17 February 2017

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 | 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.

Approved for public release, distribution unlimited.

Contents

U.S. MILITARY

- Army pays to connect 5 homes near Fort Detrick to city water
- Chemicals from Air Force base seep into wells, Lake Huron
- DARPA launches P3 program
- Epilepsy more than doubles mortality risk for veterans of recent wars
- Regulators OK Army’s radiation monitoring plan at Hawaii’s Pohakuloa Training Area
- The future is now: MHS GENESIS launches in Pacific Northwest

GLOBAL

- Common weed could help fight deadly superbug, study finds
- Doctors see gains against ‘an urgent threat,’ C. diff
- Ebola epidemic fueled by ‘super-spreaders’: study
- Ebolaviruses need very few mutations to cause disease in new host species
- Famine looms in four countries as aid system struggles to cope, experts warn
- Investigational PfSPZ malaria vaccine demonstrates considerable protection in Malian adults for duration of malaria season
- Molecule from malaria parasite attracts hungry mosquitoes
- Oral cholera vaccine safety in pregnancy
- Seroprevalence study finds immune system clues in WNV infection
- Why killer viruses are on the rise
- Why your doctor’s advice to take all your antibiotics may be wrong
- ZIKA VIRUS
- Environmental and social change drive the explosive emergence of Zika virus in the Americas
- Persistence of zika virus in body fluids — preliminary report
- Vulnerability of primitive human placental trophoblast to Zika virus

INFLUENZA

- APHC: U.S. Army Influenza Activity Report
- China: To stem spread of avian flu in China, some provinces shutter poultry markets
- ECDC: Flu News Europe
- Interim estimates of 2016–17 seasonal influenza vaccine effectiveness — United States, February 2017
• NHRC: Febrile Respiratory Illness Surveillance Update
• USAFSAM & DHA: DoD Global, Laboratory-Based, Influenza Surveillance Program

VETERINARY/FOOD SAFETY

• Fort Bragg veteran overlooked for adopting his bomb-sniffing dog
• Listeria in cheese; recalls by Sargento, Meijer, others
• Outbreaks linked to imported foods are increasing
• Study finds new bacterial strain can contaminate shellfish

WELLNESS

• Autism starts months before symptoms appear, study shows
• Baby’s sex can affect mother’s immunity; Study
• Drowsy drivers often behind fatal crashes
• Salt reduction policies cost-effective even without healthcare savings
• Study confirms vitamin D protects against colds and flu
• The hunger gains: Extreme calorie-restriction diet shows anti-aging results
• Why one food executive is pledging $25 million to fight his own industry

USAFRICOM

• Angola/Democratic Republic of the Congo: The yellow fever outbreak ends
• East Africa: Nodding disease - NIH report link to *Onchocerca* proteins
• Kenya: Kenyan doctors’ union officials jailed over strike
• Sierra Leone: Opioids - Sierra Leone’s newest public health emergency
• Somalia: More than 900 new cases of cholera in Somalia

USCENTCOM

• Iraq: UN health agency delivers medical aid to newly retaken areas of Mosul
• Saudi Arabia: Saudi Arabia reports more MERS cases; WHO announces Buraydah outbreak over
• Syria: The United States used depleted uranium in Syria

USEUCOM

• France: CPE on the rise in France
• Spain: A dozen measles cases reported in Barcelona

USNORTHCOM

• U.S.: 188,000 evacuated, emergency declared as California’s massive Oroville Dam threatens floods
• U.S.: Antibacterial soaps possibly dangerous, FDA says in ban
• U.S.: Broken California dam is a sign of emergencies to come
• U.S.: California reports thousands of workers exposed to elevated lead levels
• U.S.: CDC expands investigation into Seoul virus outbreak
• U.S.: Despite increase in car safety, traffic deaths continue to rise
• U.S.: Diseased rat urine kills New Yorker in outbreak of rare illness
• U.S.: Device measures calorie content of social media—promising new insights for public health
• U.S.: Melanoma mortality trends vary by states, region
• U.S.: Ohio postpones 8 executions amidst legal challenge to lethal injection procedure
• U.S.: Tom Price is confirmed as health secretary

USPACOM

• China: China orders cities on “pollution highway” to reduce emissions, Beijing braces for smog
• India’s air pollution rivals China’s as world’s deadliest
• Pacific nations testing tsunami warning systems this week
USSOUTHCOM

- Bolivia: Bolivia reports first yellow fever case in a decade
- French Guiana: Epidemiological assessment of the severity of dengue epidemics in French Guiana

U.S. MILITARY

Army pays to connect 5 homes near Fort Detrick to city water

11 February - The Army says it has paid $62,000 to connect five homes near Fort Detrick to the Frederick city water supply nearly 12 years after toxic chemicals were found in their wells. Fort Detrick says in a statement that the connections were completed Friday. The Army had supplied the homes with bottled water for cooking and drinking ever since the chlorinated solvents were detected in the wells. The tainted water prompted an environmental investigation and excavation of some former waste-disposal pits in a part of the base called Area B. CBS Baltimore

Chemicals from Air Force base seep into wells, Lake Huron

10 February - Residents near an abandoned military base in Michigan are worried about an unseen invader: toxic chemicals that have contaminated wells in the town of Oscoda. Now the chemicals are spreading farther — and have even reached Lake Huron. For decades, Wurtsmith Air Force base was an important part of the nation’s air defenses. Troops stationed there were trained to ... fight fires — an important role on a base where lots of aviation fuel was stored. Dale Corsi, a consultant for the Michigan Department of Environmental Quality ... says for years firefighting foams would have ended up directly in the soil. ...[C]hemicals are showing up in residential wells. “At first we found about sixty of them that were right close to the base.” ... Now as many as 300 wells have tested positive for low-level PFCs, a chemical used in the firefighting foams. Great Lakes Echo

DARPA launches P3 program

13 February - DARPA, the Defense Advanced Research Projects Agency, announced Feb. 6 that it has launched the Pandemic Prevention Platform (P3) program in order to facilitate a system capable of halting the spread of any viral disease outbreak before it can escalate to pandemic status. “Such a capability would offer a stark contrast to the state of the art for developing and deploying traditional vaccines—a process that does not deliver treatments to patients until months, years, or even decades after a viral threat emerges,” according to the agency. DARPA-funded researchers have pioneered RNA vaccine technology, a medical countermeasure against infectious diseases. "DARPA’s goal is to create a technology platform that can place a protective treatment into health providers’ hands within 60 days
of a pathogen being identified and have that treatment induce protection in patients within three days of administration.” Occupational Health & Safety

