6 January 2017

Army Public Health Weekly Update

Army Public Health Center

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Latest Edition of the Veterinary Connections Newsletter Now Available

The Veterinary Connections Winter 2017 Edition is now available for download from the APHC Periodic Publications page. Don’t miss any future editions. Subscribe to the electronic version by sending an e-mail request to: usarmy.apg.medcom-aphc.mbx.iph-vet@mail.mil

Veterinary Connections is a quarterly newsletter with information about Animal Health, Food Protection, and One Health. It is written by Army Veterinary Services personnel and published by the Army Public Health Center.

- U.S.: Here’s why the cancer death rate has plummeted
- U.S.: Ignition interlock laws - effects on fatal motor vehicle crashes, 1982–2013
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- U.S.: Study - MRSA pneumonia cases declining in US hospital patients
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- Venezuela: Inside Venezuela’s hidden healthcare crisis

U.S. MILITARY

Clinical Practice Guidelines for Access to Methods of Contraception and Contraceptive Counseling

20 December - ... This Defense Health Agency-Interim Procedures Memorandum ...

- Establishes comprehensive standards on care with respect to methods of contraception and counseling on methods of contraception for members of the Armed Forces and all who are eligible for medical services through the Military Health System (MHS).

- Meets requirements set forth in PUBLIC LAW 114–92, Sec. 718, “Comprehensive Standards and Access to Contraception Counseling for Members of the Armed Forces” (Reference (d)), which requires establishment of clinical practice guidelines that incorporate new or updated standards with respect to methods of contraception and counseling on methods of contraception.

http://www.health.mil/Policies/2016/12/20/DHA-IPM-Clinical-Practice-Guidelines-for-Access-to-Methods-of-Contraception (copy and paste link to your browser)

Defense Health Agency Year in Review

20 December - ... As we transition into 2017, [Navy Vice Adm. Raquel Bono sees] three important focus areas. First, as we deploy MHS GENESIS at our initial site in the Pacific Northwest, we will keenly look at the opportunities to compress the deployment schedule across the Military Health System. ... Another focus area is the implementation of the TRICARE 2017 contracts. ... Lastly, a great deal of interest will focus on Title VII of the National Defense Authorization Act of 2017. While challenges exist with implementing the aggressively paced schedule, our recent organizational re-configuration and 2017 strategic planning session
ELITE-SHARP Prevention and Outreach Simulation Trainer

4 January - The Army Sexual Harassment/Assault Response and Prevention (SHARP) Program’s Emergent Leader Immersive Training Environment (ELITE)-SHARP Prevention and Outreach Simulation Trainer (POST) is a new computer-based training application designed to train Army SHARP professionals (sexual assault response coordinators (SARCs) and victim advocates (VAs) on how to better support command teams and units through effective prevention and outreach programs. ELITE-SHARP POST is an innovative alternative to the prepackaged slide decks, videos, and classroom discussions available for downloading from the Army MilGaming web portal. This application will enable SARCs and VAs to interact virtually with avatars to hone their sexual harassment and assault prevention and outreach skills. Stand-To

Enduring Personal Readiness and Resilience OPORD

5 January - The Enduring Personal Readiness and Resilience Operations Order (OPORD) outlines the Army’s Ready and Resilient (R2) campaign strategy. This OPORD serves as a precursor to the upcoming policy changes of Army Regulation 600-63. The OPORD outlines four strategic objectives, which will strengthen the Army culture of trust and develop and sustain personal and unit readiness to meet demanding current and emerging requirements. The four strategic objectives are:

- Sustained personal readiness to meet operational requirements.
- A values-based organization of trusted Army professionals.
- Enhanced visibility of personal readiness throughout a career.
- R2 management that enables personal readiness. Stand-To

Incident diagnoses of non-melanoma skin cancer, active component, U.S. Armed Forces, 2005–2014

December 2016 - From 1 January 2005 through 31 December 2014, a total of 8,819 incident diagnoses of non-melanoma skin cancer (NMSC) (incidence rate 64.6 cases per 100,000 person-years [p-yrs]) were documented in the health records of 6,670 active component service members. During the surveillance period, there was a very slight decrease in the annual crude incidence rates of NMSC; rates of NMSC peaked in 2007 (68.3 cases per 100,000 p-yrs) and were at their lowest in 2013 (60.4 cases per 100,000 p-yrs). Increasing age was associated with increased risk of NMSC. White, non-Hispanic service members had a much higher rate of NMSC compared to those of other race/ethnicity groups. Female service members had a slightly lower rate of NMSC compared to male service members. Rates were elevated for officers and higher ranks compared to enlisted and lower ranks and
The U.S. Army has implemented screening processes to identify Soldiers at risk for behavioral health (BH) outcomes at Touch Points (TP) during the Army Force Generation cycle. The report includes two years of data and 1,508,504 analyzed health assessments. This report characterizes self-reported risks for BH-related outcomes such as post-traumatic stress disorder symptoms, depression symptoms, and hazardous drinking behavior using the health assessment survey data.

Army leadership can use the findings in the current report to identify at-risk Soldiers and prevent negative outcomes.

New in 2017: New Army secretary

2 January - A West Point graduate and billionaire philanthropist has been nominated to be the next Army secretary. As President-elect Donald Trump builds his team at the Pentagon, he announced Dec. 19 that he has nominated Vincent Viola for the top Army civilian job. Viola, founder of digital stock trading firm Virtu Financial and owner of the National Hockey League’s Florida Panthers, is a 1977 West Point graduate who rose to the rank of major in the Army Reserve. If confirmed by the Senate, Viola will replace Eric Fanning. ... Before the Army, Fanning served in key leadership positions in the Air Force and Navy. He also was Defense Secretary Ash Carter’s chief of staff and one of his closest advisers. Army Times

Pentagon shelves blast gauges meant to detect battlefield brain injuries

20 December - The Pentagon has quietly sidelined a program that placed blast gauges on thousands of combat troops in Afghanistan. NPR has learned the monitoring was discontinued because the gauges failed to reliably show whether service members had been close enough to an explosion to have sustained a concussion, or mild traumatic brain injury. But the small wearable devices did produce a trove of data on blast exposure that could eventually have helped researchers understand the links between bomb blasts, concussions and brain diseases. And they produced evidence that many service members are exposed to worrisome levels of blast pressure simply by being near a heavy weapon when it’s fired. NPR

U.S. Army unveils new physical assessment test

4 January - The U.S. Army has launched a new physical fitness test designed to determine if new recruits and soldiers can meet the physical demands of certain jobs such as infantry and armor specialties. The Occupational Physical Assessment Test, or OPAT, will be administered to all recruits as a way to assess their fitness for military occupational specialties, or MOSs. ... Soldiers moving into a more physically demanding job, such as combat arms, will have to meet the corresponding physical standard. ... The test will be administered to everyone coming into the service. ... The scoring is "gender neutral. All soldiers, male and female, must pass the same physical standards for the desired career field." Military.com

VA study finds EEG can help tell apart PTSD & mild traumatic brain injury

23 December - A recent VA study points to a possible breakthrough in differentiating between post-traumatic stress disorder (PTSD) and mild traumatic brain injury (mTBI),
Affordable Care Act Mandates Reporting Minimum Essential Health Care Coverage

As tax season approaches, Defense Department civilians, military members, nonappropriated funds employees and their families will need to validate their minimum essential health care coverage as reported to the Internal Revenue Service.

