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Army Public Health Weekly Update

Army Public Health Center



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U.S. MILITARY

Case report: Probable murine typhus at Joint Base San Antonio, TX

August 2015 - This report contains a description of a probable case of murine typhus diagnosed in a resident of Texas who was treated at the San Antonio Military Medical Center (SAMMC). ... The 14-year-old daughter of a retired Air Force non-commissioned officer was initially evaluated ... for fever and abdominal pain. She was managed conservatively (supportive care) but returned 3 days later with ongoing fever up to 104°F, continued abdominal pain, and new onset emesis and diarrhea. ... [The] patient was transferred by ambulance to the SAMMC pediatric ward. ... Shortly after arrival at SAMMC, the patient was admitted to the Pediatric Intensive Care Unit in hypotensive shock. ... A

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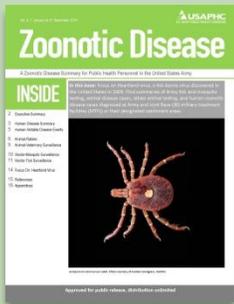
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Zoonotic Disease Summary

In this issue there is a focus on Heartland virus which is a tick-borne virus discovered in the U.S. in 2009. You can also find summaries of Army tick and mosquito testing, animal disease cases, rabies animal testing, and human zoonotic disease cases diagnosed at Army and Joint Base military treatment facilities.



rickettsial disease was suspected and the patient was treated with intravenous (IV) doxycycline, 100 mg every 12 hours; ceftriaxone and vancomycin were also administered. The patient recovered promptly and her treatment was converted to an oral regimen of doxycycline. ... After the patient ... recovered, she and her family were given instructions for prevention of murine typhus and other diseases by excluding feral cats from their home, eliminating food sources that may attract wild animals, and controlling fleas in their domestic animals. [Medical Surveillance Monthly Report](#)

U.S. military says may have mishandled organism that causes plague

10 September - The U.S. military, stung this year for mistakenly shipping live anthrax samples, said on Thursday its labs were being investigated for possibly mishandling other organisms, including one that causes plague. The disclosure came a week after the Army declared a moratorium on the production, handling, testing and shipment of biological agents and toxins. The U.S. Centers for Disease Control and Prevention said in a statement that it was trying to determine whether there were problems with record keeping and quality management or whether there were unapproved shipments. "At this time, there is nothing to suggest risk to the health of workers or the general public," the CDC said. The Army said the latest investigation dated back to an Aug. 17 inspection at the Edgewood Chemical Biological Center in Maryland, where the CDC raised questions as to whether a strain of *Yersinia pestis*, the bacterium that causes plague, was fully virulent. [Reuters](#)

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GLOBAL

Cellphone records could help predict dengue outbreak

8 September - Cellphone records could help epidemiologists predict which cities and towns might be hit next by dengue, the most rapidly spreading mosquito-borne disease in the world. That's because cellphone records let scientists track how people actually move around. ... [Some] countries, like the U.S., gather information on travel patterns and road usage, but this information often either isn't available or isn't reliable in the developing world. So, she and her colleagues have turned to cellphones. They recently found that mobility patterns revealed by cellphone data let them accurately model the spread of a large dengue outbreak in two regions of Pakistan in 2013. ... The cellphone data, added to climate information, could have been used to accurately predict both the geographic spread of this disease and its timing, according to a report in the Proceedings of the National Academy of Sciences. [NPR](#)

Vector-Borne Disease Report

West Nile Virus (WNV): 415 cases have been reported to the CDC from 45 states; 1 previously reported case of WNV in an AD Soldier from Fort Bliss, TX has been reported in 2015.

Tick Testing: RHCs and the DoD Human Tick Test Kit Program tested 1,096 ticks for *Borrelia burgdorferi*, the causative agent of Lyme disease: 210/1,012 (21%) of *Ixodes scapularis* ticks were positive; all *I. pacificus* ticks were negative (0/84).



