27 February 2015

Army Public Health Weekly Update

U.S. Army Public Health Command

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PHOTOS: Take a Look at the World’s Working Dogs

Mondays can be hard for everyone, but imagine how they feel for these working dogs around the world. Far from living “a dog’s life” like their more relaxed house-dog friends, these working dogs know the value of an honest day’s labor.

U.S. MILITARY

Incidence of *Salmonella* infections among Service members of the active and Reserve components of the U.S. Armed Forces and among other beneficiaries of the Military Health System, 2000–2013

January – 2015 - ... During 2000–2013, there were 1,815 incident cases of non-typhoidal *Salmonella* and 456 incident cases of typhoidal *Salmonella* diagnosed in the active component force. The crude incidence rate for non-typhoidal *Salmonella* was 0.91 cases per 10,000 person years (p-yrs) and the rate for typhoidal *Salmonella* was 0.23 cases per 10,000 p-yrs. Among retirees and family members, children under 5 years of age and those aged 75 years or older comprised the greatest number of non-typhoidal *Salmonella* cases. Medical Surveillance Monthly Report

Ranger School adds packing list for women

24 February- Preparations are already underway for the integrated Ranger School class in April, and officials are looking at everything from accommodations to personal hygiene. The Airborne and Ranger Training Brigade has updated its packing list for students, said Col. David Fivecoat, commander of the brigade, which runs Ranger School. ... This is a first for the storied Ranger School, which until now has been open only to men. The packing list updated Monday contains several items female students must bring with them, on top of the standard items such as uniforms, ear plugs and eye protection. They include feminine wipes, sports bras, cotton underwear, pads or tampons, and a female urinary diversion device, or FUDD. With use of a FUDD, a female soldier in the field can urinate more discreetly while standing, and also with minimal undressing. Army Times

GLOBAL

Food habits getting worse around the world

23 February - People in some poor and middle-income countries have healthier diets than those in rich ones, but major Western snack and soft drink makers are targeting children in ways that will damage their health, according to a new series of studies on obesity. The studies, published last week in special issues of The Lancet and Lancet Global Health on
International SOS has released Health Risk Map 2015, a tool to help organisations understand the medical risks in the markets in which they operate. The Health Risk Map series is now in its sixth year.

WHO urges shift to single-use smart syringes

23 February - Smart syringes that break after one use should be used for injections by 2020, the World Health Organization has announced. Reusing syringes leads to more than two million people being infected with diseases including HIV and hepatitis each year. The new needles are more expensive, but the WHO says the switch would be cheaper than treating the diseases. More than 16 billion injections are administered annually. Normal syringes can be used again and again. But the smart ones prevent the plunger being pulled back after an injection or retract the needle so it cannot be used again. BBC News

EBOLA VIRUS DISEASE

Ebola crisis: Sierra Leone orphanage quarantined

23 February - An orphanage run by a UK charity in Sierra Leone has been quarantined after one of its local staff was diagnosed with the deadly Ebola virus. Augustine Baker is said to be in a stable condition at a local treatment centre after becoming ill last week. St George Foundation orphanage co-founder Philip Dean told the BBC that 33 children and seven staff were now in isolation. "Augustine collapsed at a staff meeting and several of his colleagues helped get him to hospital," UK-based Mr Dean told the BBC. "It's possible that they have been exposed. It's a very worrying time," he said. ... "A lot of people think Ebola is over, but what has happened to Augustine and the fact that last week we took in 12 children who have lost their parents to the disease shows it isn't," Mr Dean said. Our Freetown correspondent says that Sierra Leone last week recorded 62 cases of Ebola and 52 deaths related to the disease. BBC News

Ending the Ebola outbreak

24 February - Months of declining cases have fed hopes that the Ebola outbreak might finally be ending. "There are now 10 times fewer people diagnosed with Ebola each week
than there were in September last year,” said Dr. David Nabarro, the United Nation’s special envoy on the Ebola crisis. Months of declining cases have fed hopes that the Ebola outbreak might finally be ending. ... The number of new Ebola cases fell rapidly in December and January, but officials with the United Nations and the World Health Organization cautioned that ending the outbreak entirely would be extremely difficult. “The outbreak still presents a grave threat,” Dr. Nabarro said. “We have to really work hard to get to what we call zero-zero — zero cases, zero transmissions.” New York Times

Fatality rate in West Africa Ebola clinics is dropping

26 February- As the Ebola epidemic in West Africa wanes, physicians from Doctors Without Borders are confronting a mystery: More of their patients are surviving. They do not know why. ... Since last March, the average death rate at those remaining centers has dropped to 52 percent, from about 62 percent. Although patients are getting more intravenous hydration and more nursing care as staff have more time, the agency does not believe that accounts for the whole difference. Rather, patients are arriving with less virus in their blood. Viral loads have dropped by almost half, Dr. van Cutsem said, which increases a patient’s chances of survival enormously. ... One [hypothesis] is that fear has made West Africans more careful, and that even those who are infected have gotten smaller amounts of virus into their eyes or mouths. Perhaps they are wearing gloves when they bury bodies, he said, or at least partially protecting themselves while caring for sick relatives. New York Times

Fifteen-minute Ebola test approved

20 February - The first rapid blood test for Ebola has been approved for use by the World Health Organization. It should allow patients to be identified, isolated and cared for as quickly as possible in an attempt to bring an end to the outbreak that has killed more than 9,300 people. It is less accurate than conventional tests, but takes minutes rather than hours to get a result. The test also works without electricity so it can be used in remote regions. Current Ebola testing requires a laboratory to analyse the blood for fragments of the virus’s genetic material. It can take between 12 and 24 hours to get a definitive answer. BBC News

