstain. In 2016, the American Academy of Pediatrics advised doctors to consider medication-assisted treatment, specifically suboxone, for adolescents with "severe opioid use disorders." Reuters

Gluten-free diets may be tied to an increased risk of Type 2 diabetes

13 March - Gluten-free diets are all the rage, but shunning gluten may offer no benefit to overall health for most people, a new analysis suggests. In fact, the people in the study who ate more gluten were 13 percent less likely to develop Type 2 diabetes over the 30-year study than those who ate less gluten, the researchers found. ... In the study, the researchers looked at surveys conducted every two to four years in which nearly 200,000 people reported what they ate. The researchers estimated the participants’ gluten intake based on this information, and then looked at which participants went on to develop Type 2 diabetes over the 30-year study period. The Washington Post

Lethal opiates delivered by mail from China, killing addicts in the U.S.

11 March - Carfentanil is an opiate 10,000 times more powerful than morphine. And since last summer, it's been killing addicts and confounding first responders across the country. ... "During the month of July [2016], paramedics in Akron registered more than 230 drug overdoses, with 14 of those being fatal," DEA spokesman Russ Baer says. "Those were eventually linked to carfentanil." ... Since then, the DEA has found the drug in a number of states. ... Since even the tiniest amount of carfentanil can kill, first responders who might encounter the drug need to take extra precautions. That includes agents screening packages from overseas. Carfentanil "normally comes in — we're told — by the U.S. mail system, usually from China," Portman says. ... Largely at the request of the U.S., last month China announced the banning of the export of carfentanil along with three other opioids. NPR

Nursery products to blame for rise in infant injuries, study finds

13 March - Baby injuries associated with nursery products like carriers, strollers and cribs are on the rise, a study shows. The study, published Monday, found a 23.7 percent increase in injuries to young children related to nursery products between 2003 and 2011. In all, the authors analyzed 21 years of emergency department data. The vast majority of these injuries were to the head, neck or face, and 80 percent of infants were injured because they
Out of the gate, health and research apps face-plant

15 March - There are three billion smartphones bouncing inside pockets and bags around the world. Their owners are often within arm’s reach 24-7. With such ubiquity, constant usage, and connectivity, researchers have publicly drooled over the potential for mobile devices to become gushing conduits of health information. They could wirelessly and effortlessly provide data on patients’ symptoms, the success or failure of new treatments, and the progression of diseases—streamlining clinical trials, research, and personalized care. The potential is there. But reality is not. … Tracking the effectiveness of an asthma health app created using Apple’s ResearchKit, researchers reported problems with participant selection bias, extremely low participant retention, missing data, and data security.

Severe hypoglycemia linked to increased risk of death in people with diabetes

10 March - A single instance of blood sugar falling so low as to require an emergency department visit was associated with nearly double the risk of cardiovascular disease or death, finds a new … study of older adults with type 2 diabetes. Additionally, using data from a large longitudinal study, the researchers found that one third of the older adults with diabetes who had experienced a severe low blood sugar episode (hypoglycemia) died within three years of the incident. In analyzing their data, the researchers controlled for such variables as how severe a person’s diabetes was and how long it had been since diagnosis.

Study flags later risks for sleep-deprived kids

10 March - Children ages 3 to 7 who don’t get enough sleep are more likely to have problems with attention, emotional control, and peer relationships in mid-childhood, according to a new study led by a Harvard pediatrician. Reported online in the journal Academic Pediatrics, the study found significant differences in the responses of parents and teachers to surveys regarding executive function — which includes attention, working memory, reasoning, and problem-solving — and behavioral problems in 7-year-old children depending on how much sleep they regularly received at younger ages.