Child mortality falls by 50% since 1990 – report

9 September - Child mortality has fallen by more than 50% since 1990, a report by the World Health Organization and UN children's agency Unicef says. It says that 25 years ago 12.7 million children under five died, but this year the figure is projected to drop below six million for the first time. But aid agencies warn that huge challenges remain. They point out that the UN target of reducing child mortality by two-thirds between 1990 and 2015 will not be met. The rate fell by 53% over this period, the report says. Luxemburg and Nordic countries including as Iceland, Finland and Norway are among those with the lowest deaths among under fives with less than three per 1,000 births. Oil-rich Angola has the highest rate of child deaths up to 254 per 1,000 births, followed by Somalia, Chad and Central African Republic. [BBC News](#)

Modelling the spread of hospital bugs

9 September - A new computer model predicts that multi-bed hospital wards increase bacterial hand contamination by 20% compared with single-bed wards. Understanding exactly how bacteria spread could improve the way we design and clean our hospitals, and train healthcare workers. ... [Researchers] have been able to develop a predictive model that estimated the number of bacteria that would remain on the healthcare worker's hands - even with handwashing. ... They also observed that bacteria were likely to spread many metres from the source - and potentially into the bed-space of other patients. In a multi-bed ward this could mean that bugs are spread by a healthcare worker even if they wash their hands after each patient interaction, as the bugs could be waiting for them on the next patient's bedside table. [BBC News](#)

No rise in malaria seen in pregnant women getting iron supplements

9 September - Many doctors recommend that pregnant women who suffer from anemia be given supplements to raise the level of iron, an essential nutrient, in their blood. But that rarely occurs in developing countries, experts say, given all of the other health challenges they face, including higher rates of malaria. There is some evidence that iron supplementation increases the risk of malaria in children. It's thought the immediate production of new red blood cells after treatment begins makes kids more attractive targets for disease-carrying mosquitoes. But a new study in Kenya found virtually no difference in malaria risk among pregnant women who took iron supplements and those who didn't. Hans Verhoef, a clinical epidemiologist at the London School of Hygiene and Tropical Medicine, led the study of 470 pregnant women, 60 percent of whom were anemic at the beginning. He said the extra iron given to half of those women increased the duration of their pregnancies and the weight of their newborns. [VOA](#)

U.S. Army Injury Surveillance Summary

A new periodical provides an annual update of injury-related medical encounters for non-deployed U.S. Army Soldiers, including rates over time for Active Duty and trainees, types and causes of hospitalizations and outpatient visits, and frequencies of injuries by body location and diagnosis.



Pertussis passed to newborns from siblings

7 September - A new study has found that siblings, not mothers, are now the most common source of pertussis infection in newborns. Infants can be given the DTaP vaccine (it also protects against tetanus and diphtheria) starting at 2 months, and the schedule calls for four more shots periodically through ages 4 to 6. Researchers determined the source of pertussis infection in 569 infants between 2006 and 2013. Fathers were the source of 10 percent of the infections, mothers of 20.6 percent, and siblings of 35.5 percent. Until 2008, mothers were the most common source of infection. The study was published in *Pediatrics* on Monday. Researchers determined the source of pertussis infection in 569 infants between 2006 and 2013. Fathers were the source of 10 percent of the infections, mothers of 20.6 percent, and siblings of 35.5 percent. Until 2008, mothers were the most common source of infection. [New York Times](#)

Snakebite antidote is running out

8 September - The world is running out of one of the most effective snakebite treatments, putting tens of thousands of lives at risk, warn experts. Medecins Sans Frontieres says new stocks of Fav-Afrique, which neutralises 10 different snakebites that can occur in Sub-Saharan Africa, are desperately needed. The last batch will expire in June 2016 and there is no comparable replacement. Manufacturer Sanofi Pasteur says it has been priced out of the market. Alternatives are available but MSF says they are not as good. Fav-Afrique is the only anti-venom that has been proven safe and effective to treat envenoming from different types of snakes across Sub-Saharan Africa, it says. ... Sanofi is believed to be negotiating for another company to produce Fav-Afrique, but these talks are not expected to be finalised before late 2016. This means that a replacement product could not be expected to reach the market for another two years, says MSF. [BBC News](#)

UQ scientists close in on first dengue treatment

9 September - Clinical trials for a dengue fever treatment could start within a year, following a discovery by University of Queensland scientists. UQ's School of Chemistry and Molecular Biosciences Head Professor Paul Young said the researchers had identified similarities in how the body reacted to dengue virus and bacterial infections, in a finding that would allow them to re-purpose existing drugs. "We have discovered that the dengue virus NS1 protein acts as a toxin in the body, in a similar manner to the way bacterial cell wall products lead to septic shock in bacterial infections," he said. "For the past 20 to 30 years, researchers and pharmaceutical companies have been developing drug candidates to inhibit the body's damaging responses to these bacterial infections. So drugs are already available that have gone through phase three clinical trials." [EurekAlert](#)

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Army Industrial Hygiene News and Regulatory Summary

The latest issue addresses hazardous substances, radiation, ventilation, PPE, noise, preventive medicine and more.