MIT lab develops rapid diagnostic tests for Ebola and dengue

24 February - A promising new diagnostic test from MIT looks like it could be a game changer for rapidly diagnosing several important infectious diseases within minutes. While most tests can only look for one type of infection at a time, this can differentiate between Ebola, dengue, and Yellow Fever—three hemorrhagic fevers—at the same time. ... The test will require little training, as it relies on technology similar to a pregnancy test, called lateral flow technology. A small amount of blood is directly applied to the strip, without needing to be processed in the lab. The fluid is drawn along a paper channel, and interacts with silver nanoparticles bound to monoclonal antibodies for the diseases. ... The silver nanoparticles turn different colors as they grow to different sizes, and are then bound to the antibodies. An easily read, color-coded band emerges if the blood carries any of these infections. Forbes

27 February - ... According to the latest World Health Organization update on February 18, 2015, a total of 23,253 confirmed, probable, and suspected cases of Ebola and 9,380 Ebola-related deaths had been reported as of February 15 from the three West African countries (Guinea, Liberia, and Sierra Leone) where Ebola virus transmission has been widespread and intense. Total case counts include all suspected, probable, and confirmed cases, which are defined similarly by each country. Because of improvements in surveillance, the number of cases reported in recent weeks might overestimate the number of Ebola cases in some areas because nonconfirmed cases are included in the total case counts. Sierra Leone reported the highest number of laboratory-confirmed cases (8,212), followed by Liberia (3,149) and Guinea (2,727). During the week ending February 14, a daily average of 11 confirmed cases were reported from Sierra Leone, fewer than one from Liberia, and seven from Guinea. The areas with the highest numbers of confirmed cases reported during January 25–February 14 were the Western Area and Port Loko (Sierra Leone) and Forecariah (Guinea). Guinea saw an increase in confirmed cases over the past 3 weeks. This might reflect improved surveillance and case reporting because of increased access to previously inaccessible communities. Morbidity and Mortality Weekly Report

U.S. military ends Ebola mission in Liberia

26 February - The United States military officially ended a mission to build treatment facilities to combat an Ebola outbreak in Liberia on Thursday, months earlier than expected, in the latest indication that a year-long epidemic in West Africa is waning. Washington launched the mission five months ago and the force peaked at over 2,800 troops at a time when Liberia was at the epicenter of the worst Ebola epidemic on record. Reuters

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INFLUENZA

Armed Forces Health Surveillance Center: DoD Seasonal Influenza Surveillance Summary

For Week 6:

- NORTHCOM: Flu activity was highly variable throughout NORTHCOM during this reporting period.
- EUCOM: High influenza activity was seen in Italy and Germany.
- PACOM: Influenza activity remained high in Hawaii and was moderate in South Korea.
CENTCOM and AFRICOM: Flu activity was minimal to low throughout CENTCOM and AFRICOM.

SOUTHCOM: Influenza activity was low. AFHSC DoD Seasonal Influenza Surveillance Summary

CDC: Weekly Influenza Surveillance Report

- During week 6 (February 8-14, 2015), influenza activity decreased, but remained elevated in the United States.

- Viral Surveillance: Of 18,370 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 6, 2,381 (13.0%) were positive for influenza.

- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was above the epidemic threshold.

- Influenza-associated Pediatric Deaths: Six influenza-associated pediatric deaths were reported.

- Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 3.2%, above the national baseline of 2.0%. All 10 regions reported ILI at or above region-specific baseline levels. FluView

DoD Global, Laboratory-Based, Influenza Surveillance Program

During Surveillance Weeks 5 & 6, 1-14 February 2015, a total of 542 specimens were collected and received from 65 locations. Results were finalized for 249 specimens from 50 locations. During Week 5, the laboratory identified 107 influenza A(H3N2), one influenza co-infection (A(H3N2) & RSV), 15 influenza A/not subtyped, and 11 influenza B. During Week 6, 18 influenza A(H3N2), 11 influenza A/not subtyped, and 14 influenza B were identified. USAF School of Aerospace Medicine

Flu News Europe

Week 07/2015

- Influenza activity continues, particularly in western and central countries of the WHO European Region.

- The overall proportion of influenza positive specimens and the total number of sentinel influenza virus detections decreased slightly which may be indicative of several countries having passed their peaks of influenza activity.

- Of 38 reporting countries an equal number of countries, 15 each, reported stable and increasing influenza activity.

- Of 2588 sentinel specimens, 1268 (49%) tested positive for influenza virus with positive
detections being made in 33 out of 37 countries that reported virological data.

- Influenza A(H1N1)pdm09, A(H3N2) and type B viruses continued to circulate in the Region, with A(H3N2) predominating.

- Excess all-cause mortality among elderly people (aged ≥65 years), concomitant with increased influenza activity and the predominance of A(H3N2) viruses, has been observed since the beginning of the year in seven (Belgium, France, Greece, Portugal, Spain, Switzerland and the United Kingdom (England, Scotland and Wales)) of 13 reporting countries.

- The circulation of respiratory syncytial virus (RSV) has decreased across the Region, following peak activity during the first two weeks of 2015. Flu News Europe

**Naval Health Research Center: Febrile Respiratory Illness Surveillance Update**

For week 7 ending 21 February 2014:

**Influenza**

- Fourteen cases of NHRC laboratory-confirmed influenza (A/H3) among US military basic trainees.

- Moderate influenza A/H3 activity at several recruit sites.