**Diabetes mellitus, active component, U.S. Armed Forces, 2008–2015**

January 2017 - From 2008 through 2015, a total of 9,092 incident cases of diabetes mellitus (DM) were reported among active component service members (incidence rate 82.8 cases per 100,000 person-years [p-yrs]). The overall incidence rate of type 1 DM was 3.0 cases per 100,000 p-yrs. The rate of type 2 DM was 74.5 cases per 100,000 p-yrs and rates doubled within each successive age group. Male service members had higher rates of both types of DM, compared to female service members. Black, non-Hispanic service members; service members of other or unknown race/ethnicity; and Hispanic service members had much higher rates of type 2 DM, compared to white, non-Hispanic service members. Rates of type 2 DM were highest among service members of the Army and the Navy, and lowest among Marine Corps members. Crude annual rates of type 2 DM peaked in 2010 and thereafter steadily decreased. Medical Surveillance Monthly Report

**Epilepsy more than doubles mortality risk for veterans of recent wars**

14 February - Meeting criteria for an epilepsy diagnosis significantly raises the risk of death among veterans who served in Iraq and Afghanistan, a new study has revealed. In fact, Iraq and Afghanistan veterans (IAVs) with epilepsy were found to be 2.6 times more likely to die between 2011 and 2015 than similar veterans without epilepsy. … Focusing on 2,187 veterans who met the criteria for epilepsy, examination of mortality over the next five years revealed that approximately five times more IAVs with epilepsy died by the end of 2015 than similar IAVs without epilepsy. A second analysis controlling for co-occurring conditions—such as cardiac disease, stroke, cancer and mental health conditions—also was conducted to determine if epilepsy uniquely contributed to mortality. … “After controlling for comorbidities, IAVs with epilepsy were about 2.6 times more likely to die during the follow-up period than similar veterans without epilepsy.” U.S. Medicine

**Regulators OK Army's radiation monitoring plan at Hawaii's Pohakuloa Training Area**

15 February - Federal regulators have approved a radiation monitoring plan for a U.S. Army installation on Hawaii's Big Island that previously used depleted uranium. The plan approved by the U.S. Nuclear Regulatory Commission to test sediment in the Pohakuloa Training Area could go into effect in six months, The Hawaii Tribune-Herald reported Tuesday. The depleted uranium — a dense radioactive metal alloy — was contained in spotting rounds used in the 1960s as part of a weapons program. The rounds didn’t explode on impact. Training area spokesman Eric Hamilton said 140 kilograms of depleted uranium were used in Hawaii, but it’s not known how that amount was distributed between
The future is now: MHS GENESIS launches in Pacific Northwest

16 February - Patients and providers at Fairchild Air Force Base, Washington, were the first to adopt MHS GENESIS as the new electronic health record. Deployed by the Military Health System on Feb. 7, 2017, officials touted it as an open, flexible and easily adaptable medical and dental electronic health record that gives both providers and patients access to information, from the point of injury to care in military hospitals and clinics or in the private sector. ... MHS GENESIS rolled out at Fairchild AFB and will be implemented throughout the MHS by 2022. During a ceremony Feb. 15, 2017, at Fairchild AFB, Navy Vice Adm. Raquel Bono, director, Defense Health Agency, said starting in the Pacific Northwest and phasing it into the rest of the MHS over the course of several years allows time to tweak as necessary to meet any changing needs and identify and correct unanticipated problems early.

Health.mil

top of page...

GLOBAL

Common weed could help fight deadly superbug, study finds

10 February - ... Researchers from Emory University and the University of Iowa found that extracts from the Brazilian peppertree, which traditional healers in the Amazon have used for hundreds of years to treat skin and soft-tissue infections, have the power to stop methicillin-resistant Staphylococcus aureus (MRSA) infections in mice. ...[R]esearchers pulled apart the chemical ingredients of the berries and tested them in mice infected with these superbug strains. The mice got injections containing the bacteria with or without the plant extracts. Those that didn’t receive the extracts developed skin lesions. But in the other mice, the extracts -- a mixture of 27 chemicals -- prevented skin lesions from forming. Instead of destroying the bacteria, the ingredients in the fruit weakened the bacteria by preventing them from producing the toxins it uses as weapons to damage tissue. The Washington Post

Doctors see gains against ‘an urgent threat,’ C. diff

10 February - ... [Clostridium difficile] became one of the country’s prime health concerns only a few years ago, after a particularly virulent and drug-resistant strain called NAP1 emerged in the 2000s. ... [A] small army of researchers across the country is testing innovative treatments, and three pharmaceutical companies plan to roll out large-scale vaccine trials. ... Most hospitals have established antibiotic stewardship programs to track
and control their use, and new federal regulations require such programs in nursing homes, too. English researchers credit reduced antibiotic use with cutting C. diff rates by 80 percent. ... In the next few weeks, the drug maker Merck will begin marketing bezlotoxumab (brand name: Zinplava), shown to reduce C. diff recurrences. ... Dr. Gerding and his team have conducted trials of an orally administered liquid containing spores of a C. diff strain that does not produce toxins or cause illness, but supplants the toxic strains. ... Several dozen studies of another promising method of reducing recurrence, the gross-sounding fecal transplant, are underway at research centers. The New York Times

Ebola epidemic fueled by 'super-spreaders': study

14 February - Most of the people who were infected with Ebola in the 2014 West Africa epidemic contracted the viral disease through "super-spreaders", researchers say. According to a study published on Monday in the Proceedings of the National Academy of Sciences, scientists said super-spreaders, a small percentage of people who are responsible for infecting several others during epidemics of infectious diseases, played a central role in the spread of Ebola. Researchers said 61 percent of those afflicted were infected by just three percent of others who got sick. ... If super-spreading had been completely under control, about two-thirds of Ebola cases could have been avoided, the report said. ... "It was the cases you didn't see that really drove the epidemic, particularly people who died at home, without making it to a care centre." At the time, researchers counted cases according to those seen in medical centres, but they later realised these were a small fraction of the total. Al Jazeera

Ebolaviruses need very few mutations to cause disease in new host species

15 February - Ebola is one of the world’s most virulent diseases, though rodent species such as guinea pigs, rats and mice are not normally susceptible to it. However, through repeated infection of a host animal, Ebola virus strains can be generated that replicate and cause disease within new host rodent species. Scientists ... examined the changes associated with Ebolavirus adaptation to rodents including guinea pigs and mice across four different studies. They found that only very few mutations, probably fewer than five, are required for the virus to adapt. In particular, a change in the Ebolavirus protein VP24 seems to be critical for Ebola viruses to infect a new animal species. Ebolaviruses infecting domestic species, including pigs and dogs, may also result in virus changes that may increase the risk to humans. Reston viruses, Ebolaviruses that have not been shown to cause disease in humans, so far, are known to circulate in domestic pigs in Asia. Outbreak News Today

Famine looms in four countries as aid system struggles to cope, experts warn

12 February - Famine is looming in four different countries, threatening unprecedented levels of hunger and a global crisis that is already stretching the aid and humanitarian system like never before, experts and insiders warn. Tens of millions of people in need of...
food aid in Yemen, South Sudan, Nigeria and Somalia are at the mercy not only of an overwhelmed aid system but also the protracted, mainly conflict-driven crises in their own countries, the humanitarian leaders say. While the generosity of donors has risen sixfold over the past 20 years, unprecedented levels of humanitarian suffering have overtaken financial support. Donor funding reached a record high last year but only half of the requirements were met, according to the UN’s humanitarian chief, Stephen O’Brien.