INFLUENZA

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

2014-2015 Influenza Season Week 34 ending August 29, 2015:

- Novel Influenza A Viruses: One human infection with a novel influenza A virus was reported by the state of Michigan. The person was infected with an influenza A (H3N2) variant (H3N2v) virus and was hospitalized in June 2015 as a result of their illness, but has fully recovered. No human-to-human transmission has been identified and the case reported close contact with swine in the week prior to illness onset.
- Pneumonia and Influenza (P&I) Mortality Surveillance: During week 34, 5.4% of all deaths reported through the 122 Cities Mortality Reporting System were due to P&I. This percentage was below the epidemic threshold of 5.8% for week 34.
- Outpatient Illness Surveillance: Nationwide during week 34, 0.9% of patient visits reported through the U.S. Outpatient Influenza-like Illness Surveillance Network (ILINet) were due to influenza-like illness (ILI). This percentage is below the national baseline of 2.0%. [CDC](#)

Glowing in the dark, GMO chickens shed light on bird flu fight



7 September - ... British scientists say they have genetically modified chickens in a bid to block bird flu and that early experiments show promise for fighting off the disease that has devastated the U.S. poultry and egg industries. ... To genetically engineer chickens, the UK researchers inject a "decoy" gene into a cluster of cells on the yolk of a newly

laid egg. The egg will hatch into a chick containing the decoy gene, which it will be able to pass on to its offspring. The decoy gene is injected into the chicken chromosome alongside the fluorescent protein that makes the birds glow under ultraviolet light. ... The birds would not be bred to glow if they are commercialized. When the modified birds come into contact with the flu, their genetic code is designed to trick the virus into copying the decoy and to inhibit the virus' ability to reproduce itself. [Reuters](#)

NHRC: Febrile Respiratory Illness Surveillance Update

For 2015 Week 35 (through 5 September 2015):

- 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 Fort Benning and Fort Leonard Wood. [Naval Health Research Center](#)

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<http://phc.army.smil.mil>

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Study finds high-dose flu vaccine cost effective in elderly

9 September - A cost analysis of efficacy data for the high-dose flu vaccine showed a 93% chance that it will save money compared with standard-dose flu vaccines in seniors, a study yesterday in *The Lancet Infectious Diseases* noted. Canadian and US researchers, including two from Sanofi Pasteur, which makes the Fluzone High-Dose vaccine and funded the study, analyzed data from a large efficacy study published last year. That study involved about 32,000 people 65 years and older and found the high-dose vaccine to be 24% more effective than a standard trivalent (three-strain) vaccine in preventing lab-confirmed flu. ... In the current study, the investigators determined that the high-dose vaccine was more cost effective even though it costs more than twice as much as the standard vaccine (\$31.82 vs \$12.04 per dose). They found that medical costs were \$1,377 for each high-dose recipient and \$1,493 for each standard-dose recipient. [CIDRAP News Scan](#) (second item)

WHO: Influenza Update

7 September - Globally, there was continued influenza activity in the Southern hemisphere, with an increase in Oceania, a peaking of activity in temperate South America and a decrease in activity in South Africa.