- A/H3 cases also occurring among DoD dependents and civilians near US-Mexico border. Low proportion of cases had been vaccinated prior to illness.

FRI surveillance at all eight U.S. military basic training centers indicated moderately elevated FRI rates at Lackland AFB. NHRC Febrile Respiratory Illness Surveillance Update

**Swine flu: India health minister urges calm**

25 February - Indian Health Minister JP Nadda has urged the public not to panic, as the number of deaths so far this year from swine flu passed 900 from 16,000 cases. Rajasthan and Gujarat are among the worst affected states. Officials in Ahmedabad, Gujarat’s largest city, have announced restrictions on public gatherings as a precautionary measure. The current outbreak, which began in December last year, is India’s deadliest since 2010. BBC News

**USAPHC: U.S. Army Influenza Activity Report**

For the week ending 14 February 2015 (Week 06):

- The number of specimens testing positive for influenza A continued to decline in week six. All regions, except ERMC and PRMC, have shown declining trends from peaks earlier in the year.
- Influenza-like illness (ILI) activity: Army incident ILI outpatient visits in week six were 7% higher than for the same week last year.

- Influenza cases: 4 hospitalized influenza cases were reported to USAPHC in week six: 1 Active Duty (AD) service member (SM) and 3 non-AD beneficiaries. Only one had been vaccinated. To date, 61 cases have been reported during this influenza season: 13 AD SM and 48 non-AD beneficiaries.

- Viral specimens: During week six, 578 of 2011 (29%) laboratory specimens tested positive for respiratory pathogens; 358 of 1601 (22%) specimens tested for influenza A were positive. SRMC reported the most influenza A-positive specimens (29%), followed by PRMC (25%), ERMC (22%), NRMC (17%), WRMC (8%), and CENTCOM (0%).

USAPHC U.S. Army Influenza Activity Report

**US flu season continues to hit elderly hard**

20 February - Although many markers of flu activity continue to decline slightly, hospitalizations for influenza keep climbing, with the rate again setting a record in seniors, the US Centers for Disease Control and Prevention (CDC) reported today in its weekly update. Flu activity has been elevated for 13 consecutive weeks as of last week, the CDC said. Over the past 13 flu seasons, that has been the average length of elevated activity, so this season is promising to be an extended one. [CIDRAP](http://www.cidrap.umn.edu)

**WHO Influenza Update**

23 February - Globally, influenza activity remained high in the northern hemisphere with influenza A(H3N2) viruses predominating. Some countries reported an increase in influenza A(H1N1)pdm09 activity. Antigenic characterization of most recent A(H3N2) viruses thus far indicated differences from the A(H3N2) virus used in the influenza vaccines for the northern hemisphere 2014-2015. The vast majority of influenza A(H3N2) viruses tested to date this season were sensitive to neuraminidase inhibitors.

- In North America, the influenza activity seemed to have peaked. Influenza A(H3N2) virus has predominated this season.

- In Europe, the influenza season continued to rise, particularly in western and central countries. Influenza A(H3N2) remained the dominant virus detected this season. However, in south west Europe the proportion of influenza A(H1N1) and influenza B increased.

- In northern Africa and the Middle East, influenza activity is ongoing. Some countries are reporting an increase in influenza A(H1N1)pdm09 activity (Jordan, Morocco, Tunisia).

- In the temperate countries of Asia, influenza activity decreased from its peak in northern China, but continued to increase in Mongolia and the Republic of Korea. Influenza A(H3N2) virus predominated so far.

- In tropical countries of the Americas, influenza activity remained low in most countries.

- In tropical Asia, influenza activity continued to increase in southern China, China Hong Kong Special Administrative Region and India. [WHO](http://www.who.int)
Which foods are high risk for carrying harmful pathogens?

25 February - Federal researchers have mapped out the percentage of foodborne illnesses associated with specific food groups. The CDC, FDA, and U.S. Department of Agriculture used data on nearly 1000 outbreaks from 1998 to 2012 — with a focus on the most recent 5 years — for four common foodborne pathogens:

- **Campylobacter** illnesses were most often attributable to dairy (66%), often unpasteurized, and chicken (8%).
- Most *Escherichia coli* O157 illnesses were caused by beef (46%) and vegetable row crops (36%).
- *Listeria monocytogenes* illnesses were often caused by fruits (50%) and dairy (31%).
- *Salmonella* illnesses came from a wider variety of sources, including seeded vegetables (18%), eggs (12%), fruit (12%), chicken (10%), sprouts (8%), beef (9%), and pork (8%).

NEJM Journal Watch

Clinically depressed three times more likely to commit violent crime

24 February - People diagnosed with major depression are around three times more likely than the general population to commit violent crimes such as robbery, sexual offences and assault, psychiatric experts said on Wednesday. In a study based on some 47,000 people, the scientists emphasized, however, that the overwhelming majority of depressed people are neither violent nor criminal and should not be stigmatized. "One important finding was that the vast majority of depressed persons were not convicted of violent crimes, and that the rates ... are below those for schizophrenia and bipolar disorder, and considerably lower than for alcohol or drug abuse," said Seena Fazel, who led the study at Oxford University’s psychiatry department. Reuters

Early immunotherapy helps kids beat peanut allergy

23 February - Very young children who have shown reactivity to peanuts had a high rate of "sustained unresponsiveness" after stopping oral immunotherapy, researchers reported...
A total of 29 out of 30 patients were able to consume 5 g peanut protein in a food challenge 4 weeks after stopping oral immunotherapy, which had been given for at least 1 year, said Brian P. Vickery, MD, of the University of North Carolina at Chapel Hill, in a press conference at the American Academy of Allergy, Asthma, and Immunology annual meeting. Sustained unresponsiveness is a term that has been introduced to describe an individual’s ability to undergo a food challenge without becoming symptomatic and then have the food introduced into the diet ad libitum. MedPage Today