DoD members and employees will receive a Form 1095, designated B or C. Service members and DoD civilians will use the 1095-B or 1095-C to answer health coverage questions on their federal tax returns. The 1095 form is not intended to be filed with taxes, but rather is used as a validation of information that the IRS already has received from DoD. Defense.gov

otherwise known as a concussion. ... The researchers used electroencephalogram, or EEG, a test that measures electrical activity in the brain. The size and direction of the brain waves can signal abnormalities. Analyzing a large set of EEGs given to military personnel from the wars in Iraq and Afghanistan, the researchers saw patterns of activity at different locations on the scalp for mTBI and PTSD. They saw brain waves moving slowly in opposite directions, likely coming from separate places in the brain. The researchers emphasize that these effects don’t pinpoint a region in the brain where the disorders differ. Rather, they show a pattern that distinguishes the disorders when the EEG results are averaged among a large group. Custer Free Press / Abstract

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GLOBAL

A new approach for controlling intestinal worm infections could help millions of the world’s most vulnerable people

30 December - ... The key public health intervention for controlling soil-transmitted helminthiasis is the large-scale distribution of anthelmintic medication – often referred to as "deworming". ... Children are the primary focus of global control efforts for intestinal worms because of the greater impact the disease has on them. ... The last few years have seen burgeoning interest from researchers in the idea of expanding soil-transmitted helminthiasis control programs beyond school-based deworming. ... [Recent research] shows ... that when whole communities are given deworming medication, children are less likely to be reinfected, than when only children are treated in the first instance. The Conversation

Behavioral resistance: mosquitoes learn to avoid bed nets

3 January - ... A team led by Lisa Reimer of the Liverpool School of Tropical Medicine monitored mosquito behavior in villages in Papua New Guinea before (2008) and after (2009-2011) the distribution of bed nets. Data from one of the villages, Mauno, depicts a very noticeable shift in mosquito feeding behavior. ... Before bed nets were distributed in 2008, the median biting time for mosquitoes was around midnight. After the distribution, the median time shifted back to 10 pm. Also, a greater proportion of mosquitoes took their dinner even earlier, from 7 to 9 pm. Worryingly, it's unclear whether the bed nets were effective at preventing malaria transmission. The number of bites per person per night dropped after the introduction of bed nets, but started to climb in subsequent years as mosquitoes began to adapt. Additionally, the prevalence of malaria infection in humans -- arguably, the only statistic that actually matters -- dropped in one village, remained the same in a second, and ticked up slightly (albeit insignificantly) in a third. American Council on Science and Health
Climate variation drives dengue dynamics

3 January - ... Because of climate change, globalization, and other factors, dengue has increasingly spread to new countries and over larger areas, from tropical to temperate zones. In this study, we found that climate has both direct effects on dengue incidence and indirect effects mediated by mosquito density, as mosquitoes are the vectors of dengue. The quantitative results derived from this study may be helpful toward advancing our understanding of how climate influences vector-borne diseases and prove useful for the control and prevention of dengue fever. *PNAS*

Copper oxide-embedded textiles help reduce healthcare-related infections

30 December - A study yesterday in the *American Journal of Infection Control* suggests that using copper oxide-impregnated biocidal textiles in long-term care medical facilities can reduce healthcare-associated infections (HAIs). ... At the end of the study, investigators observed significant reductions in HAI indicators in the wards when copper-treated textiles were used, including a 29.3% reduction in antibiotic treatment initiation events, a 55.5% decrease in fever days, a 23% drop in days of antibiotic treatment, and a 27.5% decrease in antibiotic defined daily doses per 1,000 hospitalization days. "Our study adds an important layer to the in vitro studies and the previous open-label studies supporting the effect of copper oxide–impregnated medical textiles as a possible supplement to other measures aimed at reducing the rate of HAIs," the authors wrote. *CIDRAP ASP Scan* (fifth item)

Critical vaccine shortage threatens polio eradication efforts

29 December - ... The [international campaign to eradicate polio]—conducted by the World Health Organization (WHO), the U.S. Centers for Disease Control and Prevention (CDC), UNICEF, Rotary International and the Bill and Melinda Gates Foundation—was expecting to receive 110 million doses of injectable polio vaccine (IPV) this year, but the two manufacturers have told the groups they can supply only about half that. "We don’t have specifics, but something is preventing the scale-up of vaccination production," says Shanelle Hall, director of UNICEF’s supply division. "We are projecting now that we won’t have the quantities we need until 2018." More than 100 countries are depending on those doses. Without them, planners worry that the eradication campaign will lose momentum, and so many children will go unprotected that there will be fresh outbreaks. *Newsweek*

Easing the toll of sickle cell disease in childbirth

2 January - Creating hospital teams devoted to treating pregnant women who have sickle cell disease reduced death rates for those women by almost 90 percent, a study at a major hospital in Ghana showed. Sickle cell disease ... is caused by a genetic mutation that if inherited from only one parent protects against malaria, but if inherited from both parents can be lethal. ... At the Korle-Bu Teaching Hospital in Accra, the capital of Ghana, women
with sickle cell disease were about 12 times as likely to die in childbirth as women without it. ... [T]he hospital formed teams of nurses, obstetricians and blood and lung specialists and assigned them to care for all pregnant women with the disease. ... After the teams and protocols were in place, the hospital’s rate of maternal deaths in childbirth for women with sickle cell disease dropped to 1.1 percent from 9.7 percent. The New York Times

Five little-known diseases to watch out for in 2017

3 January – [E]merging diseases have been appearing at an accelerating rate. ... These are the ones to watch for in 2017: Leishmaniasis, ... Rift Valley fever, ...

- Oropouche: ... [S]pread by mosquitoes of the genus *Culex*. ... *Culex* has a far wider distribution than the *Aedes* mosquitoes. ... Whether Oropouche’s recent expansion out of its Amazonian heartland to neighbouring parts of South America is just a local fluctuation or the beginnings of a Zika-esque global tour, remains to be seen. Oropouche is normally a self-limiting fever with loss of appetite, headaches and vomiting, but the occasional meningitis complication is more concerning.

- Mayaro: Characterised by fever, aches and pains and a rash, Mayaro is distant relative of Chikungunya, and spread by biting *Aedes* mosquitoes, Mayaro made a recent surprise appearance in Haiti. ...