- In the Northern Hemisphere countries, respiratory virus activity remained low in general, and influenza activity continued at low, inter-seasonal levels. Influenza type A predominated in sporadic detections. A number of countries have also scaled down surveillance activity during the inter-seasonal period.
- In Eastern Africa, in countries with reported influenza activity, influenza type A predominated. In Western Africa, influenza activity decreased overall, with influenza B predominating in Ghana and influenza A in Côte d'Ivoire.
- In tropical countries of the Americas, Central America and the Caribbean, influenza activity remained at low levels, with the exception of Cuba, where high levels of influenza-like illness (ILI) and severe acute respiratory infections (SARI) were reported, associated with influenza A(H1N1)pdm09 and RSV viruses detections.
- In tropical Asia, countries in Southern Asia and South East Asia reported an overall low influenza activity though India reported a minor increase in activity with predominantly A(H1N1)pdm09. Influenza activity was still high in southern China with influenza A(H3N2) predominating.
- In temperate South America, ILI and SARI activity remained low and continued to decrease in general, except in Chile, where respiratory virus activity remained elevated. Influenza type A viruses predominated in the region.
- In South Africa, influenza activity decreased, with influenza type B predominating in recent weeks.
- In Australia, influenza activity seemed to be still increasing with predominantly influenza B virus followed by influenza A(H3N2) detections. In New Zealand, influenza activity may have peaked in the second week of August with influenza A(H3N2) and B predominating. [WHO](#)

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Cucumber-linked *Salmonella* outbreak total climbs to 341

9 September - The US Centers for Disease Control and Prevention (CDC) said today that 56 more illnesses have been reported in a multistate *Salmonella* Poona outbreak linked to cucumbers imported from Mexico, raising the total so far to 341 cases. Three more states (Hawaii, Kentucky, and Pennsylvania) have reported cases, lifting the number of affected states to 30. One more person has died from their illness, a patient from Texas, putting the fatality count at two. Meanwhile, the number of people who have been hospitalized for their infections has climbed from 53 to 70, or 33% of cases with available information. The CDC announced the outbreak linked to cucumbers distributed by Andrew & Williamson Fresh Produce, based in San Diego, on Sep 4. On the same day the Food and Drug Administration posted a recall notice, which noted that the products had been distributed to at least 22 different states, and perhaps others. [CIDRAP News Scan](#) (first item)

New type of drug-free labels for meat has U.S.D.A. blessing

4 September - ... [The] federal Agriculture Department has quietly opened a new front in the debate over the use of drugs in the livestock and poultry industries. In the next few months, consumers will start seeing the phrase "produced without ractopamine" on packages of Organic Buttercrot Bacon from Tendergrass Farms, a company that markets "natural" and organic meats. Ractopamine hydrochloride is among a class of drugs called beta-agonists, which are used to add muscle weight to animals in the weeks before slaughter. ... By some estimates, 60 to 80 percent of pigs raised in the United States are given the drug. But the European Union, China, Russia and many other countries prohibit imports of one or more of beef, pork and turkey raised with ractopamine out of concern that its effect on human health is unknown. Tendergrass Farms now can carry a label that says, among other things, "Made from organic pork raised on family farms with a vegetarian diet and no ractopamine (a beta-agonist growth promotant) or antibiotics — ever!" [New York Times](#)

Oysters may serve as link in transmission of norovirus

7 September - Oysters appear to be an important link in the transmission of norovirus among humans, according to new research from China. ... [Researchers] analyzed the genetic sequences of 1,077 samples of noroviruses found in oysters. Some sequences had been stockpiled in genetic databases since 1983. The scientists found that 80 percent of the known human noroviruses matched those found in oysters. The majority of the matches were in oysters from coastal waters, more likely to be contaminated with human sewage. Noroviruses mutate very quickly, as do influenza viruses, and big outbreaks usually begin after a new strain emerges. There was a "convergence" between new strains circulating in

oysters and those circulating in humans, the researchers also found. [New York Times](#)

Philippines bans monkey exports over Ebola deaths

10 September - The Philippines has suspended exports of the macaque monkey after an Ebola virus strain that is non-fatal to humans struck 20 of the animals, killing 11, officials have said. Eleven captive Philippine macaques have died after contracting the bat-borne Ebola Reston virus, while nine others are under treatment, Simeon Amurao, assistant director of the Bureau of Animal Industry, said on Thursday. ... The Philippines is among the world's major exporters of laboratory monkeys and has so far shipped close to 300 monkeys to Japan this year, and 600 last year, Amurao added. [Al Jazeera](#)

U.S. FDA finalizes two rules aimed at preventing food hazards

10 September - The U.S. Food and Drug Administration finalized two rules on Thursday requiring human and animal food companies to identify possible food safety hazards and outline steps to prevent or minimize them. The rules are the first of seven proposed following the passage of the Food Safety Modernization Act. ... The law is designed gives the FDA greater power to inspect food facilities and farms with the aim of preventing foodborne illnesses instead of reacting after they have occurred. The first two rules focus on food manufacturing processes. They require companies to develop written food safety plans that indicate potential hazards that could affect the safety of their products and outline plans to prevent or minimize them. [Reuters](#)