Healthy diet linked to lung health

26 February - Among its many rewards, eating a healthy diet might help protect against the development of chronic obstructive pulmonary disease, or COPD, according to a new study. Based on more than 120,000 men and women followed for more than a decade, researchers calculate that those who ate a diet highest in whole grains, vegetables and nuts, and lowest in red meats and sugars were up to a third less likely to develop COPD – even if they smoked - than those who ate the worst diet. Reuters

HIV prevention saves over $250,000 over lifetime

25 February - Preventing the human immunodeficiency virus (HIV) in one person living in the U.S. saves more than $250,000 over their remaining lifetime, according to a new analysis. Based on estimates of lifespan and medical costs from age 35 onward, researchers found that avoiding infection with the virus that causes AIDS saves from $229,800 to $338,400, depending on the amount of care a person receives. Bruce Schackman, who led the study, said the savings may be even greater once non-medical costs are taken into account, including a person's reduced productivity due to the infection. ... The savings estimates will help researchers and policymakers judge the cost-effectiveness of HIV prevention methods. Reuters

Meditation for a good night’s sleep

23 February - ... You may be able to significantly improve your ability to get a restful night of sleep by practicing a popular form of meditation, a rigorous new study shows. The findings may be particularly relevant to Americans older than 55, about half of whom have some form of sleep trouble. The research, a clinical trial "published in the journal JAMA Internal Medicine, recruited about 50 older adults with moderate sleep problems and assigned them to follow one of two programs. In one group, the adults learned behaviors that could help them develop good sleep hygiene, like establishing a regular bedtime routine and avoiding caffeine and alcohol before bed. The other group underwent a six-week program on mindfulness meditation — the nonjudgmental awareness of the thoughts and feelings drifting through one’s mind — led by a certified teacher. At the end of the yearlong study, the people who learned the mindfulness approach had greater improvements in sleep quality and fewer symptoms of insomnia, depression and fatigue than those who received standard care. New York Times
Regular hot, dry saunas boost heart health?

23 February - Visits to a dry sauna and the length of those visits were inversely associated with a lower risk of death from sudden cardiac arrest, coronary heart disease (CHD), cardiovascular disease, and even all-cause mortality in a group of Finnish men, Jari A. Laukkanen, MD, PhD, of the University of Eastern Finland, and colleagues reported in *JAMA Internal Medicine*. ... A random selection of 2,315 men from Kuopio, Finland, ages 42-60, who used sauna facilities at least once per week, a cultural tradition in Finland, were recruited from 1984 to 1989. ... The mean age and BMI were 53, and 26.9, respectively. ... Over the course of the study, 49% of men who visited the sauna once per week died. Among men who went 2-3 times per week, 38%, and they had a 24% lower risk of death compared to men who only went once per week. *MedPage Today*

Studies cement value of HIV prophylaxis

25 February - Pre-exposure prophylaxis (PrEP) with a single pill prevented HIV infection among more than 85% of two groups of men who have sex with men, according to two studies presented here. The studies attempted to approximate a real-world use of oral PrEP and both had surprisingly high efficacy rates -- 86% in both cases, researchers reported at the 2015 Conference on Retroviruses and Opportunistic Infections. That level of efficacy was sufficiently high that both studies were stopped early by their monitoring committees. The research, taken together, has "absolutely solidified our understanding" of how valuable PrEP can be in men who have sex with men, commented Sharon Hillier, PhD, of the University of Pittsburgh School of Medicine. *MedPage Today*

Weekend HIV 'drug holiday' safe in youths

25 February - For some young people with HIV, taking a weekend off their medications appears to be safe, a researcher reported. In a multinational, randomized trial, a 5-day treatment course with 2 days off was noninferior to continuous treatment in terms of the risk of virologic failure, according to Karina Butler, MD, of Our Lady's Children's Hospital in Dublin, Ireland. But, Butler cautioned [that] it's too early to change guidelines for treating young people with HIV. Among other things, she said, participants in the study were all on a single HIV treatment regimen that has a long period of persistence in the body and they were all successfully controlling their infection. *MedPage Today*
Africa's expanding farms attract more plague-infested rats

23 February - Converting wilderness areas into farmland in East Africa may be increasing the risk of disease epidemics, as rodents crawling with plague-carrying fleas are drawn to the harvested food. In northern Tanzania, crop lands have expanded by 70 percent over the last few decades and the number of plague-carrying rodents in these corn growing lands has nearly doubled compared with neighboring wilderness areas, said the study published in the American Journal of Tropical Medicine and Hygiene on Monday. Scientists linked an increase in corn fields – necessary to feed an expanding population – to a 20-fold rise in the population of African rats in northern Tanzania, which transmit deadly diseases to humans, including Lassa fever and plague. Reuters

Guinea: HIV care slammed by Ebola

24 February - Ebola had a "massive impact" on HIV care at a hospital in one of the epidemic's hot spots, a researcher said here. The Centre Medicale de Macenta, a 100-bed medical facility in a remote part of Guinea, managed to provide continuous care during the worst of the epidemic, according to David Leuenberger, MD, of Mission Philafrique, a Swiss nongovernmental organization. Ebola had a "massive impact" on HIV care at a hospital in one of the epidemic's hot spots, a researcher said here. But patients stayed away in droves, he told reporters here at the 2015 Conference on Retroviruses and Opportunistic Infections. ... The result was about a 50% drop in HIV testing, new HIV diagnoses, and entry into care, Leuenberger said, although relatively few patients already in care were lost to follow-up. ... The Ebola epidemic has had a "massive public health impact beyond the actual Ebola morbidity and mortality," Leuenberger said. MedPage Today