- Elizabethkingia: is the sole bacterial pathogen on the list – the only one that isn’t spread by biting insects and the only one that is found worldwide. So Elizabethkingia won’t be expanding its range but may be expanding its clinical impact in a world where antibiotics can no longer be relied upon to save our lives from bacterial infections. The Conversation

Iron deficiency anemia tied to hearing loss

5 January - Iron deficiency anemia may be linked to hearing loss, new research has found. Researchers studied 305,339 men and women ages 21 to 90, of whom 4,807 had hearing loss and 2,274 had iron deficiency anemia. Hearing loss was more prevalent among women in the sample, and after adjusting for sex, the researchers found the risk for hearing loss was nearly two and a half times as high in those with anemia. The risk for sensorineural hearing loss, the type linked to problems in the nerves of the inner ear, was 82 percent higher in those deficient in iron. ... [A]nimal studies suggest that iron deficiency may reduce blood flow to the inner ear, affecting the cochlear ganglion, the group of nerve cells that transmit sound to the brain. The New York Times

New Ebola vaccine gives 100 percent protection

22 December - In a scientific triumph that will change the way the world fights a terrifying killer, an experimental Ebola vaccine tested on humans in the waning days of the West African epidemic has been shown to provide 100 percent protection against the lethal disease. The vaccine has not yet been approved by any regulatory authority, but it is considered so effective that an emergency stockpile of 300,000 doses has already been created for use should an outbreak flare up again. ... The new vaccine has some flaws, experts said. It appears to work only against one of the two most common strains of the
Ebola virus, and it may not give long-lasting protection. Some of those who get it report side effects like joint pain and headaches. The New York Times

Prolonged infection highlights key resistance mutation

4 January - ... After chemotherapy had wiped out her infection-fighting white blood cells, [a 6-week-old] girl developed a persistent, serious bloodstream infection. ... [T]he infection, the researchers found after taking blood cultures, was caused by vancomycin-resistant Enterococcus faecium (VRE). ... The girl ultimately recovered after 28 days and completed cancer treatment, but the infection did not fully resolve until her immune system had recovered. ... Genetic sequencing of 22 of the VRE isolates revealed several mutations in single isolates, but one in the relA gene was found in several isolates. This mutation, it turns out, plays a critical role in helping bacteria withstand antibiotics by inappropriately activating what is known as the stringent response, a defense mechanism that turns on in the face of adverse conditions—such as nutrient stress or antibiotic stress. ... "Basically, this mutation got the bacteria ready and primed the pump for them to resist any antibiotic that was thrown at them," said co-author Jason Rosch, PhD. CIDRAP

ZIKA VIRUS

CDC reviews Zika actions as response nears 1-year mark

30 December - As the US Centers for Disease Control and Prevention (CDC) nears the 1-year mark from activation of its emergency operations center (EOC) to respond to the Zika outbreak and its complications, Director Tom Frieden, MD, MPH, [said], "Fighting Zika is the most complex epidemic response CDC has taken on." ... Some are actions that CDC officials would typically take for any disease outbreak, such as issuing travel guidance, publishing clinical guidance for clinicians, developing and distributing lab tests, and conducting surveillance. The Zika outbreak, however, also required other steps, including monitoring the blood supply, improving access to contraceptives, implementing mosquito-control strategies and developing best practices, and playing a key role in intensive research that established a link between Zika and birth defects, as well as with other complications such as Guillain-Barre syndrome (GBS). CIDRAP

FDA warns health care providers against relying solely on Zika virus serological IgM assay results

22 December - ... The FDA is alerting physicians who care for pregnant women meeting CDC Zika virus clinical criteria and/or CDC Zika virus epidemiological criteria, that the U.S. commercial testing facility, Laboratory Corporation of America (LabCorp), has reported some false positive results from the ZIKV Detect test. While the FDA has not yet determined if the reported false positives are related to the ZIKV Detect test or the commercial testing facility, it is important to remember that IgM tests remain useful in ruling out Zika exposure but require confirmatory testing. FDA
Half of adult women in Brazil put off pregnancy by Zika virus – survey

22 December - More than half of adult women of reproductive age in Brazil have actively tried to avoid pregnancy because of the Zika virus epidemic, according to a survey carried out there. ... The survey carried out in June, led by academics in Brazil, shows that 56% of women who responded have tried to avoid becoming pregnant. ... Dr Debora Diniz from the University of Brasilia and colleagues say there is an urgent need for Brazil to reconsider its policies on family planning and abortion, to help women who want to avoid the risk of having a baby with brain malformation. ... The government should ensure better access to contraceptive methods and information, they say, arguing for a wider range of methods to be made available. Long-lasting reversible contraception such as intrauterine devices are scarce, they say, and hormonal implants are unavailable through the public services.

Maryland researchers identify proteins in Zika linked to birth defects

2 January - Scientists from the University of Maryland School of Medicine have identified seven proteins in the Zika virus that could be to blame for the birth defects linked to the pathogen. The researchers are among scores around the world trying to develop a vaccine and other treatments for the virus, which causes neurological problems in children and adults. To do this, they are trying to understand how the virus works. Until now, scientists didn’t know which Zika proteins were causing health disorders and how they lead to disease in the body. ... The University of Maryland research ... provides the first comprehensive look at the Zika virus genome, or the genetic material that makes up a cell or organism, the scientists said.

Prevalence of antibodies to Zika virus in mothers from Hawaii who delivered babies with and without microcephaly between 2009-2012

20 December - ... We recently demonstrated the first congenital ZIKV infection in the United States. In this study, we investigated archived blood samples from six mothers who gave birth to babies with microcephaly and 12 mothers who gave birth to healthy babies in Hawaii between 2009 and 2012. We tested maternal blood for the presence of ZIKV IgM and IgG antibodies ... Blood from one mother who delivered babies with microcephaly tested positive for ZIKV IgM antibody (16.6%) and blood from three mothers tested positive for ZIKV IgG antibody (50%). ZIKV showed a trend toward significance with microcephaly. ZIKV IgG antibody positive mothers were more likely to deliver babies with microcephaly than mothers who were negative for ZIKV IgG antibodies (Odds ratio [OR] = 11.0, 95% confidence interval [CI] = 0.8–147.9, p = 0.083). Similarly, ZIKV IgM antibody positive mothers were also more likely to deliver babies with microcephaly than mothers who were
negative for ZIKV IgM antibody (OR = 6.8, 95% CI = 0.2–195.1). These data provide further evidence of a link between ZIKV infection and microcephaly and suggests presence of ZIKV positive cases and associated microcephaly in the United States as early as 2009. PLOS

**Zika virus: Promoting male involvement in the health of women and families**

29 December - ... For the control of the current ZIKV outbreak, it is essential to consider the many ways in which men should be involved. These include: decision-making about and practice of safer sex; negotiating sex while respecting women’s rights and decisions; decision-making about contraception and family planning; roles as husbands or partners of pregnant women who are at risk of being infected with ZIKV or are already infected with ZIKV; roles as fathers of Zika-infected children born with Zika sequelae; participation in research, including studies of natural history, infectivity, and clinical trials of vaccines and antiviral drugs; as well as support and advocacy of ZIKV control initiatives. These roles go well beyond current guidelines on safer sex, wearing condoms, and postponing conception, all of which are issues in which women alone rarely have the final say. PLOS

**INFLUENZA**

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

For the week ending 10 December 2016 (Week 49):

The percentage of influenza A positive specimens in Army MTFs increased in all RHCs over the past week. In the US civilian populations, influenza-like illness (ILI) activity decreased slightly.