The Guardian

Investigational PfSPZ malaria vaccine demonstrates considerable protection in Malian adults for duration of malaria season

16 February - An investigational malaria vaccine given intravenously was well-tolerated and protected a significant proportion of healthy adults against infection with *Plasmodium falciparum* malaria -- the deadliest form of the disease -- for the duration of the malaria season. ... The study participants live in Mali, Africa, where they are naturally exposed to the parasite. The investigational vaccine, known as the PfSPZ Vaccine, contains live but weakened sporozoites. ... The investigators report that the vaccine candidate was well-tolerated and safe with no serious adverse events. Among the 40 participants who received five placebo doses, 93 percent (37 participants) developed *P. falciparum* malaria infections; by comparison, 66 percent (27 participants) of the participants who received five doses of the PfSPZ Vaccine (41 participants) developed malaria infection. NIH

Molecule from malaria parasite attracts hungry mosquitoes

13 February - Carbon dioxide emitted from humans and other mammals is a well-known homing beacon for blood-thirsty female mosquitoes. But mosquitoes responsible for spreading the parasite that causes malaria, *Plasmodium falciparum*, are more attracted to already infected animals. Ingrid Faye and colleagues at Stockholm University now report that (E)-4-hydroxy-3-methyl-but-2-enyl pyrophosphate (HMBPP), a molecule made by *P. falciparum*, explains this mysterious attraction that helps spread malaria. They showed that mosquitoes preferred to consume red blood cells laced with HMBPP, doubling their intake compared with HMBPP-free cells. "It was a very fast feeding and they filled their guts enormously," Faye says. Blood cells infected with *P. falciparum* caused a similar increase in feeding. C&EN

Oral cholera vaccine safety in pregnancy

13 February - The killed oral cholera vaccine poses no increased risk for pregnancy loss or adverse birth outcomes when administered to pregnant women, according to a new study published in *Vaccine*. Cholera vaccines are not currently recommended for use in pregnant women because of unknown safety risks, but infection with cholera in pregnancy can cause severe complications, including death. In this study, 48,414 Bangladeshi women were
questioned about cholera immunization status during a 2011 vaccine campaign. Of the 286 women who received the killed oral cholera vaccine (Shanchol) while unknowingly pregnant, 69 were available for follow-up surveillance. Sixteen percent of pregnant women who received Shanchol experienced pregnancy loss, compared to 12% in the control group. Researchers said there was no increased risk in pregnancy loss after using models that controlled for adjusted baseline characteristics. CIDRAP News Scan (fourth item)

Seroprevalence study finds immune system clues in WNV infection

13 February - Seroprevalence testing for West Nile virus (WNV) among adults in Connecticut, where the disease is endemic, shows higher seroconversion levels in immunocompromised people, though age didn't seem to be a significant seroconversion factor. A team ... looked at blood test results and demographic information from 1,063 adults—890 nonimmunocompromised and 173 immunosuppressed—who were enrolled in a study on immunity and aging. They compared the results with symptomatic WNV patients reported to the Connecticut Department of Health from 2000 to 2014. ... Evidence of WNV exposure was seen in 76 (8.5%) of the nonimmunosuppressed group, none of whom had reported symptoms or were diagnosed with infection. Of 173 immunosuppressed participants, 29 (16.8%) showed evidence of infection. The rates of seroconversion for the two groups did not vary significantly by age or sex, but levels were higher among Hispanic groups. ... Researchers said the mean age for symptomatic cases reported by the health department was higher than that of the asymptomatic cases, suggesting that age remains a factor for disease susceptibility. CIDRAP News Scan (fifth item)

Why killer viruses are on the rise

14 February – [A] $200 million project called PREDICT, sponsored by the U.S. government and led by University of California, Davis, School of Veterinary Medicine’s ... goal is to figure out the viruses that are lurking inside animals around the world. So we are ready when a new and potentially harmful virus jumps from animals into people and causes an outbreak. In other words, [Kevin] Olival wants to find the next pandemic virus before it finds us. ... So far, Olival and Lee’s team have trapped and sampled more than 1,300 animals in Malaysia. Globally, the PREDICT team has sampled more than 74,000 animals. Not everyone is a fan of the project. Some infectious disease scientists think creating a long list of viruses isn’t very helpful. They say money could be better spent on diseases we actually have now instead of trying to guess which ones might become a problem someday. NPR

Why your doctor’s advice to take all your antibiotics may be wrong

9 February - You’ve heard it many times before from your doctor: If you’re taking antibiotics, don’t stop taking them until the pill vial is empty, even if you feel better. The rationale behind this commandment has always been that stopping treatment too soon would fuel the development of antibiotic resistance — the ability of bugs to evade these
drugs. Information campaigns aimed at getting the public to take antibiotics properly have been driving home this message for decades. But the warning, a growing number of experts say, is misguided and may actually be exacerbating antibiotic resistance. The reasoning is simple: Exposure to antibiotics is what drives bacteria to develop resistance. Taking drugs when you aren’t sick anymore simply gives the hordes of bacteria in and on your body more incentive to evolve to evade the drugs, so the next time you have an infection, they may not work. STAT

ZIKA VIRUS

Environmental and social change drive the explosive emergence of Zika virus in the Americas

9 February - Since Zika virus (ZIKV) was detected in Brazil in 2015, it has spread explosively across the Americas and has been linked to increased incidence of microcephaly and Guillain-Barré syndrome (GBS). In one year, it has infected over 500,000 people (suspected and confirmed cases) in 40 countries and territories in the Americas. Along with recent epidemics of dengue (DENV) and chikungunya virus (CHIKV), which are also transmitted by Aedes aegypti and Ae. albopictus mosquitoes, the emergence of ZIKV suggests an ongoing intensification of environmental and social factors that have given rise to a new regime of arbovirus transmission. ... Potential drivers include climate variation, land use change, poverty, and human movement. Beyond the direct impact of microcephaly and GBS, the ZIKV epidemic will likely have social ramifications for women’s health and economic consequences for tourism and beyond. PLOS