Uganda intensifies efforts to contain typhoid outbreak

25 February - Ugandan health authorities said Wednesday that they have intensified efforts against the deadly typhoid outbreak in the capital and two central districts. As of Monday 513 cases fitting the case definition had been identified in Kampala and in Wakiso and Mukono districts, the Health Ministry said in a statement, adding that two people have been killed and 11 other deaths are being investigated. ... The statement said that Kampala Capital City Authority and Ministry of Health officials have engaged food vendors and juice sellers, helping them improve hygiene practices to prevent further spread of the disease. Xinhua
Afghanistan: More than 100 killed in Afghan, Central Asia avalanches

25 February – A series of avalanches has killed more than 100 people in mountainous areas of northeastern Afghanistan. Officials said on February 25 most of the victims were in Panjshir Province, where heavy snowfall in recent days destroyed more than 100 homes and blocked main roads, making it difficult for rescue workers to reach the affected villages. It also blocked a key highway that leads to the Salang tunnel, which connects Kabul with provinces north of the Hindu Kush mountains. Authorities in neighboring Tajikistan said on February 24 that avalanches caused by heavy snowfalls and abrupt warm weather killed at least five in recent days. In another Central Asian nation, Kyrgyzstan, an avalanche on February 25 killed a Russian woman vacationing in the mountains in the northern Issyk-Kul region. Radio Free Europe/Radio Liberty

Saudi Arabia: New Saudi MERS case; study of 2014 outbreak notes healthcare link

25 February - As Saudi Arabia’s Ministry of Health (MOH) reported a new MERS-CoV case today, a study in the New England Journal of Medicine (NEJM) noted a high incidence of MERS cases linked to healthcare centers in a 2014 outbreak in Jeddah. ... Saudi Arabia has now confirmed 913 MERS-CoV cases, including 389 deaths. The MOH also posted an English-language statement today (but dated Feb 23) that was reported in the media yesterday noting that it had closed a private Riyadh hospital for not complying with infection-control guidelines. The agency said that, especially because of the possibility of hospital MERS cases, similar actions will face other healthcare facilities if they don’t comply. The NEJM study, by an international team of researchers, involved all 255 patients with lab-confirmed MERS-CoV in Jeddah from Jan 1 through May 16 of last year—a period that saw a surge of MERS cases in the area. Of the 191 symptomatic patients, 40 (20.9%) were HCWs. And of the 112 non-HCWs for whom data could be assessed, 109 (97.3%) had contact with a healthcare facility, a confirmed MERS-CoV patient, or someone with severe respiratory illness in the 14 days before they had symptoms. CIDRAP News Scan (first link)

Syria: Cholera outbreak feared in Syria's future

24 February - A cholera outbreak is feared in coming months in Syria, where other waterborne diseases such as hepatitis A and typhoid are on the rise because of poor sanitation, the World Health Organization warned Tuesday. The level of safe drinking water is about one-third of the amount that existed before the conflict erupted nearly five years ago, and supplies are cut off to punish civilians at times, WHO said. Syria recorded 31,460 cases of hepatitis A last year, and more than 1,000 cases have been reported per week since January, said Dr. Elizabeth Hoff, WHO representative in Syria. VOA
Europe: WHO calls for more measles vaccination in Europe as large outbreaks persist

25 February - The World Health Organization in Europe called on Wednesday for measles vaccination campaigns to be stepped up across the region after recording 22,000 cases of the highly infectious disease since the start of 2014. Saying she was "taken aback" by high case numbers, Zsuzsanna Jakab, the U.N. health agency’s European director, said the 22,149 reported cases from seven countries threatened the region’s goal of eliminating measles by the end of 2015. Even though measles cases fell by 50 percent from 2013 to 2014, large outbreaks continue is both eastern and western Europe, the WHO said. Italy has seen 1,674 measles cases since the beginning of last year, while Germany has had 583, Kyrgyzstan 7,477 and Russia more than 3,240. Reuters

European Union – U.S.: A pesticide banned, or not, underscores trans-Atlantic trade sensitivities

23 February - Syngenta, a Swiss chemicals company, produces one of America’s most popular herbicides. It is called atrazine, and 73.7 million pounds of the chemical compound were applied in the United States in 2013. It was used on more than half of all corn crops, two-thirds of sorghum and up to 90 percent of sugar cane. But Syngenta cannot sell atrazine to farms in its own backyard. The weed killer is banned as a pesticide in the European Union as well as in Switzerland over concerns that it is a groundwater contaminant. ... Scores of chemicals that are banned or tightly restricted in the European Union are allowed in the United States. One recent analysis by the Center for International Environmental Law, a Washington-based advocacy group, found 82 instances of pesticides allowed in the United States but barred or restricted in Europe. New York Times

Germany: Toddler dies of measles in Berlin, first death in outbreak

24 February - An 18-month-old boy has died of measles in Berlin, the first known death in an outbreak of the disease that has seen more than 570 cases in the German capital since October. An autopsy on the child, who died on Feb. 18 and wasn’t immunized against measles, showed he had an unspecified medical condition, but it wouldn't have led to his death without the measles infection, the Charite hospital said Tuesday. ... Authorities believe the Berlin measles infections began with a child from Bosnia whose family was seeking asylum. The highly contagious illness then spread, partly because many older adults in Germany were never immunized and many younger adults received only one vaccine instead of two, as is now recommended for full protection. About half of those infected were adults, officials said. Yahoo! News
United Kingdom: UK approves three-person babies