- **ILI Activity:** Army incident ILI outpatient visits in week 49 were less than 1% lower than the same week last year.
- **Influenza cases:** No hospitalized influenza-associated cases were reported to APHC through DRSi in week 49. Three cases have been reported so far this season.
- **Viral specimens:** During week 49, 144 of 909 (16%) laboratory specimens tested positive for respiratory pathogens. RHC-A reported most (37%) of the influenza A-positive specimens, followed by RHC-P (27%), RHC-C (24%), RHC-E (7%), and CENTCOM (5%). APHC

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

During week 51 (December 18–24, 2016), influenza activity increased in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus subtype reported
by public health laboratories during week 51 was influenza A (H3). The percentage of respiratory specimens testing positive for influenza in clinical laboratories increased.

- **Novel Influenza A Virus:** One human infection with a novel influenza A virus was reported.

- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System.

**China: Human infection with avian influenza A(H7N9) virus**

3 January - On 30 December 2016, the Department of Health, Hong Kong Special Administrative Region (SAR) notified WHO of a case of laboratory-confirmed human infection with avian influenza A(H7N9) virus. The case is a 70-year-old man with underlying chronic conditions, who travelled to Shenzhen and Zhongshan, Guangdong province from 13 to 16 December 2016. The patient reported having fever, productive cough, shortness of breath, vomiting and diarrhoea since 26 December. He visited a public hospital in Hong Kong SAR, China on 27 December and was admitted to an isolation ward on 28 December. A sputum sample taken on 28 December tested positive for avian influenza A(H7N9) virus RNA. The patient was in serious condition at the time of report. ... To date, a total of 809 laboratory-confirmed human infections with avian influenza A(H7N9) virus have been reported through IHR notification since early 2013. [WHO](https://www.who.int)

**ECDC: Flu News Europe**

*Week 51/2016 (19–25 December 2016)*

- Influenza activity continues to increase across the region. Very high intensity was reported in one country (Finland).

- The proportion of virus detections among sentinel surveillance specimens increased to 47% from 38% last week.

- The great majority of influenza viruses detected this week were influenza A and of those subtyped, the majority were A(H3N2).

- Influenza cases from hospital settings increased in some countries, but comparison to last week was not possible as few countries reported data.

- A risk assessment on seasonal influenza in EU/EEA countries was published by ECDC on 24 December 2016 stating that influenza viruses, mainly A(H3N2), started circulating early. If A(H3N2) continues to predominate it is likely that people over 65 years will be the most severely affected age-group this season. More than half of the detected characterised A(H3N2) viruses belong to a new genetic clade, but all are antigenically similar to the vaccine strain.

[European Center for Disease Prevention and Control/WHO](https://www.ecdc.europa.eu)
Flu costs US vets $1.2 billion annually

4 January - A new study published in *PLOS One* estimates that the annual burden of disease for influenza is $1.2 billion for America’s veterans. The estimate considers both healthcare costs and lives lost. ... The authors estimated there were approximately 10,674 ED visits, 2,538 hospitalizations, and 5,522 deaths attributable to influenza each year for veterans. This resulted in an annual loss of $27 million in productivity, even though the majority of patients with severe flu were over the age of 65. The annual costs for ED visits were $6.2 million, and VA hospitalizations had annual costs totaling $36 million. “Overall, premature death was found to be the largest driver of costs, followed by hospitalization,” the authors concluded. *CIDRAP Flu Scan* (second item)

Flu vaccine protection wanes throughout season

3 January - A new study published recently in the journal *Clinical Infectious Diseases* shows that the protection influenza vaccines offer patients wanes throughout the course of the flu season by as much as 10% each month. ... Protection from both influenza A and B viruses decreased at a rate of about 7% per month for influenza A (H3N2) and B. In 2009, H1N1 protection decreased between 6 to 11% per month. Patients who received the flu vaccine before the current season began had a more pronounced drop in vaccine effectiveness. The vaccine offered some protection for at least 5 to 6 months for all strains. *CIDRAP News Scan* (third item)

H5N8 suspected in Czech Republic outbreaks

4 January - The Czech Republic today said highly pathogenic H5 avian influenza has been confirmed at two small poultry farms and in wild birds, Reuters reported today, citing the country’s agriculture ministry. The outbreak is the country's first in nearly a decade. Further tests are under way to see if the virus is the H5N8 subtype responsible for outbreaks in over a dozen European countries, as well as in Asia, India, and parts of the Middle East. The farms are located in the southeastern part of the country, and the wild bird detection involved wild swans in the same region. All of the Czech Republic’s neighbors—Austria, Hungary, Germany, Poland, and Slovakia—have already reported H5N8 outbreaks. *CIDRAP Flu Scan* (first item)

Holidays reduce influenza transmission, delay trajectory of seasonal epidemics

3 January - The holiday season not only reduces influenza transmission in the United States, it delays the trajectory of seasonal influenza epidemics, researchers said. These effects are related to school closings, according to Shweta Bansal, PhD ... and colleagues. “In comparing the effects of two purported mechanisms driving holiday dynamics — school closure and increased travel — we were surprised to find that changes due to school closure explained nearly all of the delay in peak timing and increase in spatial synchrony in our model,” Bansal and colleagues wrote. ... “While holiday travel is more commonly linked with
seeding and synchronizing flu in multiple locations, we found that school closures, and more specifically, reductions in the average number of holiday contacts and not the changes in mixing among age groups, could in fact create a dampening and synchronizing spatial effect. Healio

NHRC: Febrile Respiratory Illness Surveillance Update

For 2016 Week 51 (through 24 December 2016):

- Influenza: No new cases of NHRC laboratory-confirmed influenza among US military basic trainees.
- FRI surveillance at all eight U.S. military basic training centers indicated FRI rates were elevated at MCRD Parris Island. Naval Health Research Center

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

- During 11 - 24 December 2016 (Surveillance Weeks 50 & 51), a total of 238 specimens were collected from 47 locations. Results were finalized for 193 specimens from 42 locations. During Week 50, 26 influenza A(H3N2), one influenza A(H3N2) & RSV coinfection, and one influenza B were identified. During Week 51, 31 influenza A(H3N2) and one influenza B were identified. Approximately 20% of specimens tested positive for influenza during Week 50. Approximately 34% of specimens tested positive for influenza during Week 51. The influenza percent positive for the season is approximately 11%.
- On 22 December 2016, the New York City Health Department released a statement of an ongoing influenza A(H7N2) outbreak investigation in NYC animal shelter cats. Over 100 cats tested positive for A(H7N2) across all NYC shelters. Of 350 individuals screened, one veterinarian tested positive for the virus. The individual was involved in specimen collection of sick cats. The illness was mild, short-lived, and has since resolved. ...
- Many countries across Europe and Asia continue to battle outbreaks of several strains of avian influenza in various birds and settings. Greece recently announced its first highly pathogenic avian influenza A(H5N8) detection. US Air Force School of Aerospace Medicine & Defense Health Agency