Persistence of zika virus in body fluids — preliminary report

14 February - ... We evaluated samples obtained from 150 participants (including 55 men) in whom ZIKV RNA was detected on reverse-transcriptase–polymerase-chain-reaction (RT-PCR) assay in urine or blood in an enhanced arboviral clinical surveillance site. We collected serum, urine, saliva, semen, and vaginal secretions weekly for the first month and then at 2, 4, and 6 months. All specimens were tested by means of RT-PCR, and serum was tested with the use of anti–ZIKV IgM enzyme-linked immunosorbent assay. Among the participants with ZIKV RNA in any specimen at week 4, biweekly collection continued until all specimens tested negative. We used parametric Weibull regression models to estimate the time until the loss of ZIKV RNA detection in each body fluid and reported the findings in medians and 95th percentiles. ... The medians and 95th percentiles for the time until the loss of ZIKV RNA detection were 14 days (95% confidence interval [CI], 11 to 17) and 54 days (95% CI, 43 to 64), respectively, in serum; 8 days (95% CI, 6 to 10) and 39 days (95% CI, 31 to 47) in urine; and 34 days (95% CI, 28 to 41) and 81 days (95% CI, 64 to 98) in semen. Few participants had detectable ZIKV RNA in saliva or vaginal secretions. The New England Journal of Medicine
Vulnerability of primitive human placental trophoblast to Zika virus

13 February - We have tested the hypothesis that the placenta of early pregnancy might be more easily breached by the Zika virus (ZIKV) than the relatively resistant outer cells of the mature placenta. Colonies of placental lineage cells derived from embryonic stem cells, which are probably analogous to the primitive placenta at implantation, were lysed more rapidly by an African strain of ZIKV, considered relatively benign, than by an Asian strain linked to fetal brain abnormalities. We conclude that the human fetus may be most vulnerable to ZIKV very early in pregnancy and that the African strain may threaten a pregnancy more strongly than previously believed. PNAS

top of page...

INFLUENZA

APHC: U.S. Army Influenza Activity Report

For the week ending 4 February 2017 (Week 5) All regions, except RHC-E and RHC-P, have shown an increase in the percentage of specimens testing positive for influenza A. In the general population, the number of influenza positive tests reduced significantly in week 5.

- ILI Activity: Army ILI (influenza-like illness) outpatient visits in week 5 were 2.5% higher than the same week last year.
- Influenza cases: Seven hospitalized influenza-associated cases were reported to APHC through DRSi in week 5: 1 AD Service Member and 6 non-AD beneficiaries.
- Viral specimens: During week 5, 634 of 2080 (30%) lab specimens tested positive for respiratory pathogens. Of 476 influenza A-positive specimens, RHC-C reported 223 (46.8%), followed by RHC-A (193, 40.5%), RHC-E (36, 7.6%), RHC-P (22, 4.6%), and CENTCOM (2, 0.4%). APHC

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

During week 5 (January 29-February 4, 2017), influenza activity increased in the United States.

- Viral Surveillance: The most frequently identified influenza virus subtype reported by public health laboratories during week 5 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.
- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was above the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.
Influenza-associated Pediatric Deaths: Five influenza-associated pediatric deaths were reported. CDC

China: To stem spread of avian flu in China, some provinces shutter poultry markets

13 February - Authorities are closing live poultry markets in multiple Chinese cities and provinces, in an effort to stop the spread of the deadly H7N9 strain of the avian flu virus. "Officials in the southern Chinese city of Guangzhou – population 17 million – found more than 30 percent of the city’s poultry markets are contaminated with the H7N9 strain of bird flu," as NPR's Rob Schmitz reports from Shanghai. ... China has seen an uptick of cases of H7N9. "State media has reported 130 human cases of bird flu in January, resulting in 24 deaths," Rob says. In Sichuan province, authorities say they have closed "280 live poultry trading and slaughtering venues in Suining city," according to the state-run Xinhua news agency. It adds that authorities have also halted poultry live trading in Zhejiang province since Saturday evening. Additionally, authorities have suspended live poultry markets in Changsha, the capital of Hunan province, according to Xinhua. Five people in the province have died as a result of the virus this year. "And on Saturday, officials in Beijing confirmed the city’s first human case of bird flu this year," Rob added. NPR

ECDC: Flu News Europe

Week 5/2017 (30 January - 5 February 2017)

- Influenza activity remained elevated across the region with 28 of 43 countries reporting medium to very high intensity.
- Most countries reported stable or decreasing activity compared to the previous week.
- Excess all-cause mortality has been observed in people aged 15-64 year and 65 years or older in many of the 18 countries that provide data on excess all-cause mortality and, most likely, this is mainly due to the circulation of influenza A(H3N2) virus.
- The proportion of influenza virus detections among sentinel surveillance specimens decreased to 45% from 51-52% seen since week 51/2016.
- The great majority of influenza viruses detected were type A (94%) and, of those subtyped, 97% were A(H3N2). However, there was a small increase of the influenza type B detection proportion, as is often seen towards the end of an influenza season.
- Most of the hospitalized laboratory-confirmed influenza cases reported have occurred in people aged 65 years or older.

European Center for Disease Prevention and Control/WHO

Interim estimates of 2016–17 seasonal influenza vaccine effectiveness — United States, February 2017

17 February - ... This report uses data, as of February 4, 2017, from 3,144 children and adults
enrolled in the U.S. Influenza Vaccine Effectiveness Network during November 28, 2016–February 4, 2017, to estimate an interim adjusted effectiveness of seasonal influenza vaccine for preventing laboratory-confirmed influenza virus infection associated with medically attended ARI. During this period, overall vaccine effectiveness (VE) (adjusted for study site, age group, sex, race/ethnicity, self-rated general health, and days from illness onset to enrollment) against influenza A and influenza B virus infection associated with medically attended ARI was 48% (95% confidence interval [CI] = 37%–57%). Most influenza infections were caused by A (H3N2) viruses. VE was estimated to be 43% (CI = 29%–54%) against illness caused by influenza A (H3N2) virus and 73% (CI = 54%–84%) against influenza B virus. Morbidity and Mortality Weekly Update

NHRC: Febrile Respiratory Illness Surveillance Update

For 2017 Week 5 (through 4 February 2017)

- Influenza: Six 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 elevated at Fort Benning, Fort Jackson, NRTC Great Lakes, and MCRD Parris Island. Naval Health Research Center