Study identifies African-specific genomic variant associated with obesity

13 March - An international team of researchers has conducted the first study of its kind to look at the genomic underpinnings of obesity in continental Africans and African-Americans. They discovered that approximately 1 percent of West Africans, African-Americans and others of African ancestry carry a genomic variant that increases their risk of obesity, a finding that provides insight into why obesity clusters in families. … People with
Genomic differences in the semaphorin-4D (SEMA4D) gene were about six pounds heavier than those without the genomic variant, according to the study. NIH

**Un-sweetened: How a Maryland county cut soda sales without a soda tax**

13 March - A three-year campaign in Howard County, Md., aimed at curbing the community’s sweet tooth led to a significant decline in sales of sugary drinks. ... [T]he Unsweetened campaign led to a 20 percent decrease in sales of soda and a 15 percent decline in fruit drink sales between January 2013 and December 2015. ... The community-led campaign, funded by the Horizon Foundation, a nonprofit dedicated to health and wellness, included TV and outdoor advertising, as well as a social media campaign. The campaign also worked with healthcare professionals — including pediatricians — to improve messaging that pediatricians could use to educate their patients on the risks associated with excessive sugar intake, including obesity and Type 2 diabetes. NPR

**U.S.: Trends in suicide by level of urbanization — United States, 1999–2015**

17 March - The U.S. suicide rate has been increasing since 2000. Rates in less urban areas have been higher than rates in more urban areas, with some evidence of a growing difference. During 1999–2015, suicide rates increased across all levels of urbanization, with the gap in rates between less urban and more urban areas widening over time, most conspicuously over the later part of this period. Geographic disparities in suicide rates might reflect suicide risk factors known to be prevalent in less urban areas, such as limited access to mental health care, social isolation, and the opioid overdose epidemic, because opioid misuse is associated with increased risk for suicide. That the gap in rates began to widen more noticeably after 2007–2008 might reflect the influence of the economic recession, which disproportionately affected less urban areas. Morbidity and Mortality Weekly Update

**Weight loss, especially with surgery, tied to lower risk of heart failure**

15 March - Obese people who get surgery to lose weight have half the risk of developing heart failure compared to patients who make lifestyle changes to shed excess pounds, a recent study suggests. “We were surprised by the large difference in heart failure incidence between the two groups,” said lead study author Dr. Johan Sundstrom of Uppsala University in Sweden. It’s possible gastric bypass patients had a lower risk of heart failure because they lost more weight than the group trying to do so without surgery. Researchers also found that losing 10 kilograms (22 pounds) by any means was tied to a 23 percent drop in heart failure risk. Reuters

**What your therapist doesn’t know**

April 2017 - ... [One] 20th-century development that spurred many professions forward,
while largely bypassing psychotherapy: the use of metrics to forecast likely outcomes. The most famous application of metrics is the “moneyball” concept. ... Could a similar approach—looking for statistical patterns among a vast array of psychotherapy outcomes—help therapists better predict our patients’ trajectories? ... Close to 50 [feedback systems] have been developed over the past two decades. As the systems have spread, they have accumulated ever larger banks of clinical data. Studies have shown that metrics significantly improve the effectiveness of psychotherapy, including reducing dropout rates and shortening the length of treatment. The Atlantic

top of page...

USAFRICOM

Africa: Lassa fever – Benin, Togo and Burkina Faso

10 March - On 20 February 2017, the Ministry of Health of Benin notified WHO of a Lassa fever case in Tchaourou district, Borgou Department, Benin, close to the border with Nigeria. ... A total of 68 contacts are being followed-up in Benin and 29 contacts are being followed-up in Togo. On 26 February 2017, after receiving information from Togo, the Ministry of Health of Burkina Faso has notified WHO of a confirmed Lassa fever case in a hospital in the northern part of Togo. ... A total of 7 contacts have been identified in Togo and ... 135 contacts in Burkina Faso. ... On 2 March 2017, a man admitted to a health centre in the Kpendial health district [Togo] tested positive for Lassa fever. ... A total of 18 contacts were identified in Togo linked to the male case. WHO