WHO: Influenza Update

26 December - Influenza activity in the temperate zone of the northern hemisphere increased slightly, with some countries passing their seasonal threshold, which is early for the season. Worldwide, influenza A(H3N2) virus was predominant. WHO
Burger King, Tim Hortons to curb antibiotics used in chicken

29 December - Restaurant chains Burger King and Tim Hortons plan to switch to chicken raised without antibiotics considered "critically important" to human medicine, their owner said on Wednesday, making it the latest company to ditch the drugs over health concerns. Restaurant Brands International Inc, which owns both chains, said it aims to make the change in U.S. stores in 2017 and in Canada in 2018. An estimated 70 percent of antibiotics that are important to fighting human infections and ensuring the safety of invasive procedures such as surgeries are sold for use in meat and dairy production. Reuters

FDA notes full implementation of rules on antibiotic use in food animals

3 January - The US Food and Drug Administration (FDA) announced today that it has reached a "significant milestone" in efforts to reduce the use of medically important antibiotics in food producing animals. Under Guidance for Industry #213, all pharmaceutical companies that sell medically important antibiotics for use in food animals were asked to voluntarily commit to making two label changes to their products by Jan 1: (1) remove any "growth promotion" claims and (2) change the marketing status of products administered to food animals via water and feed so that they can be used only under veterinary supervision. Companies have had 3 years to make these changes. CIDRAP Stewardship / Resistance Scan (first item)

FDA will not control Vibrio in shellfish

4 January - The Center for Science in the Public Interest has stated that the FDA has denied their petition to control Vibrio in shellfish. Every year, Americans are sickened, and some die, after eating raw shellfish contaminated with Vibrio vulnificus. The FDA could set a performance standard that would control this issue. CSPI petitioned the FDA to use this power in 2012. The government denied the petition, citing "competing priorities.” Food Poisoning Bulletin

University of Texas develops oral Salmonella vaccine

5 January - Researchers at the University of Texas Medical Branch in Galveston have developed an oral vaccine against Salmonella bacteria. ... Researchers at that facility have developed potential vaccines against Salmonella Typhimurium, but that vaccine was given as an injection. An oral vaccination is much simpler to give to patients. And it uses the same pathway that the bacteria took to enter the body. Dr. Ashok Copra, UTMB professor of microbiology and immunology said, "In the current study, we analyzed the immune responses of mice that received the vaccination by mouth as well as how they responded to
a lethal dose of *Salmonella*. We found that the orally administered vaccines produced strong immunity against *Salmonella*, showing their potential for future use in people.”

*Food Poisoning Bulletin*

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**WELLNESS**

A fitness downside to statin drugs?

4 January - Taking cholesterol-lowering statin drugs seemed to make exercise more difficult and less beneficial, a new study in mice suggests. ... In the experiment, statins were very effective in lowering cholesterol levels. But animals moved less if they were taking statins than if they were not taking the drugs. And when they did move, mice on statins developed fewer advantageous physical changes within their muscles than animals that were not given the drugs. *The New York Times*

A gut makeover for the New Year

29 December - ... [S]cientists harvested the gut bacteria from people who followed sharply different diets. One group ate a fairly typical American diet, consuming about 3,000 calories a day, high in animal proteins with few fruits and vegetables. ... The other group consisted of people who ... ate less than 1,800 calories a day and had meticulously tracked what they ate for at least two years, sticking to a mostly plant-based diet and consuming far less animal protein than the other group, a third fewer carbohydrates and only half the fat. This calorie-restricted group, the researchers found, had a far richer and more diverse microbial community in the gut than those eating a typical American diet. They also carried several strains of “good” bacteria, known to promote health, that are unique to their plant-based diet. ... After the human microbiota was transplanted into ... mice, the mice got to eat either like typical Americans or like the calorie restrictors. Mice that had a microbiota conditioned by the typical American diet had a weaker response to the plant-based diet. *The New York Times*

DoD health experts want troops to cut back on energy drinks

29 December - U.S. military health officials are warning service members that chugging too many energy drinks can have harmful side effects. ... [T]here are real reasons to avoid overusing energy drinks, according to Patricia Deuster, professor and director of the Consortium for Health and Military Performance at the Uniformed Services University of the Health Sciences. ... Energy drinks are loaded with caffeine. ... High amounts of caffeine can lead to increased blood pressure, panic attacks, heart palpitations, anxiety, dehydration, insomnia and even bowel irritability when energy drinks are mixed with alcohol, Deuster
maintains. Energy drinks are also loaded with sugar. Some cans pack a punch of 27 grams of sugar, two-thirds of the recommended daily maximum for men, and 2 grams more than the maximum doctors recommend for women. ... There is also a problem in the military with energy drinks and sleep, according to Deuster. While service members may initially use energy drinks to make up for a lack of sleep, they can easily overuse the drinks, leading to a harmful cycle. Military.com

Engineering social incentives for health

29 December - ... Convention has organized the process of health care into interactions between a clinician and a patient. But even patients with chronic illness may spend only a few hours a year with a physician, as compared with the thousands of waking hours when so much of what determines their health occurs out of clinicians’ reach. Some strategies for engaging patients during the course of their daily lives, such as remote monitoring, still rely on busy clinicians, whose time is expensive. Other approaches rely on community health workers whose services cost less and who often reside in the same neighborhoods as the patients they serve. Largely untapped are ways of organizing existing, cost-free social interactions with friends and relatives who are already embedded in patients’ lives. The New England Journal of Medicine

For heart health, the most dangerous time of the year

28 December - The rate of heart attack increases during the holiday season, but not just because of cold weather or the exertions of snow shoveling. Researchers examined heart attack rates in New Zealand, where Christmas falls during summer and the temperature hovers in the 70s. ... There were 197,109 cardiac deaths between 1988 and 2013 in New Zealand, with a disproportionate number, 26,257, occurring between Dec. 25 and Jan. 7. During that holiday period, the number of cardiac deaths outside the hospital went up by 4.2 percent compared with the rest of the year. Heart-related deaths during the holiday season rise by a similar rate in the United States, where it tends to be much colder in most parts of the country. The authors suggest that changes in diet, alcohol consumption or emotional stress during the holidays could contribute to the effect. The New York Times

Is the warning that creatine's not for teens getting through?