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WELLNESS

Check out life spans around the world — and likely years of ill health

5 September - ... In the first of what will be an annual look at health along with life span around the world called the [Global Burden of Disease Study](#), researchers found that between 1990 and 2013, life expectancy rose by 6.2 years. The average life span at birth across the globe is now 71.5 years, though rates vary tremendously by region. People live the longest, according to the Lancet study, in Andorra, in southwestern Europe, or an average of 83.9 years. People die the youngest, an average of 48.3 years, in Lesotho, in Africa. But regardless of socioeconomics, geography or total number of years lived, the study shows what appears to be a universal part of the human condition: people live an average of one-eighth of their lives in a disabled or unhealthy state. [NPR](#)

Furry pets 'enrich' gut bacteria of infants at risk for allergies

10 September - In a small, preliminary study, infants in households with furry pets were found to share some of the animals' gut bacteria - possibly explaining why early animal exposure may protect against some allergies, researchers say. The infants' mothers had a history of allergy, so the babies were at increased risk too, and it was once thought that pets might be a trigger for allergies in such children, the authors point out in the *Journal of Allergy and Clinical Immunology*. "Earlier it was thought that exposure to pets early in childhood was a risk factor for developing allergic disease," said Dr. Merja Nermes of the University of Turku in Finland, who coauthored the research letter. "Later epidemiologic studies have given contradictory results and even suggested that early exposure to pets may be protective against allergies, though the mechanisms of this protective effect have remained elusive." Adding pet microbes to the infant intestinal biome may strengthen the immune system, she told Reuters Health by email. [Reuters](#)

Kale or steak? Change in diet key to U.N. plan to end hunger by 2030



10 September - In trendy, hipster London or New York, it's all about juicing, vegan diets and snacking on kale crisps. Thousands of miles away, in Nairobi or Bogota, the middle classes are more likely to reach for roasted goat or a juicy steak. Later this month, world leaders are set to endorse a U.N. goal to eliminate hunger by 2030, but they will have to convince

their citizens to adopt new eating habits first, experts say. Diets must feature less red meat, which consumes 11 times more water and results in five times more climate-warming emissions than chicken or pork, according to a 2014 study. The shift, like the U.N. Sustainable Development Goals (SDGs) themselves, must apply to both wealthy and developing nations, where consumption of ecologically unfriendly foods is growing fastest. [Reuters](#)

Stroke damage 'helps smokers quit'

8 September - A particular region of the brain may drive smoking addiction, say scientists who found stroke survivors with damage to their insular cortex more easily kicked the habit. They studied 156 stroke patients with different patterns of brain injury. More of those with insular cortex damage successfully gave up smoking and reported fewer withdrawal symptoms than the other stroke patients. Experts say targeting this brain area may help other smokers quit. [BBC News](#)

Struggles with sleep linked to heart disease risk

10 September - Adults who get too much or too little sleep may have the beginnings of "hardening" of the arteries, which can be an early sign of heart disease, according to a new study. ... For the study, more than 47,000 men and women, age 42 on average, completed a sleep questionnaire and had tests to detect lesions of calcium and plaque in the artery leading to the heart, an early sign of disease, and arterial stiffness in the leg, a sign of vascular aging. According to their questionnaires, the participants' average sleep duration was 6.4 hours per night, and about 84 percent said their sleep quality was "good." The researchers considered those who got five hours or less per night to be "short" sleepers, and those who got nine or more hours to be "long" sleepers. Short sleepers had 50 percent more calcium in their coronary arteries than those who slept for seven hours per night, according to the results in *Arteriosclerosis, Thrombosis and Vascular Biology*. Long sleepers had 70 percent more calcium than those who slept seven hours. [Reuters](#)

Surgeon General: Make walking a national health priority

10 September - The U.S. Surgeon General is calling on Americans to "step it up" -- that is, to do more walking. He says this easy and free activity could prevent serious health problems. On Wednesday, Dr. Vivek Murthy launched the "Step It Up" campaign in Washington, D.C., a national effort to promote walking and wheelchair rolling. He calls it a powerful tool to prevent chronic health problems. "The science tells us that 22 minutes of brisk walking or moderate physical activity can get you these health benefits of reduced risk of heart disease and diabetes," Murthy explained. ... Despite the known health benefits of moderate exercise, government data shows that only half of U.S. adults and about a quarter of high school students reported getting the recommended amount of physical activity. [CBS News](#)