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

During 22 January - 4 February 2017 (Surveillance Weeks 4 & 5), a total of 460 specimens were collected from 52 locations. Results were finalized for 357 specimens from 51 locations. During Week 4, two influenza A(H1N1)pdm09, 92 influenza A(H3N2), and ten influenza B viruses were identified. During Week 5, 75 influenza A(H3N2) and ten influenza B viruses were identified. Approximately 40% of specimens tested positive for influenza during Week 4. Approximately 43% of specimens tested positive for influenza during Week 5. The influenza percent positive for the season is approximately 27%.
US Air Force School of Aerospace Medicine & Defense Health Agency

VETERINARY/FOOD SAFETY

Fort Bragg veteran overlooked for adopting his bomb-sniffing dog

10 February - A Fort Bragg veteran is trying to reunite with his bomb-sniffing dog that was adopted by a civilian while he was recovering from injuries he suffered on deployment in Afghanistan in 2012. Ryan Henderson, who was a sergeant serving as a dog handler for the
82nd Airborne Division's 1st Brigade Combat Team in 2012, said he's pleaded with the
civilian to return Satan, his beloved German shepherd. But Henderson's efforts are futile -
he's among several dog handlers who were overlooked for adoption before laws ensured
handlers would be given the first crack at adoption. ... The Department of Defense's military
working dog program has been under scrutiny for the past few years. The program -
Tactical Explosive Detector Dog, or TEDD, program - was initiated in January 2011 as a
temporary, Army-funded contract to support brigade combat teams deployed to areas
known to be ridden with improvised explosive devices. U.S. Central Command ended the
contract for the program in 2014. At that time, handlers were not legally required to be
identified for the first chance to adopt the dogs; it was merely a common courtesy in
Defense Department kennels. Fay Observer

Listeria in cheese; recalls by Sargento, Meijer, others

11 February - Routine, random testing by Tennessee food inspectors found Listeria monocytogenes in Colby cheese
and has triggered recalls of a variety of Sargento, Meijer and Amish Classics cheese products. No illnesses had been
reported to Tennessee officials or Michigan-based grocery chain Meijer, according to a state alert and a recall notice
posted Thursday and Friday, respectively. However, it can take up to 70 days for symptoms of Listeria infection to develop following exposure to the bacteria. Food Safety News

Outbreaks linked to imported foods are increasing

16 February - A study published in the March edition of the CDC's Emerging Infectious Diseases reveals that more Americans are being sickened by imported food. The study's
authors state that "a small but increasing number of foodborne disease outbreaks [are] associated with imported foods, most commonly fish and produce. New outbreak
investigation tools and federal regulatory authority are key to maintaining food safety." fresh fruits, and 20% of fresh vegetables come from other countries. This proportion has steadily increased over the past 20 years because consumers want to eat produce out of season and want a wider selection of products. Food Poisoning Bulletin

Study finds new bacterial strain can contaminate shellfish

13 February - Scientists studying oysters along the East Coast may have discovered why
more seafood lovers are getting sick from shellfish. A new strain of the bacteria *Vibrio parahaemolyticus*, is causing diarrhea, vomiting and abdominal pain. The strain, ST631, is endemic to the region, but it is unclear how it became so noxious. Research suggests this bacterium and others may be spreading because of climate change. The discovery may reduce the risk of food poisoning. Scientists have developed a model that estimates the odds of bacteria in New Hampshire oysters. The New York Times
Autism starts months before symptoms appear, study shows

15 February - Parents often notice the first signs of autism in their children at around 12 to 18 months. Maybe a child isn’t making eye contact, or won’t smile when mom or dad walks in the door. But a new study suggests there is evidence of autism in the brain even earlier—well before a child’s first birthday—and that the signs can be seen on a magnetic resonance imaging (MRI) scan. ... [R]esearchers conducted MRI scans on 150 children three times: at six months old, one year and two years. Just over 100 of the children were at high risk because they had an older sibling diagnosed with autism. The faster growth rate of the surface areas of their brains correctly predicted eight times out of 10 which of the high-risk children would go on to be diagnosed with the condition. Scientific American

Baby's sex can affect mother's immunity: Study

15 February - A new study from The Ohio State University Wexner Medical Center has found that pregnant women’s bodies react differently depending on whether they are carrying a boy or a girl. Researchers followed 80 pregnant women through their entire pregnancy and found that the sex of a baby can be linked to a pregnant woman’s immune responses. ... While women didn’t exhibit differences in blood cytokine levels based on fetal sex, we did find that the immune cells of women carrying female fetuses produced more pro-inflammatory cytokines when exposed to bacteria,” Amanda Mitchell ... lead investigator on the study, said in a press release. "This means that women carrying female fetuses exhibited a heightened inflammatory response when their immune system was challenged, compared to women carrying male fetuses.” UPI

Drowsy drivers often behind fatal crashes

10 February - In the U.S. alone, more than 6,000 people die in drowsy driving-related motor vehicle crashes each year, a recent study suggests. Millions of U.S. drivers fall asleep at the wheel each month, and roughly 15 percent of all fatal crashes involve a drowsy driver, researchers note in the journal Sleep. “Drowsy driving is not just falling asleep at the wheel; it mimics alcohol-impaired driving in many ways,” said lead study author Stephen Higgins, a researcher at the National Highway Traffic Safety Administration in Washington, D.C. "Drowsiness leads to slower reaction times and impaired attention, mental processing, judgment, and decision making,” Higgins added by email. Reuters

Salt reduction policies cost-effective even without healthcare savings

10 February - Government policies designed to reduce how much salt people eat may be cost-effective even without considering the potential healthcare savings, a recent study
suggests. That's because efforts to curb salt use through policies like public education and industry agreements would not cost that much relative to their potential to reduce mortality and disability, researchers estimate. ... For the current study, researchers modeled the effects and costs of government-supported sodium reduction programs in 183 countries worldwide. ... Government programs designed to achieve a 10 percent reduction in salt consumption over 10 years could save nearly 6 million life years currently lost to cardiovascular disease each year, at an average cost of $204 per life year saved. Reuters

Study confirms vitamin D protects against colds and flu

15 February – A new global collaborative study has confirmed that vitamin D supplementation can help protect against acute respiratory infections. The study, a participant data meta-analysis of 25 randomized controlled trials including more than 11,000 participants, has been published online in The BMJ. ... The investigators found that daily or weekly supplementation had the greatest benefit for individuals with the most significant vitamin D deficiency (blood levels below 10 mg/dl) — cutting their risk of respiratory infection in half — and that all participants experienced some beneficial effects from regular vitamin D supplementation. Administering occasional high doses of vitamin D did not produce significant benefits. Harvard Gazette