2 January – ... [T]he safety and effectiveness of creatine hasn’t been rigorously analyzed by the Food and Drug Administration in the way that drugs are evaluated. And while proponents argue that the supplement’s long history of use by many athletes suggests it’s relatively safe for healthy adults, pediatricians warn that it’s unclear whether the supplement might harm the growing muscles and bones of kids and teens. ... Even so, use of the supplement among teens seems to be rising, particularly among young male athletes. Researchers ... [had a] 20-year-old undergraduate, a member of the research team, [call] 244 health food stores across the U.S., posing as a 15-year-old football player seeking to increase his muscle strength. In each phone call he asked workers at the stores for their
recommendations about which, if any supplements he should take. More than two thirds of the sales associates recommended creatine to the caller — despite the label clearly warning against its use by young people. NPR

NIH-sponsored expert panel issues clinical guidelines to prevent peanut allergy

5 January - An expert panel sponsored by the National Institute of Allergy and Infectious Diseases (NIAID), part of the National Institutes of Health, issued clinical guidelines today to aid health care providers in early introduction of peanut-containing foods to infants to prevent the development of peanut allergy. ... [R]ecent scientific research has demonstrated that introducing peanut-containing foods into the diet during infancy can prevent the development of peanut allergy. The new Addendum Guidelines for the Prevention of Peanut Allergy ... provides three separate guidelines for infants at various levels of risk for developing peanut allergy. NIH

United Kingdom: Children consume half of daily sugar quota at breakfast – study

2 January - Children in England consume half their recommended maximum daily intake of sugar at breakfast, and by the end of the day have had more than three times the healthy limit, according to research from Public Health England (PHE). The study, based on the annual National Diet and Nutrition Survey, found that on average children have the equivalent of three cubes – about 11g – of sugar before they go to school, mainly in sugary cereals, drinks and spreads. Despite this, researchers found that eight out of 10 parents believed their children’s breakfast was healthy. PHE is launching a campaign to raise awareness of health problems linked to excessive sugar intake. It has developed an app that allows people to scan products’ barcodes to see how much sugar, saturated fat and salt they contain. The Guardian

USAFRICOM

Nigeria: 2016 records highest Lassa deaths

28 December - Lassa fever killed more people between 2015 and 2016, the highest death toll from the disease on record since it was discovered more than 40 years ago, says the Nigeria Centre for Disease Control, NCDC. Across 23 states, a total 273 infections were recorded and 149 people died from contracting Lassa fever, NCDC said in a statement. ”Of these, 165 cases and 89 deaths have been confirmed through laboratory testing,” the NCDC said. The record indicates case fatality ratio of 53.9%, meaning 54 in 100 people who contracted the disease died. AllAfrica
Sudan: Measles outbreak results in 20 deaths in Sudan’s Nuba Mountain region

2 January - More than 100 measles cases were reported since November, including 20 deaths in children in Nuba Mountains region in South Kordofan, Sudan, according to Tutu Mustafa, Secretary of Health in the Nuba Mountains region. ... Mustafa attributed the problem to poor health conditions due to lack of vaccination of children since the outbreak of war in 2011. He called on the international community to put pressure on the Khartoum government to allow vaccination of children in the Blue Nile and South Kordofan regions.

Outbreak News Today

Zimbabwe: Zimbabwe battles new typhoid outbreak

4 January - An outbreak of typhoid in Zimbabwe's capital has killed two people and is affecting dozens more, raising fears that the southern African country's water and sanitation problems are far from over. Officials say that so far, 126 cases of typhoid have been confirmed in Harare since the start of the rainy season in Zimbabwe about two months ago. There are more than 1,000 other suspected cases nationwide. ... [A] visit to ... parts of Harare on Wednesday [found that faucets] were dry, sewer water could be seen flowing, and some people were using water from open sources like lakes and rivers. VOA

Zimbabwe: Zimbabwe tackles mental health with 'friendship benches'

3 January - Doctors estimate one in four Zimbabweans battles depression or anxiety, but there are just 12 psychiatrists treating the entire population of 14 million. "We cannot possibly go the route of training psychiatrists and psychologists because it would take 15 years," said Dr. Victoria Simms of the London School of Hygiene and Tropical Medicine. ... Local doctors have come up with a simple, but seemingly effective, answer. Wooden seats, or "friendship benches," were installed on the grounds of several health clinics in Harare. Visitors were offered six one-on-one counseling sessions with lay health workers. ... Those women were trained "to offer problem-solving therapy," Simms said. "And so the patient explains what all their problems are, and it is opening up the mind in the sense of allowing the patient to see that they can do something about their problems." ... After six months, 14 percent of the patients in the friendship bench group reported symptoms of depression, compared to 50 percent in a control group. They were also five times less likely to have suicidal thoughts. VOA

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Pakistan: Summary of poliovirus circulation in 2016

27 December - In Pakistan, a circulating vaccine-derived poliovirus type 2 (cVDPV2) has been detected from environmental samples in Quetta, Balochistan. Two isolates with apparent genetic linkages were isolated from environmental samples, collected on 20 October and 28 November 2016. Virus was isolated from environmental samples only and no associated cases of paralysis linked to the isolated strains have been detected in Quetta or anywhere else in the province. Pakistan also continues to be affected by endemic transmission of wild poliovirus type 1 (WPV1). As of 21 December, 19 WPV1 cases have been reported in 2016. It is the lowest number of annual cases ever reported, from the fewest number of affected areas in the country. WHO

Pakistan: Toxic liquor kills 42 after Christmas parties in Punjab

28 December - At least 42 people, most of them Christians celebrating Christmas, have died and dozens have fallen ill after drinking toxic alcohol in Pakistan, the Dawn newspaper has reported. Police in eastern Punjab province took all alcohol sellers in the district of Toba Tek Singh, the site of the incident, into custody for questioning, Muhammad Shahbaz, a local police official, told DPA news agency. The brew was consumed during festive celebrations in a Christian community, Shahbaz said. Five Muslims were among the dead. Many of the victims had been drinking and dancing throughout Sunday and into Monday morning, when some of them fell ill and were taken to hospital, he said. About 150 others were taken to clinics, dozens of them unconscious. Funerals have been held for 25 victims. Al Jazeera

Saudi Arabia: Officials report 3 new MERS cases and 3 deaths in Saudi Arabia

3 January - Over the New Year's weekend, Saudi Arabia's Ministry of Health (MOH) reported three new MERS-CoV cases and three deaths, two of them in previously reported patients. Two of the three new cases had direct contact with camels. ... The new infections raise Saudi Arabia's MERS-CoV total to 1,522. Nine patients are still being treated or monitored for their infections. CIDRAP News Scan (second item)
France: France gives workers 'right to disconnect' from office email

2 January - French workers have won the right to ignore business emails that arrive after hours. A new labor law that took effect on Sunday gives employees the "right to disconnect" from email, smartphones and other electronic leashes once their working day has ended. "These measures are designed to ensure respect for rest periods and ... balance between work and family and personal life," the Ministry of Labor said in a statement. ... Marie Pierre Fluery, who works as a human resources director, said the law is necessary to help people avoid being overwhelmed by work demands. "I think it is essential in order to preserve the health of employees," she said. CNN