April 2017 - We obtained data on 201,704 children younger than 5 years from 103 surveys across 33 countries. ... Our results showed that [artemisinin-based combination therapies (ACTs)] coverage in children younger than 5 years with a fever and P. falciparum infection increased across sub-Saharan Africa in 2003–15, but even in 2015, only 19.7% ... of children younger than 5 years with a fever and P. falciparum infection received an ACT. In meta-analyses, children younger than 5 years were more likely to receive an ACT for fever and P. falciparum infection if they lived in an urban area ... had household wealth above the national median ... had a caregiver with any education ... had a household insecticide-treated net ... were older than 2 years ... or lived in an area with a higher mean P. falciparum prevalence in children aged 2–10 years. The Lancet
Burkina Faso: In a remote West African village, a revolutionary genetic experiment is on its way

14 March – [S]cientists here are engaged in what could be the most promising ... biological experiments of our time. ... The goal: to nearly eradicate the population of one species of mosquito, and with it, the heavy burden of malaria across Africa. These scientists are planning to release mosquitoes equipped with “gene drives,” a technology that overrides nature's genetic rules to give every baby mosquito a certain trait that normally only half would acquire. Once such an insect gets out into the wild, it will move indiscriminately and spread its modified trait. ... But the insects wouldn't go extinct, scientists say. The gene drive mosquitoes currently under consideration would only reduce the population of Anopheles gambiae enough to stop the transmission of malaria. STAT

Burundi: Burundi says malaria reaches epidemic proportions

14 March - Health experts say more than 700 people have died of malaria so far this year in Burundi, prompting the government to declare the disease an epidemic. The determination was based on findings of a survey by Burundian and World Health Organization experts, said Josiane Nijimbere, Burundi’s Minister of Health. She said there have been 1.8 million cases of malaria registered since the beginning of the year — a huge number in a country with a population of less than 11 million. The minister attributed the increase of malaria partly to climate change. There is a strong association between malaria and warm temperatures, which have led to significant increase in malaria cases because of the spread of mosquitoes,” Nijimbere told reporters Monday. VOA

Ethiopia: Death toll reaches 72 in Ethiopia landfill collapse

14 March - The death toll has risen to 72 after Saturday's collapse of a mountain of garbage in a landfill outside Ethiopia's capital, state broadcaster EBC reported Tuesday. The government declared three days of national mourning, starting Wednesday. Many victims were women and children as makeshift mud-and-stick homes inside the Koshe landfill were buried in debris. It was not clear how the collapse occurred. Residents have said the dumping of trash had resumed there in recent months after protests at a newer landfill site. Others have blamed the construction of a new waste-to-energy plant at Koshe. ... More than 50 people caught in the collapse have received medical treatment, said Solomon Bussa, the chief of clinical services at the Alert Hospital where the injured have been taken. AP
Kenya: Kenya doctors end strike after deal with government

14 March - Thousands of doctors working in Kenya's public hospitals have agreed to end a 100-day strike after reaching a deal with the government on Tuesday that aims to address their grievances. More than 5,000 health workers calling for nearly a 300 percent hike in pay went on strike in December, but it was not clear how much of their demands were accepted. The government and union officials signed a deal to address pay and other issues in dispute, said Dr Ouma Oluga, secretary-general of the Kenya Medical Practitioners, Pharmacists and Dentists Union. Oluga said the biggest achievement in the agreement is that doctors now will work just 40 hours a week and will be compensated for extra hours. ... Kenya's public doctors, who train for six years at universities, earn a basic salary of just $400-$850 a month. Al Jazeera

Mozambique: Mozambique cholera outbreak spreading, more than 1,200 infected

14 March - A cholera outbreak in parts of Mozambique has infected more than 1,200 people, killing two this month after heavy rains, and will spread further if no action is taken, a health ministry official said on Tuesday. The disease, which is usually contracted from infected water, has already spread from the capital Maputo to another three of Mozambique's 13 provinces since the start of this year, deputy director of public health Benigna Matsineh told Reuters. "But there are 19 more districts on the verge of seeing outbreaks of cholera in the coming days if nothing is done to prevent the spread of the disease. Reuters

Syria: How many health workers have been killed in Syria?