24 February - The UK has now become the first country to approve laws to allow the creation of babies from three people. The modified version of IVF has passed its final legislative obstacle after being approved by the House of Lords. The fertility regulator will now decide how to license the procedure to prevent babies inheriting deadly genetic diseases. The first baby could be born as early as 2016. ... The technique, developed in Newcastle, uses a modified version of IVF to combine the healthy mitochondria of a donor woman with DNA of the two parents. It results in babies with 0.1% of their DNA from the second woman and is a permanent change that would echo down through the generations.

BBC News

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USNORTHCOM

Canada: Canadian soldiers with mental health conditions more likely to be declared unfit for service

24 February - New research by National Defence shows that soldiers with mental health conditions, especially those with Afghan war illnesses, are far more likely to be declared unfit for military service, the Canadian Press writes. Almost 70 per cent of them can expect to be mustered out within 10 years of deployment, the article added. ... The Canadian Forces Health Services Branch has reviewed the medical files of over 30,000 troops who deployed as part of the nearly 12 year Afghan campaign. ... The analysis finds that five years after the first deployment, 40 per cent of soldiers with a mental-health diagnosis were likely to have developed career limitations that would lead to being released, compared with 11 per cent with no medical condition. After 10 years, the figures jump to 68.8 per cent and 19.8 per cent respectively. Ottawa Citizen

Canada: Measles virus circulating in Ontario is a variant previously unknown to WHO

23 February - The measles outbreak in Canada’s largest city was already a minor epidemiological puzzle when scientists discovered something that deepened the mystery. Of the 11 Greater Toronto Area patients diagnosed with the highly contagious illness since the end of January, none are connected to each other in any way that public health staff could discover through interviews with the patients or their parents. None had recently travelled outside Canada to a place where they might have caught the measles. Public health officials had hoped that genetic analysis of the measles viruses in these cases might shed light on where the Toronto outbreak came from. Instead, scientists found something new: The version of the measles virus circulating in Ontario is a variant that has never before...
been reported to the World Health Organization database that contains descriptions of
more than 22,000 slightly different viral sequences of the measles virus found across the
globe. Globe and Mail

U.S.: 7 out of 10 doctors - climate change is already harming patients’ health

26 February - ... Today, the American Thoracic Society (ATS) will hit the halls of Congress to
educate our representatives about a new survey of more than 900 ATS members, which
found the majority of doctors believe climate change is already negatively affecting the
health of their patients. In fact, 77 percent of respondents reported that increases in air
pollution due to climate change are worsening the severity of illnesses in their patients, and
they expect these health impacts will further increase in the future. ATS members also
indicated that their patients are experiencing other climate-related health problems —
including injuries due to severe weather, allergic reactions, and heat-related impacts. These
findings are in line with the results of a survey of the National Medical Association's
members last year, which also found that the sick, elderly, and people living below the
poverty line will be disproportionately impacted by climate change. White House Blog

Bioethics commission: Ebola teaches us public health preparedness requires ethics preparedness

26 February - Today the Presidential Commission for the Study of Bioethical Issues
(Bioethics Commission) reported that the federal government has both a prudential and a
moral responsibility to actively participate in coordinated global responses to public health
emergencies wherever they arise. ... The Bioethics Commission’s seven recommendations
offer targeted policy and research design suggestions. For example, the Bioethics
Commission recommended that the United States strengthen key elements of its domestic
and global health emergency response capabilities. These include:

- Strengthening the capacity of the World Health Organization to respond to global
  health emergencies through the provision of increased funding and collaboration with
  other international, national, and non-governmental public health organizations;
- Identifying and empowering a single U.S. health official accountable for all federal
  domestic and international public health emergency response activities; and
- Strengthening the deployment capabilities of the U.S. Public Health Service, including
  by streamlining command structure for deployment and providing appropriate
  resources to train and maintain skills needed for emergency response. EurekAlert!

U.S.: CDC details fatal infection with new, presumably tick-borne virus

20 February - A Kansas man whom medical professionals tested for the newly reported
Heartland virus was instead infected by another presumably tick-borne virus, a novel
member of the genus thogotovirus, according to a report yesterday in *Emerging Infectious Diseases*. Researchers from the US Centers for Disease Control and Prevention (CDC) and Kansas reported that the Bourbon County man, who was over 50 and previously healthy, became ill with nausea, weakness, and diarrhea several days after receiving several tick bites and removing an engorged tick from his shoulder. ... [Test] results were negative for Rocky Mountain spotted fever, Lyme disease, and ehrlichiosis. The patient deteriorated despite intensive care and died 11 days after his first symptoms. A whole-blood specimen collected 9 days after illness onset was sent to a CDC lab for Heartland virus testing. Scientists were able to isolate a virus that they determined was a novel *thogotovirus* species and proposed calling it Bourbon virus after the patient's county of residence. They said the virus was likely the cause of the man's illness. **CIDRAP News Scan** (second item)