Russia: H.I.V. cases surpass a million in Russia, but little is done

28 December - Quietly, the number of Russians who have received a positive H.I.V. diagnosis passed the one million mark this year. There is, however, little indication that the government will commit adequate resources to stem the acceleration of the virus from high-risk groups into the general population. About 850,000 Russians carry H.I.V. and an additional 220,000 have died since the late 1980s, said Vadim Pokrovsky, the longtime head of the Moscow-based Federal AIDS Center, who estimated that at least another 500,000 cases of H.I.V. have gone undiagnosed. ... The overall estimate of victims constitutes about 1 percent of Russia’s population of 143 million, enough to be considered an epidemic. ... Beyond that, they said that heterosexual sex would soon top intravenous drug use as the main means of infection. The New York Times

U.S.: CDC considers lowering threshold level for lead exposure

30 December - The U.S. Centers for Disease Control and Prevention is considering lowering its threshold for elevated childhood blood lead levels by 30 percent, a shift that could help health practitioners identify more children afflicted by the heavy metal. Since 2012, the CDC, which sets public health standards for exposure to lead, has used a blood lead threshold of 5 micrograms per deciliter for children under age 6. While no level of lead exposure is safe for children, those who test at or above that level warrant a public health response, the agency says. ... But the step, which has been under consideration for months, could prove
controversial. One concern: Lowering the threshold could drain sparse resources from the public health response to children who need the most help – those with far higher lead levels. Reuters

**U.S.: CDC keeps secret its mishaps with deadly germs**

4 January - The Centers for Disease Control and Prevention, which has faced congressional hearings and secret government sanctions over its sloppy lab safety practices, is keeping secret large swaths of information about dozens of recent incidents involving some of the world's most dangerous bacteria and viruses. CDC scientists apparently lost a box of deadly and highly-regulated influenza specimens and experienced multiple potential exposures involving viruses and bacteria, according to heavily-redacted laboratory incident reports obtained by USA TODAY. Several reports involve failures of safety equipment. In one, a scientist wearing full-body spacesuit-like gear to protect against lethal, often untreatable viruses like Ebola, had their purified air hose suddenly disconnect — "again" — in one of the world’s most advanced biosafety level 4 labs. USA Today

**U.S.: Fentanyl outpaces heroin as the deadliest drug on Long Island**

28 December - An anesthetic commonly used for surgery has surpassed heroin to become the deadliest drug on Long Island, killing at least 220 people there in 2016, according to medical examiners' records. The drug, fentanyl, is a synthetic opioid, which can be 100 times more potent than morphine. The numbers from Long Island are part of a national pattern, as fentanyl fatalities have already surpassed those from heroin in other parts of the country, including New England, as its use has skyrocketed. Part of the reason for the increase is economic — because fentanyl can be manufactured in the lab, it is much cheaper and easier than cultivating heroin. The New York Times

**U.S.: Five dead as severe weather slams South**

3 January – Five people died Monday when violent storms barreled through the South, causing power outages, flooding and downed power lines. A Walton County, Fla., man, drowned near his submerged car in Mossy Head, according to a statement from the sheriff's office. ... Four people were also killed Monday evening when a tree fell on their mobile home in Rehobeth, Ala., said Kris Ware, a spokeswoman for the Dothan Houston County Emergency Management Agency, according to the Associated Press. Parts of Louisiana, Mississippi and southern Alabama were causing the most concern among weather experts, the National Weather Service reported. USA Today
U.S.: Gun violence should be treated as a public health crisis, study says

3 January - Every year in the U.S., more than 30,000 people die from things related to guns. That puts guns ahead of HIV, Parkinson’s disease, malnutrition, hypertension, intestinal infection, peptic ulcer, anemia, viral hepatitis, biliary tract disease, atherosclerosis and fires. Yet, the funding for research on gun violence lags far behind other leading causes of death, according to a study published Tuesday in the *Journal of the American Medical Association*. ... The researchers wrote: "Gun violence had 1.6% of the funding predicted ($1.4 billion predicted, $22 million observed) and had 4.5% of the volume of publications predicted (38,897 predicted, 1738 observed) from the regression analyses. Gun violence killed about as many individuals as sepsis. However, funding for gun violence research was about 0.7% of that for sepsis and publication volume about 4%. In relation to mortality rates, gun violence research was the least-researched cause of death and the second-least funded cause of death after falls." NPR

U.S.: Here’s why the cancer death rate has plummetsed

5 January - Death rates from cancer, the second-biggest killer in the United States, have dropped 25% since 1991, according to a new report from the American Cancer Society. That statistic translates into a lot of lives saved; had the cancer death rate remained steady from its peak in 1991, about two million more people would have died from cancer in the years until 2014, the report finds. The drop is fueled by decreasing death rates from the four largest types of cancer: lung, breast, prostate and colorectal. ... The authors credit the drop to reductions in smoking—shown last year to be responsible for about 30% of all cancer deaths—as well as advances in treatment and earlier detection. Health

U.S.: Ignition interlock laws - effects on fatal motor vehicle crashes, 1982–2013

5 January - ... Ignition interlocks, or alcohol-sensing devices connected to a vehicle’s ignition to prevent it from starting if a driver has a predetermined blood alcohol content (BAC) level, are a promising avenue for preventing alcohol-involved driving. This study sought to assess the effects of laws requiring ignition interlocks for some or all drunk driving offenders on alcohol-involved fatal crashes. ... State laws requiring interlocks for all drunk driving offenders were associated with a 7% decrease in the rate of BAC >0.08 fatal crashes and an 8% decrease in the rate of BAC ≥0.15 fatal crashes, translating into an estimated 1,250 prevented BAC >0.08 fatal crashes. Laws requiring interlocks for segments of high-risk drunk driving offenders, such as repeat offenders, may reduce alcohol-involved fatal crashes after 2 years of implementation. *American Journal of Preventive Medicine*

U.S.: Melanoma rates keep rising

29 December - The number of diagnosed melanoma cases and related deaths in the U.S. has been steadily climbing for at least two decades despite widespread prevention efforts, a
recent study suggests. Researchers now estimate that one in 54 Americans will develop invasive melanoma – the rarest and deadliest type of skin cancer – in their lifetime. That’s up from a 2009 estimate of one in 58. “Physicians have improved their ability to identify melanomas in the past 30 years . . . but this alone likely does not explain the increased number of melanomas,” said study coauthor Dr. Alex Glazer, a physician based in New York City who is affiliated with the National Society for Cutaneous Medicine. “Despite public health measures and warnings people still get a high level of UV exposure from the sun and tanning beds which is likely contributing to the increased incidence,” Glazer added by email. The steady rise in melanoma diagnoses and deaths in the U.S. over the past few decades mirrors trends seen worldwide, researchers note in JAMA Dermatology. Reuters


6 January - ... Approximately two thirds of cigarette smokers are interested in quitting, and in 2015, approximately half of smokers reported receiving advice to quit from a health professional and making a quit attempt in the past year. However, fewer than one third of smokers who tried to quit used evidence-based cessation treatments, and fewer than one in 10 smokers overall successfully quit in the past year. As of 2015, approximately three in five adults who had ever smoked had quit. Health care professionals can help smokers quit by consistently identifying patients who smoke, advising them to quit, and offering them cessation treatments. Morbidity and Mortality Weekly Update

U.S.: Recently approved cholera vaccine available for use in the U.S.