The hunger gains: Extreme calorie-restriction diet shows anti-aging results

16 February - ... [T]wo new studies appear to move calorie restriction from the realm of wishful thinking to the brink of practical, and perhaps even tolerable, reality. Writing in Nature Communications, researchers at the University of Wisconsin–Madison and the National Institute on Aging reported last month chronic calorie restriction produces significant health benefits in rhesus monkeys—a primate with humanlike aging patterns—indicating “that CR mechanisms are likely translatable to human health.” The researchers describe one monkey they started on a 30 percent calorie restriction diet when he was 16 years old, late middle age for this type of animal. He is now 43, a longevity record for the species, according to the study, and the equivalent of a human living to 130. Scientific American

Why one food executive is pledging $25 million to fight his own industry

15 February - In late 2015, Daniel Lubetzky learned of a federal rule that puzzled him: Salmon, avocados, olives, eggs and tree nuts aren’t “healthy,” according to the Food and Drug Administration. Lubetzky, the chief executive of snack brand KIND, had just received a letter from the FDA warning him to stop putting the term on the packaging of his snack bars. The agency's labeling regulations — dating back to the height of the anti-fat craze — prevented even "good" fats from calling themselves healthy, while allowing the label on some high-sugar products. ... Lubetzky concluded that his industry had too much power in how food policy is decided. On Wednesday, he launched a new public advocacy
organization, called Feed the Truth, designed to explore, expose and “counteract” that sort of influence. He is now giving $25 million to fund the organization. The Washington Post

top of page...

USAFRICOM

Angola/Democratic Republic of the Congo: The yellow fever outbreak ends

14 February – The Democratic Republic of Congo (DRC) declared the end of the yellow fever outbreak in that country today following a similar announcement in Angola on 23 December 2016, bringing an end to the outbreak in both countries after no new confirmed cases were reported from both countries for the past six months. ... The outbreak, which was first detected in Angola in December 2015, had caused 965 confirmed cases of yellow fever across the two countries, with thousands more cases suspected. The last case detected in Angola was on 23 June 2016 and DRC’s last case was on 12 July the same year. WHO

East Africa: Nodding disease - NIH report link to Onchocerca proteins

15 February - Researchers at the National Institutes of Health have uncovered new clues to the link between Nodding syndrome, a devastating form of pediatric epilepsy found in specific areas of east Africa, and a parasitic worm that can cause river blindness. The study ... suggests that the mysterious neurological disease may be caused by an autoimmune response to the parasitic proteins. ... The results of this study suggest that Nodding syndrome may be an autoimmune disease, in which the immune system incorrectly attacks the body’s own proteins. According to the researchers, the immune system creates antibodies to fight off the parasite following infection with Onchocerca volvulus. However, those antibodies also bind to leiomodin-1, so the immune system—incorrectly—will attack brain cells that contain that protein, which can result in symptoms of Nodding syndrome. Outbreak News Today

Kenya: Kenyan doctors' union officials jailed over strike

13 February - A Kenyan court has jailed seven union officials for a month for failing to call off a strike by the country’s doctors that has crippled public hospitals for 10 weeks. Judge Hellen Wasilwa said on Monday that she could not delay further the contempt of court sentence that had been suspended earlier on condition the doctors cancel their strike. At least 5,000 doctors are on strike since December 5 for better pay and to protest the dilapidated state of Kenya’s public healthcare. It has left public hospitals closed and patients unable to get basic medical care. Al Jazeera
Sierra Leone: Opioids - Sierra Leone's newest public health emergency

13 February - ... What was until recently a little-known prescription-only medication for treating chronic pain has in the past two years been at the centre of a rapidly expanding addiction crisis in Sierra Leone - a country with virtually no avenues for drug rehabilitation. ... Propelled by a black market network of importers and sold cheaply under the table by private pharmacies, the problem has become so bad that in August 2016, Sierra Leone's overwhelmed pharmaceutical regulators declared tramadol abuse a public health emergency. In the 25 years since it was launched on the global market, tramadol dependence has spread through parts of Southeast Asia, the Middle East, North and West Africa and Europe. Fueled by inaction from international regulators and a steady stream of the product from India and China's swelling generic medication industries, pills imported by unstable or under-regulated countries can be easily be diverted to armed groups or smugglers who move it across the globe. Al Jazeera

Somalia: More than 900 new cases of cholera in Somalia

14 February - The World Health Organization (WHO) said yesterday that Somalia has reported 913 new suspected cholera cases, including 10 deaths, since their last update on Jan 25. Despite increasing cases, the fatality rate has dropped to 1.1% from last week's 1.7%, indicating improving patient care. ... In the last month, a new treatment center was opened in in Burhakaba, and chlorination of water sources was conducted in Baidoa, Burhakaba and surrounding areas. Thirty-eight districts in the country have reported cases. ... Since the beginning of the year, there have been 4,026 suspected cases of cholera including 57 deaths (case-fatality rate 1.5%). Because of the prolonged conflict in the country, insecurity and accessibility have hindered cholera response operations. CIDRAP News Scan (fourth item)

top of page...

USCENTCOM

Iraq: UN health agency delivers medical aid to newly retaken areas of Mosul

16 February – The United Nations health agency has delivered medical supplies to parts of eastern Mosul, the Iraqi city liberated from the Islamic State (ISIL), where clinics are receiving an influx of people in urgent need of medical care. The World Health Organization (WHO) said the supplies “will support treatment of patients with infectious diseases, chronic conditions, diarrheal diseases and trauma cases who have been deprived of medical care.” According to the press release, the supplies are a donation from the Government of Norway
and include medicines, emergency health kits, surgical kits and an interagency diarrheal disease kits. They were delivered to newly retaken areas of Mosul, including 16 primary health centres, one hospital and the Directorate of Health (DOH) of Ninewa – the governorate which includes Mosul. UN News Centre

Saudi Arabia: Saudi Arabia reports more MERS cases; WHO announces Buraydah outbreak over

13 February - The Saudi Arabian Ministry of Health (MOH) reported three new MERS-CoV cases over the weekend and two deaths, while the World Health Organization (WHO) released details on 17 cases of MERS, noting that a small healthcare-associated outbreak in Buraydah was officially over. ... The newly reported cases lift the country’s MERS total to 1,557 cases, including 648 deaths. Eight patients are still being treated for the disease. ... Late last Friday the WHO released details on 17 cases of MERS reported between Jan 10 and Feb 3 in Saudi Arabia. Four of the patients died. Nine of the 17 cases reported were linked to camel exposure, a known risk factor for contracting the disease. CIDRAP