**U.S.: CDC investigates deadly bacteria's link to doctors' offices**

26 February - The Centers for Disease Control is raising a red flag that a potentially deadly bacteria may be lurking in your doctor's office. The bacteria, *C. difficile*, is typically found in hospitals, but a study out Wednesday reports a substantial number of people contracted the bug who hadn't been in a hospital, but had recently visited the doctor or dentist. The bacteria can cause deadly diarrhea, according to the CDC, with infections on the rise. The new report shows nearly half a million Americans infected in various locations in one year, with 15,000 deaths directly attributed to *C. diff*. In a 2013 study, researchers found *C. diff* present in six out of seven outpatient clinics tested in Ohio, including on patients’ chairs and examining tables. The CDC is so concerned that they're starting a new study to try to assess nationally whether people are getting *C. diff* in doctors' offices. ... In the meantime, patients should wash their hands after visiting the doctor's office -- with soap and water, because alcohol-based gels don't get rid of *C. diff*. **CNN**

**U.S.: CDC official dismisses claim that undocumented immigrants bring measles into the U.S.**

23 February - Despite claims to the contrary from some of the loudest anti-immigration reform voices in the Republican Party, the Centers for Disease Control and Prevention stressed on Monday that undocumented immigrants are not bringing measles into the United States. Dr. Anne Schuchat, director for the National Center for Immunization and Respiratory Diseases, dismissed claims tying undocumented immigrants to the recent measles outbreak. ... “We don’t have evidence to support that,” Schuchat said during a webinar hosted by the National Press Foundation. Though there are an estimated 20 million measles cases worldwide every year, only a handful ever reach the U.S., according to a recent study in the Journal of the American Medical Association. Most of the measles cases that do arrive have origins outside the U.S., and are usually carried by Americans returning from trips abroad. **Huffington Post**
U.S.: HHS releases national health security strategy and review

23 February - The US Department of Health and Human Services (HHS) has released a broad health security strategy designed to guide health security enhancements over the next 4 years, along with a review that claims progress in that realm over the past 4 years. The National Health Security Strategy and Implementation Plan for 2015-18 "provides strategic direction to ensure that efforts to improve health security nationwide over the next four years are guided by a common vision; based on sound evidence; and carried out in an efficient, collaborative manner," HHS said in a statement. The strategy announces five objectives: to build and sustain healthy, resilient communities; enhance capability to make and use medical countermeasures and non-drug interventions; ensure "comprehensive health situational awareness" to support decision-making; enhance the integration of the public health, healthcare, and emergency management systems; and strengthen global health security. CIDRAP News Scan (second item)

U.S.: Hospitals see alarming increase in suicidal children

20 February - Here's a troubling thought: more kids and young adults are intentionally hurting themselves -- sometimes lethally. ... The data on self-injury and suicide come from a report, published in American Pediatrics that found inpatient visits for suicide, suicidal ideation, and in 2006 to just below 59,000 in hospitalizations have not hospitalizations was most olds, showing a 151% increase, increase. Children ages 10 to 14 also visited the hospital 50% more for "all listed mental health conditions," the report noted. While the researchers chose time periods before and after the Great Recession, the report itself provides only a "snapshot of findings from the data," and "based on the analysis we can't make any conclusions," Torio said. "Mental health needs could be greater or they could be being treated more seriously than before, but we can’t speculate on those reasons without more information." MedPage Today

U.S.: Officials fear southeastern Indiana HIV outbreak could worsen

25 February - People in southeastern Indiana thought that they had put at least a small dent in their prescription painkiller problem and that heroin was now outpacing opioids as the drug of choice. But then came shocking news Wednesday from state health officials: At least 26 people in the region were diagnosed with HIV in a three-month period, and most of them contracted it after injecting the potent painkiller Opana for a quick high. These cases, plus four others considered preliminary cases, could be just the start. State health officials are interviewing newly identified HIV patients and urging them to reach out to their sexual
partners as well as anyone with whom they shared needles, as both forms of contact can spread the disease. A few of the cases already identified were sexually transmitted. **Indy Star**

**U.S.: Studies note risk factors, epidemiology of Arizona RMSF cases**

23 February - CDC and Arizona scientists note that early gastrointestinal symptoms, a history of alcoholism, and a history of chronic lung disease are risk factors for death with Rocky Mountain spotted fever (RMSF), a disease with a distinct epidemiologic pattern in indigenous populations in Arizona, according to two new studies in *Clinical Infectious Diseases*. Both studies analyzed data from 205 RMSF cases from two Indian reservations from 2002 through 2011. The area has a 7% case-fatality rate (CFR) for the disease, compared with under 1% for the rest of the nation. The first study noted that doxycycline was administered significantly later in fatal cases—by a median of 7 days—than in nonfatal cases, even though patients in both groups presented for care early, an average of 2 days after symptom onset. The researchers noted that early nausea and diarrhea, a history of alcoholism or chronic lung disease, and abnormal lab results all were associated with elevated CFR and delayed doxycycline use. **CIDRAP News Scan** (fourth item)

**U.S.: Three separate measles outbreaks affecting U.S.**

24 February - The CDC reported on Monday that there are three separate outbreaks of measles in the U.S. Roughly 77% of cases reported in 2015 are related to a large, multistate outbreak that is connected to two Disney theme parks in California. Meanwhile, Illinois and Nevada are experiencing outbreaks of their own, with 14 and 6 cases, respectively. Nationwide, 13 new cases were reported last week, bringing the total for the year to 154. **NEJM Journal Watch**