29 December - An estimated three to 5 million people a year are affected by cholera – a disease found in contaminated food or water. While uncommon in the United States, about 140,000 people around the world succumb to the disease each year. The Military Health System is bringing attention to a vaccine newly approved by the Food and Drug Administration that has proven effective in the fight against this disease: Vaxchora. Air Force Lt. Col. Heather Halvorson, deputy branch chief of the Defense Health Agency Immunization Healthcare Branch, said that the vaccine is now available for those age 18 through 64 and traveling to areas where cholera is present. Health.mil

U.S.: Study - MRSA pneumonia cases declining in US hospital patients

3 January - A new longitudinal study in the American Journal of Infection Control indicates that the prevalence of methicillin-resistant Staphylococcus aureus (MRSA) pneumonia is declining in US hospital patients, a trend that is accompanied by improvements in mortality and length of hospital stay. ... The investigators found that 104,562 patients had a primary diagnosis code for S aureus pneumonia during the study period, with MRSA accounting for 77.7% of the cases. Overall S aureus pneumonia cases dropped from 96.4 per 100,000 hospital discharges in 2009 to 73.7 cases per 100,000 in 2012 (a decline of 24%), while
MRSA pneumonia cases declined from 75.6 cases per 100,000 in 2009 to 56.6 cases per 100,000 in 2012 (a 19% drop). [Methicillin-susceptible *S aureus*] pneumonia cases fell from 20.8 per 100,000 to 17.1 during the study period.

**CIDRAP Stewardship / Resistance Scan** (second item)

**U.S.: The CDC’s new quarantine rule could violate civil liberties**

30 December - On August 15th, with little fanfare, the Centers for Disease Control and Prevention (CDC) took steps to improve its ability to deal with infectious outbreaks. The agency proposed a new rule that would expand its powers to screen, test, and quarantine people traveling into or within the United States, in the event of a crisis like the historic Ebola outbreak of 2014. On the face of it, this sounds like a good thing. ... But some epidemiologists, lawyers, and health organizations say that the rule, in its current form poses a serious threat to civil liberties, allowing authorities to detain and examine people with little heed to due process and informed consent. ... It is already authorized to detain people suspected of carrying diseases like plague, Ebola, and (somewhat improbably) smallpox. But the new rule does away with a formal list. It extends the same powers to any “quarantinable communicable disease,” and uses wider range of symptoms (from a list that federal agents can update as the need arises) for defining “ill” people. *The Atlantic*

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**USPACOM**

**Australia: Fecal pollution taints water at Melbourne’s beaches after storm**

2 January - The annual beach pilgrimage during the height of summer in Melbourne, Australia’s second-largest city, is threatened by an unsettling phenomenon: shores where the tides are tainted with excrement. The Environment Protection Authority in the state of Victoria said on Monday that heavy rains had caused fecal pollution to wash into Port Phillip from rivers, creeks and drains. It advised against swimming at 21 beaches because of poor water quality. “It’s poo in all its luxurious forms that is causing the problem,” said Anthony Boxshall, the agency’s manager of applied sciences, noting that the waste was coming from people, dogs, horses, cows, birds and other animals. ... Mr. Boxshall said much of the waste had been washed down the 150-mile Yarra River that runs through Melbourne into Port Phillip, affecting the city’s bayside beaches the most. *The New York Times*

**China: China jails former drug regulatory official for taking bribes: state media**

3 January - A former official with the China Food and Drug Administration has been jailed for taking bribes from vaccine manufacturers who wanted help with gaining approval for
their drugs, the state-owned Legal Evening News newspaper reported on Tuesday. Yin Hongzhang, the former deputy director of the regulator’s drug testing center, was sentenced to 10 years in prison and fined 500,000 yuan ($71,864.89), the newspaper said. His wife and son earlier received prison sentences for their involvement. Reuters

China: Despite smog alert, Beijing says air quality improving

3 January - The Chinese capital was on the second-highest level of smog alert Tuesday, but city officials said the air quality was improving overall, citing data for last year. Hundreds of flights were canceled and highways were closed across northern China over the new year holiday as average concentrations of small breathable particles known as PM2.5 soared above 500 micrograms per cubic meter in Beijing and surrounding regions. Pollution alerts are common in northern China, especially during bitterly cold winters when energy demand, much of it met by coal, soars. But the Beijing Municipal Environmental Protection Bureau told state media that PM2.5 concentrations dropped 9.9 percent on the year to an average of 73 micrograms per cubic meter in the capital in 2016. VOA

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USSOUTHCOM

PAHO reports small increase in chikungunya cases

3 January - The Pan American Health Organization (PAHO) reported only 108 new suspected, confirmed, and imported chikungunya cases late last week, after reporting more than 56,000 new infections the week before. A smattering of cases in a handful of countries accounted for the increase, with Colombia and Costa Rica each reporting 20 new cases to top other nations, according to the Dec 30 update. Most countries, however, have not reported new cases for several weeks. Brazil, which has accounted for 82% of all cases in 2016 and was responsible for the big jump in cases in the Dec 23 update, has yet to report on the final 3 weeks of the year. Countries in the Americas have now reported 498,290 suspected, confirmed, and imported chikungunya cases this year. CIDRAP News Scan (fifth item)

Peru: 85 suspected human rabies cases reported in jungle of Cusco

31 December - Health officials in the Cusco region in southeastern Peru have reported dozens of suspected human rabies cases in individuals in La Convención province, according to a Publimetro report (computer translated). Eighty-five people are suspected of having contracted wild rabies after being bitten by bats in the various Amazonian localities of Camana, Mayapo, Puerto Huallana and Alto Pichas. Regional director of Health of Cusco,
Julio César Espinosa La Torre said that among the group of victims with a bat bite are the 15 soldiers transferred to Lima, of this group, two cases were confirmed, of which one is deceased. Espinoza la Torre said that to date, more than 912 civilians and 680 soldiers have been vaccinated in Alto and Bajo Urubamba, in the district of Megantoni, who must receive up to four doses, every 7 and 14 days. Outbreak News Today

Venezuela: Inside Venezuela's hidden healthcare crisis

4 January - Venezuela is in the midst of a healthcare crisis caused by a crippling lack of state resources. Medicines and basic hospital equipment are now in such short supply that doctors struggle to make diagnoses, let alone provide treatment. And yet, they continue to try to do their best for their patients, even as they lack the tools to deal with a resurgence of previously eradicated diseases such as malaria and diphtheria and rising maternal and infant mortality rates. Meanwhile, the government of President Nicolas Maduro has refused to lift a ban on international aid that could alleviate the crisis. The government also restricts media access to public health facilities and penalises health workers who speak out. Hospitals have armed guards, and journalists caught inside face arrest. [Video] IRIN

Outbreak News Today

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Outbreak News Today