15 March - In truth, there is no way to come with a 100 percent accurate count of all the health workers who have died since the conflict in Syria that began six years ago this month. That’s because it takes a lot of checking to verify a death — Physicians for Human Rights, for example, wants to know the victim’s name, job, the location and date of death and the cause of death. And they want three sources who can back up the account. So not every death has been officially confirmed. In fact, Elise Baker, a researcher for PHR, says she believes that the organization has only been able to verify 50 to 65 percent of reported health worker deaths. But now there is at least a minimum number of confirmed deaths:
Syria: Six years into Syria's war, rebel areas face deepening medical crisis

16 March - ... War has battered Syria's once robust healthcare system. Hundreds of medical staff have been killed, and more than half the country's 30,000 doctors have fled, according to Physicians for Human Rights. The New York-based group has documented at least 400 attacks on medical facilities over the past six years, blaming most on the Syrian government and its Russian allies. Islamic State and various rebel groups have also hit hospitals, it says. ... Antibiotics and vaccines often run out, while cancer treatment and dialysis are too expensive and too difficult to come by, medical workers said. Thousands have died from untreated cancer, kidney failure, and diabetes, according to the Syrian American Medical Society. Reuters

Europe: ECDC reports spike in yellow fever from South America travel

15 March - The European Centre for Disease Prevention and Control (ECDC) released a risk assessment on yellow fever yesterday, noting a new case of travel-associated disease in a person from the Netherlands. This is the fourth case reported in Europeans who had recently traveled to South America in the past 8 months. ... According to the ECDC, these cases represent a dramatic spike in travel-related yellow fever: Between 1999 and 2016 there were only four reported cases of travel-related yellow fever in the European Union (EU). CIDRAP

Europe: EU chemical agency says weed killer glyphosate not carcinogenic

15 March - Glyphosate, the key ingredient in Monsanto Co's Roundup herbicide, should not be classified as a substance causing cancer, the European Chemical Agency concluded on Wednesday, potentially paving the way for its license renewal in the EU. ... Weighing in on the controversy, the EU body which regulates chemicals and biocides said it had considered extensive scientific data. "This conclusion was based both on the human evidence and the weight of the evidence of all the animal studies reviewed," Tim Bowmer, chairman of ECHA's Committee for Risk Assessment, said in an online briefing. Reuters
Romania: Measles outbreak kills 17 unvaccinated children in Romania

12 March - A measles outbreak in Romania has killed 17 children and infected thousands more since September due to poverty and an anti-vaccination movement. Romanian health minister Florian Bodog said that none of the children who died from the highly contagious virus had been vaccinated. ... More than 3,400 people have been infected since February 2016 compared with the year before when the country registered seven cases but no deaths. RTE

top of page...

USNORTHCOM

U.S.: Beyond Lyme - New tick-borne diseases on the rise

11 March - ... In the past 50 years, scientists have detected at least a dozen new diseases transmitted by ticks. ... For some reason, ticks flock to mice. ... Most of these ticks are carrying Lyme disease, [Richard] Ostfeld has found. Others are carrying anaplasmosis, babesiosis or Powassan. Some ticks harbor two, three or even four pathogens at once. These observations gave him an idea: Use the mice to kill the ticks. ... A mouse walks into the box and is swiped with a little brush that applies a drop of the insecticide on its back. ... For weeks after the mouse leaves the box, it kills ticks that land on it. ... This spring Ostfeld and [Felicia] Keesing have launched an experiment with 1,200 families in upstate New York. ... Some families will get these tick boxes in their yards. Some will get a fungus sprayed on their shrubbery, which is known to kill ticks. And some will get neither. Over the next five years, Ostfeld and Keesing will check to see whether the boxes and fungus keep people from getting tick-borne diseases. NPR

U.S.: Deadly fungal infection that doctors have been fearing now reported in U.S.