**U.S.: Top medical groups say gun violence is a public health crisis**

24 February - Seven medical groups representing most U.S. physicians are seeking to recast gun-related casualties as a public health crisis, pointing to data that blames firearms for 33,000 U.S. deaths and more than double that many injuries in 2013. The coalition, which also includes the American Bar Association and the American Public Health Association, issued a "call to action" Tuesday that implores the medical community to study deaths and injuries caused by firearms without "political influence or restriction." The appeal is made in an editorial and a new study, both published in the Annals of Internal Medicine, and echoes a similar call to physicians two years ago that the groups say went largely unheeded due to political forces. This time, the medical societies outline recommendations to curtail gun violence, such as eliminating "gag orders" that bar physicians from discussing gun ownership with patients, banning assault weapons and high-capacity magazines, and advancing universal background checks. **Huffington Post**
Australia: Alcohol affects '1m Australian children'

23 February - More than one million Australian children are affected in some way by the drinking of others, says a report on alcohol and domestic violence. As many as 140,000 children are substantially affected. More than 10,000 children are in the child protection system because of a carer’s drinking problem. The link between alcohol and domestic violence comes as Australia plans to set up a scheme to address family violence and violence against women. ... The study, The hidden harm: Alcohol’s impact on children and families ... [found that:]

- More than a quarter of survey respondents reported experiencing harm from the drinking of family members
- Past harm was the strongest predictor of future harm for children and families
- Alcohol abuse is associated with between 15% and 47% of child abuse cases each year across Australia
- About 22% of all Australian children are estimated to be affected in some way by the drinking of others; 3% are substantially affected and 0.2% are already within the child protection system because of a carer’s drinking. BBC News

China: Health-conscious Chinese challenge Western food firms

25 February - Chinese consumers ... are making new demands of international food brands, posing challenges for Western firms already grappling with slower sales and intense competition in the world’s most populous nation. Packaged food makers such as Nestle, Danone, PepsiCo and General Mills enjoyed fast growth in China as middle class consumers opted for convenience foods. Now conditions have become more difficult. Aside from the economy cooling, a government crackdown on gift-giving, local competition and increased labor costs, there is growing demand for healthier foods with fewer artificial ingredients that can be more expensive to make. Reuters

China: Study notes 5% seroprevalence in SFTS-endemic village in China

24 February - Chinese scientists yesterday reported that more than 5% of farmers living in a village in which severe fever with thrombocytopenia syndrome (SFTS) had antibodies to the virus, according to a study in the International Journal of Infectious Diseases. The researchers collected serum samples from 363 farmers in a village in the western province of Shaanxi, which is where the first-ever case of the tick-borne disease was noted in 2009. They found antibodies to the SFTS virus (SFTSV) in 20 of them (5.5%), with no statistically significant difference between men and women. The authors conclude, “SFTSV readily infects humans with outdoors exposures. Our serological study indicates that the virus
circulates widely in Shaanxi Province. SFTSV represents a public health threat in China."

CIDRAP News Scan (second item)

India: Doctors in India profiteering from sick patients: reports

24 February - ... Most experts agree that healthcare fraud is rampant in the world's largest democracy, with recent corruption scandals engulfing everyone from doctors to drug companies and health regulators. [Dr. Arun Gadre's] work suggests that three types of malpractice are particularly common: kickbacks for referrals, irrational drug prescribing and unnecessary interventions. One interviewee told Gadre that doctors typically get 30,000 to 40,000 Indian rupees (US$480-640) for referring patients for angioplasty. For perspective, many Indian health providers make less than US$10,000 a year. ... While kickbacks are illegal in India, they are nearly impossible to avoid, health providers say. Young doctors in particular, many with towering student debts, find it hard to survive without them. Some doctors have to rely on this practice to get started, said Dr. Anita Jain, the BMJ's India editor, adding that ultimately patients are footing the bill. Reuters

Southeast Asia: Emotional scars of modern slavery run 'deeper than any visible wound'

24 February - ... Researchers interviewed more than 1,000 men, women and children in Southeast Asia who were forced into sex work, commercial fishing, agricultural businesses, street begging or other labor-intensive industries. ... More than two-thirds of the men interviewed were exploited in the fishing industry, the team found. ... A fifth of all people in the study said they endure some sort of serious work injury, including back and neck damage and the loss of a body part. Most received no medical care while held against their will. In many instances, the injury wasn't accidental. Almost half of all participants said that they had been sexually or physically abused or both. Methods of violence were often extreme. Many of the participants reported being beaten up, dragged around, cut with a knife and shot at. In terms of mental health, more than 60 percent of the people interviewed showed signs of depression. Around 40 percent reported anxiety and 38 percent had PTSD. About 600 people said they never had the freedom to do what they wanted to do. And nearly 200 reported being locked in a room. These people were twice as likely to have poor mental health. NPR

PAHO: Chikungunya cases rise by more than 41,000

24 February - The Pan American Health Organization (PAHO) reported 41,424 new cases of chikungunya in the Caribbean and Americas in a report dated Feb 20 but posted yesterday,
with more than 33,000 of those cases in Colombia, bringing the outbreak total to 1,248,093. The new total includes 1,217,093 suspected and 27,529 confirmed locally acquired cases and 3,471 imported cases of the mosquito-borne disease. Colombia, which reported no new cases in the Feb 13 PAHO update, reported 33,755 new cases last week, bringing the country's outbreak total to 177,213. Brazil reported 3,163 new cases, bringing its outbreak total to 6,743, and El Salvador reported 3,015, bringing its outbreak total to 141,789. The United States reported a modest increase of 148 new imported chikungunya cases, bringing the country's outbreak total of imported cases to 2,506. Puerto Rico reported a death due to chikungunya, bringing the territory's fatality total to 15. The outbreak has caused 183 total deaths, according to PAHO. CIDRAP News Scan (first item)

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