Syria: The United States used depleted uranium in Syria

14 February - Officials have confirmed that the U.S. military, despite vowing not to use depleted uranium weapons on the battlefield in Iraq and Syria, fired thousands of rounds of the munitions during two high-profile raids on oil trucks in Islamic State-controlled Syria in late 2015. The air assaults mark the first confirmed use of this armament since the 2003 Iraq invasion, when it was used hundreds of thousands of times, setting off outrage among local communities, which alleged that its toxic material caused cancer and birth defects. U.S. Central Command (CENTCOM) spokesman Maj. Josh Jacques told Airwars and Foreign Policy that 5,265 armor-piercing 30 mm rounds containing depleted uranium (DU) were shot from Air Force A-10 fixed-wing aircraft on Nov. 16 and Nov. 22, 2015, destroying about 350 vehicles in the country’s eastern desert. Foreign Policy

France: CPE on the rise in France

10 February - The number of enterobacterial isolates with decreased susceptibility to carbapenems doubled in France from 2012 to 2014 and the proportion of carbapenemase producers rose by more than 50% during that period. ... From January 2012 to December 2014, 6,682 enterobacterial isolates recovered from clinical and screening specimens in
France and French overseas territories were tested for carbapenem activity. ... Isolates with reduced susceptibility to at least one carbapenem (ertapenem, meropenem, or imipenem) were further evaluated for carbapenemase activity. ... The results of the testing showed 99% of the enterobacterial isolates were nonsusceptible to at least one carbapenem and that the number of isolates with decreased susceptibility rose from 1,485 in 2012 to 2,972 in 2014.

CIDRAP Stewardship/Resistance Scan (second item)

Spain: A dozen measles cases reported in Barcelona

12 February - Health officials in Catalonia have reported twelve measles cases among young adults in Barcelona, according to a La Vanguardia report (computer translated). The twelve cases diagnosed so far in the metro Barcelona area are linked to the same original patient, a person who became infected in China in early January, as stated in the circular that the Agency of Public Health of Catalonia has sent to all health centers. Measles was eradicated from the area since 2000; however, sporadic outbreaks still occur. Outbreak News Today

USNORTHCOM

U.S.: 188,000 evacuated, emergency declared as California’s massive Oroville Dam threatens floods

13 February - About 188,000 residents near Oroville, Calif., were ordered to evacuate Sunday after a hole in an emergency spillway in the Oroville Dam threatened to flood the surrounding area. Thousands clogged highways leading out of the area headed south, north and west, and arteries major and minor remained jammed as midnight approached on the West Coast. Even as they fled, however, the flow of water over the spillway halted late in the evening, stabilizing the crisis. But officials warned the damaged infrastructure could create further dangers as storms approach in the week ahead. ... After a record-setting drought, California has been battered by potentially record-setting rain, with the Northern California region getting 228 percent more than its normal rainfall for this time of year. The average annual rainfall of about 50 inches had already been overtaken with 68 inches in 2017 alone. The Washington Post

U.S.: Antibacterial soaps possibly dangerous, FDA says in ban

11 February - Consumers soon won’t be able to buy antibacterial hand soaps, products federal officials are describing as unneeded and possibly dangerous. “There isn’t enough science to show that over-the-counter antibacterial soaps are better at preventing illness than washing with plain soap and water,” the U.S. Food and Drug Administration says. By
September 2017, the FDA order says, the banned antibacterial soaps and body washes should be removed from store shelves. The officials say the products contain 19 antimicrobial chemicals, most commonly triclosan (liquid soaps) and triclocarban (bar soaps).” *WBTV*

**U.S.: Broken California dam is a sign of emergencies to come**

14 February - A deluge of repeated rainstorms set the stage for the near-disaster at the Oroville Dam in California, a crisis that foreshadows what the Golden State can expect more of with climate change, several experts said. ... While it's too soon for studies that would look for a climate link to the Oroville drama, experts said climate models show California likely will swing between devastating droughts and extreme storms. That could cause significant problems if the state’s infrastructure isn’t ready, they said. ... The state’s water system “was designed and built for a climate we no longer have, for yesterday’s climate, not tomorrow’s climate,” said Peter Gleick, president emeritus and chief scientist with the Pacific Institute and an expert on water issues. “We're going to have to rethink how we deal with infrastructure, to deal with the changes that are, frankly, already here.” *Scientific American*

**U.S.: California reports thousands of workers exposed to elevated lead levels**

13 February - More than 6,000 California workers in munitions, manufacturing and other industries have elevated levels of lead in their blood that could cause serious health problems, according to a recent report from the state’s public health agency. The report, containing the results of tests conducted between 2012 and 2014, comes as the state’s workplace health and safety agency, Cal/OSHA, is considering a major update of its safety standards for workplace lead exposure for the first time in decades. The current standards are based on 35-year-old medical findings, which at the time did not recognize the dangers of even low-level exposure to lead. *PBS Newshour*

**U.S.: CDC expands investigation into Seoul virus outbreak**

10 February - The Centers for Disease Control and Prevention (CDC) is working with health officials in 15 states regarding the investigation of an outbreak of Seoul virus infection, according to an update on the agency's website. Thus far, 11 people in Illinois, Indiana, and Wisconsin have had laboratory-confirmed infection after initial reports that 2 persons who operated a home-based rat-breeding facility in Wisconsin were hospitalized in December. The individuals had purchased rats from animal suppliers in Wisconsin and Illinois. Subsequent investigation into 2 ratteries in Illinois revealed an additional 6 individuals who tested positive for Seoul virus. All have recovered. *Clinical Advisor*
U.S.: Despite increase in car safety, traffic deaths continue to rise

15 February - Despite improvements in automobile technology which even critics acknowledge have made cars the safest they have ever been, traffic fatalities took a dramatic rise last year. The number of motor vehicle deaths in 2016 totaled 40,200, up 6 percent from 2015, and marked the first time the annual fatality total has exceeded 40,000 since 2007. Those 2016 death numbers are up an alarming 14 percent from the 2014 total. ... Deborah Hersman, president of the Itasca-based National Safety Council which compiled the 2016 numbers [said,] “Vehicle miles traveled last year went up by about 3 percent, but the fatality numbers were double that.” NBC 5 Chicago

U.S.: Diseased rat urine kills New Yorker in outbreak of rare illness

15 February - Diseased rat urine has killed at least one person and sickened two others in New York City in an outbreak of a rarely seen infection, prompting calls from city officials on Wednesday for a renewed effort to cull the rodent population. The outbreak of leptospirosis began in December and all three cases were traced to a single-block area of the Bronx, New York’s northernmost borough, the city’s health department said in a statement on Tuesday. ... Two people were diagnosed in December and the third in February, the department said. While one died, the other two have since recovered. The department did not identify the patients, nor say exactly how it thought the three people were exposed to the infected rat urine. Reuters

U.S.: Device measures calorie content of social media—promising new insights for public health