10 March - Nearly three dozen people in the United States have been diagnosed with a deadly and highly drug-resistant fungal infection since federal health officials first warned U.S. clinicians last June to be on the lookout for the emerging pathogen. ... The fungus, a strain of a kind of yeast known as Candida auris, has been reported in a dozen countries on five continents starting in 2009, when it was found in an ear infection in a patient in Japan. Since then, the fungus has been reported in Colombia, India, Israel, Kenya, Kuwait, Pakistan, South Korea, Venezuela and the United Kingdom. Unlike garden variety yeast infections, this one causes serious bloodstream infections, spreads easily from person to person in healthcare settings, and survives for months on skin and for weeks on bed rails, chairs and other hospital equipment. Some strains are resistant to all three major classes of antifungal drugs. The Washington Post
U.S.: Federal health department would face a nearly 18 percent cut

16 March - The Department of Health and Human Services would receive $69 billion under the president’s budget proposal, a reduction of 17.9 percent that would send spending in one of the government’s largest and most sprawling departments to its lowest level in nearly two decades. More than a third of the $15.1 billion in cuts would affect the National Institutes of Health, the government’s main engine of biomedical research, which has long enjoyed strong bipartisan support in Congress. The Washington Post

Flea-borne bacterial disease spreading wider in Texas

15 March – A sometimes fatal bacterial disease carried by fleas and lice appears to be spreading more often, and over a larger swath of territory in Texas than it did a decade ago, a new study suggests. The authors aren’t sure how to explain the increase in murine typhus cases, though one suggested the “rampant” population of opossums in Texas may not be helping. The flea that can transmit the bacteria … infests opossums as well as rodents. The condition has been traditionally found in southern Texas, in places where there is more poverty, said Melissa Nolan Garcia, a pediatric tropical medicine instructor at Baylor College of Medicine in Houston. “However, when we are starting to see more cases in San Antonio, Houston, and Dallas. STAT

U.S.: New guideline will allow first-year doctors to work 24-hour shifts

10 March - First-year doctors in training will now be permitted to work shifts lasting as long as 24 hours, eight hours longer than the current limit, according to a professional organization that sets work rules for graduates from medical schools in the United States. In setting the new standard, which goes into effect on July 1, officials at the Accreditation Council for Graduate Medical Education said on Friday that they hoped to avoid confusion and disruptions in care that can result when a patient is handed off to one doctor from another whose shift is ending. The New York Times

U.S.: Patients lose sight after stem cells are injected into their eyes

15 March - Three women suffered severe, permanent eye damage after stem cells were injected into their eyes, in an unproven treatment at a loosely regulated clinic in Florida. … One, 72, went completely blind from the injections, and the others, 78 and 88, lost much of their eyesight. Before the procedure, all had some visual impairment but could see well enough to drive. The cases expose gaps in the ability of government health agencies to protect consumers from unproven treatments offered by entrepreneurs who promote the supposed healing power of stem cells. … The clinic was part of a company then called Bioheart, now called U.S. Stem Cell. Staff members there used liposuction to suck fat out of
the women’s bellies, and then extracted stem cells from the fat to inject into the women’s eyes. ... [T]he chief science officer of U.S. Stem Cell, said in an interview that the clinic did not need F.D.A. approval because it was treating patients with their own cells, which are not a drug. The New York Times

U.S.: Plaintiffs in U.S. lawsuit say Monsanto ghostwrote Roundup studies

14 March - Employees of Monsanto Co ghostwrote scientific reports that U.S. regulators relied on to determine that a chemical in its Roundup weed killer does not cause cancer, farmers and others suing the company claimed in court filings. The documents, which were made public on Tuesday, are part of a mass litigation in federal court in San Francisco claiming Monsanto failed to warn that exposure to Roundup could cause non-Hodgkin’s lymphoma, a type of cancer. The company has denied that the product causes cancer. Reuters