13 February - ... A team of scientists have invented a new instrument for measuring ... the caloric content of social media posts—like tweets. “This can be a powerful public health tool,” says Peter Dodds, a scientist at the University of Vermont, who co-led the invention of the new device—called a Lexicocalorimeter. ... [T]he Lexicocalorimeter gathers tens of millions of geo-tagged Twitter posts from across the country and fishes out thousands of food words—like "apples," "ice cream," and "green beans." At the same time, it finds thousands of activity-related terms—like "watching TV," "skiing," and even "alligator hunting" and "pole dancing." These giant bags of words get scored—based on data about typical calorie content of foods and activity burn rates—and then compiled into two measures: "caloric input" and "caloric output." The ratio of these two measures begins to paint a picture that might be of interest ... to mayors, public health officials, epidemiologists, or others interested in "public policy and collective self-awareness," the team of scientists write in their new study. Medical Xpress
U.S.: Melanoma mortality trends vary by states, region

14 February - Whether death rates from melanoma are going up or down in the United States depends on the state and region, according to a research letter published online by *JAMA Dermatology*. ... Demographic differences appear to be a factor in the variation in melanoma death and incidence rates among states, according to study authors. Among the findings is that 23 of 48 states (with data for 2003 and 2013) had a decrease in melanoma death rates; four states had no change, and 21 states saw an increase. ... More specifically, the study found melanoma dropped in five of nine Northeastern states over a decade, and death rates declined in six of the nine states. Yet, incidence and death rates rose in most Midwestern states studied. While melanoma cases also went up in the South and West, death rates varied in those regions. *U.S. Medicine*

U.S.: Ohio postpones 8 executions amidst legal challenge to lethal injection procedure

10 February - Gov. John Kasich has put Ohio executions on hold until May, citing a legal challenge to the state's three-drug lethal injection protocol. The governor's office released a statement saying it had postponed the execution dates for the next eight prisoners on death row, including the next prisoner to die, Ronald Phillips, who had his date moved from next Wednesday to May 10. Executions have been on hold in Ohio since Jan. 16, 2014, when the state used a sedative called midazolam during the execution of Dennis McGuire. It took 24 minutes for McGuire to die. ... The state had planned to resume using midazolam in a new lethal injection protocol this year, but in January a federal judge rejected the state's three-drug procedure, on the grounds that midazolam is not sufficiently humane in its effects. ... Barbiturates such as pentobarbital were the lethal injection drugs of choice until pharmaceutical companies began blocking their sale for executions. *NPR*

U.S.: Tom Price is confirmed as health secretary

10 February - The Senate early Friday approved the nomination of Representative Tom Price to be secretary of health and human services, putting him in charge of President Trump's efforts to dismantle the Affordable Care Act. By a vote of 52 to 47, the Senate confirmed Mr. Price, Republican of Georgia, after a debate that focused as much on his ethics and investments as on his views on health policy. ... Mr. Price will be the first physician to lead the Department of Health and Human Services since Dr. Louis W. Sullivan stepped down at the end of the first Bush administration in January 1993. As secretary, Mr. Price will be responsible for a department with an annual budget of more than $1 trillion. Agencies within the department regulate food and drugs, sponsor much of the nation's biomedical research and combat public health threats, including the Zika virus, opioid drug abuse and bioterrorism. *The New York Times*
China: China orders cities on "pollution highway" to reduce emissions, Beijing braces for smog

13 February - Chinese cities that sit on three pollution "highways" have been told to coordinate efforts to reduce emissions, as Beijing and the country’s northeast regions brace for another bout of heavy smog this week, state media reported on Monday. There are 20 cities which sit on three western, central and eastern routes on which air-borne pollutants travel north due to geological and meteorological conditions, the China Daily newspaper said citing the Ministry of Environment. Tackling emissions in cities such as Anyang and Tangshan will reduce the severity of air pollution in neighbouring areas and help Beijing reach its ambitious target this year to reduce the daily concentration of PM2.5 harmful breathable particles to 60 micrograms per cubic metre from 73 in 2016, it said.

Thomson Reuters Foundation News

India’s air pollution rivals China’s as world’s deadliest

14 February - India’s rapidly worsening air pollution is causing about 1.1 million people to die prematurely each year and is now surpassing China’s as the deadliest in the world, a new study of global air pollution shows. The number of premature deaths in China caused by dangerous air particles, known as PM2.5, has stabilized globally in recent years but has risen sharply in India, according to the report. ... India has registered an alarming increase of nearly 50 percent in premature deaths from particulate matter between 1990 and 2015, the report says. ... Pollution levels are worsening in India as it tries to industrialize, but “the idea that policy making should be led by government is lacking,” Bhargav Krishna, manager for environmental health at the Public Health Foundation of India, a health policy research center in New Delhi, said in an interview. The New York Times

Pacific nations testing tsunami warning systems this week

13 February - Pacific Rim countries will be testing their warning systems and their capacity to handle a major tsunami during a Feb. 15-17 exercise named PacWave17. It aims to identify any holes in the Pacific Tsunami Warning and Mitigation System established under the auspices of UNESCO’s Intergovernmental Oceanographic Commission (IOC). The exercise involves several scenarios for earthquakes off the coasts of Chile and Peru, Colombia and Ecuador, Philippines, Solomon Islands, Tonga, and Vanuatu for countries to choose from, with alerts being sent to the national focal points of each country taking part from the Pacific Tsunami
Bolivia: Bolivia reports first yellow fever case in a decade

10 February - Bolivia's government on Friday said a Danish tourist had tested positive for yellow fever, its first case in a decade, after he visited a jungle area in the far west of the landlocked Andean country. After an initial stay at a Bolivian hospital, National Health Director Rodolfo Rocabado said the stricken tourist traveled on to Chile for treatment. He also urged Bolivians not to fear an outbreak. "This person came from another place and was not vaccinated," he told Reuters. "Our population is covered because massive vaccination campaigns have been done." Reuters

French Guiana: Epidemiological assessment of the severity of dengue epidemics in French Guiana

14 February - We monitored hospitalized [dengue] cases between 2008 and 2013. Detailed clinical features and biological parameters were collected on a daily basis from all cases. Among the 1,356 cases, 216 (16%) were classified according to the WHO 2009 classification as dengue without warning signs (WS), 926 (68%) were classified as dengue with WS and 214 (16%) were classified as severe dengue. The severity rates were similar between the three major epidemics that occurred during the study period, whereas the hospitalization rate was highest in 2013. Fluid accumulation, aspartate aminotransferase (ASAT) counts>193 IU/L and platelet counts<75,000 cells/mm3 were associated with dengue severity. PLOS One
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.