U.S.: What hospitals waste

9 March - ... Ten years ago, [Elizabeth] McLellan, a registered nurse, shocked to see what hospitals were tossing out, began asking them to give her their castoffs instead. In 2009 she launched Partners for World Health, a nonprofit that now has four warehouses throughout Maine. Today, she and hundreds of volunteers collect medical equipment and supplies from a network of hospitals and medical clinics, sort them and eventually ship containers full of them to countries like Greece, Syria and Uganda. “This is money.” McLellan said, extending her arm to the vast array of supplies. “This is one of the reasons why your health insurance is so expensive.” ... In 2012 the National Academy of Medicine estimated the U.S. health care system squandered $765 billion a year. ProPublica

USPACOM

Asia: Looming threat of Asian tobacco companies to global health

13 March - There are already one billion tobacco smokers worldwide, and this number is likely to rise further with Asian tobacco companies poised to enter the global market, according to SFU health sciences professor Kelley Lee. ... “Their aim is to grow their share of the world market through increased marketing, new products and lower prices. This is likely to mean more smokers worldwide.” Lee and her team are the first to study the global business strategies of Asian tobacco companies. ... Their aim in analysing companies in Japan, South Korea, China, Taiwan and Thailand was to document how these companies are shifting from a domestic focus to become aspiring transnational companies. Science Daily
China: Paying for cleaner air; study finds many in China willing to invest a portion of income for cleaner environment

15 March - ... [R]esearchers discovered that families with children are willing to spend a significant amount of their income for better air quality. Specifically, they determined that families with children under the age of six are willing to invest 5.9 percent of their annual income ($120) for a reduction in PM2.5, the small suspended particles in the air that are a major health threat in China. Families without children below the age of six, meanwhile, were willing to spend 3.3 percent of their annual income, or $70.

Yale School of Public Health

India: Food, drink giants plot fightback as India looks to tighten rules

16 March - Several food and drink multinationals and trade groups met in recent weeks to discuss how to lobby more effectively against Indian proposals for higher taxes and stricter labeling rules on fatty or sugary foods, sources familiar with the talks said. According to officials, Prime Minister Narendra Modi’s administration has begun to look closely at policy proposals under discussion since at least 2015, raising concerns over the possible impact on the $57 billion sector. Alarmed by rising rates of obesity and diabetes, India plans to frame draft rules within a month requiring manufacturers to display the fat, sugar and salt content of products on packaging. It is also considering a nationwide “fat tax” for so-called “junk foods.” Reuters

Philippines: Duterte’s new anti-drug ‘super agency’ includes health, education, welfare

13 March - Philippines President Rodrigo Duterte has revived his bloody war on drugs, and it’s bigger than ever. Last week, the strongman president signed an executive order published Friday that pulls 21 state agencies into the drug war under the joint command of a new “super agency.” Led by the Philippine Drug Enforcement Agency (PDEA), the Interagency Committee on Anti-illegal Drugs (ICAD) includes the justice department, armed forces, police and coast guard as well as the departments of health, education and social welfare among others. ... [A]ny and all agencies must assist the Philippine Drug Enforcement Agency in anti-drug operations when called upon, according to the listed function of the enforcement cluster. Humansphere
PAHO reports 600 new chikungunya cases

13 March - The Pan American Health Organization (PAHO) in the past 2 weeks added 606 confirmed, suspected, and imported chikungunya cases to its total, bringing the case count for 2017 so far to 5,153. Paraguay accounted for most of the new cases, noting 421 new cases and 423 for the year, according to a Mar 10 PAHO update. Colombia reported 74 new cases to bring its 2017 total to 279, while Peru notched 49 new cases and 239 for the year. The vast majority of countries in the Americas, however, have not posted for weeks, including any reports in 2017. CIDRAP News Scan (fourth item)