Why runners get slower with age (and how strength training may help)

9 September – ... [In a new study, researchers] recruited 110 experienced, recreational runners between 23 and 59 years of age. They invited the men and women to the Runners' Clinic at Wake Forest and fitted them with reflectors designed to capture how they moved. Then, while the researchers filmed them, the volunteers ran repeatedly at their normal training pace along a track containing a device that could measure how forcefully they struck the ground. The researchers then integrated this data to create profiles of the runners' form, which they then compared by age. The differences were striking. With each passing decade, the runners' stride length and preferred speed dropped by about 20 percent. Meanwhile, runners older than about 40 displayed much less activation of and power in the muscles of their lower legs, especially those around the ankle and in the calf. Consequently, Dr. DeVita and his colleagues found, these runners pushed off more weakly with each stride and did not rise as high into the air as younger runners, a change in form

that accelerated as runners reached their 50s. [New York Times](#)

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USAFRICOM

Grim snapshot reveals complex health issues for Ebola survivors

9 September - The first snapshot of health complications facing Ebola survivors in Sierra Leone presents a dismal picture of their road to recovery. A new study has found that up to four months after blood tests indicated that they were Ebola-free, more than half of survivors continue to suffer from joint pain, headaches or muscle pain. And more than 40 percent of survivors complain of sleeplessness and visual problems. Perhaps most worryingly, almost all the survivors—96 percent—reported being rejected by their communities after they were released from the hospital. The majority said they were still too scared to return home. [Scientific American](#)

Madagascar: WHO details 14 plague cases, 10 deaths

8 September - A pneumonic plague outbreak in Madagascar has sickened 14 people, 10 of them fatally, the World Health Organization (WHO) said in a Sep 6 statement. The first case was detected on Aug 17 in Moramagna district, located in the east central part of the country. No new cases have been reported since Aug 27. The agency said Madagascar's government has activated a task force, with help from the WHO and the Pasteur Institute in Madagascar. Response steps include active case finding, surveillance, contact tracing, chemoprophylaxis, and vector control. The agency recommended that urban areas such as Antananarivo take vector prevention actions. [CIDRAP News Scan](#) (fourth item)

More Ebola in Sierra Leone as Dallas probe notes missteps

8 September - Sierra Leone officials have reported four new Ebola cases, all tied to a recent case that ended the country's countdown to Ebola-free status more than a week ago, and a review of a Dallas hospital's steps following the country's first Ebola case last fall found preparedness and communication issues both locally and nationally. In related news, the Philippines announced that monkeys in a research lab have tested positive for a non-outbreak, milder strain of Ebola virus. [CIDRAP](#)

West African child is paralyzed by vaccine-derived polio

7 September - A case of vaccine-derived polio has paralyzed a child in Bamako, the capital of Mali, and an emergency vaccination drive is being organized to forestall an outbreak, the World Health Organization announced Monday. It is the first time the disease has been seen in Mali since 2011. The patient is a Guinean child whose parents traveled to Bamako

seeking medical care. The child's virus is a close genetic match to a strain last detected in a nearby region of Guinea in 2014. The child was not infected with the "wild type" polio virus. ... Rather, it was a strain created when one of the three live, weakened virus strains in the oral polio vaccine mutated to become dangerous again. Such mutations are a rare but persistent consequence of relying on oral polio vaccine drops, which are easy to administer and much more protective than so-called killed vaccine. [New York Times](#)

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USCENTCOM

Deadly sandstorm continues to blanket Middle East



9 September - Lebanon's unprecedented and deadly sandstorm has forced the government to shut schools and public institutions over health concerns. The sandstorm, which entered its third day on Wednesday, caused the deaths of four people in the country, while sending as many as 2,000 to hospitals due to breathing problems, a health

ministry official told the DPA news agency. Those who died, including a child, were from eastern and northern Lebanon, the parts of the country hardest hit by the storm. The unseasonable sandstorm is reported to have killed at least 12 people across the region. The meteorological department at Beirut's Rafik Hariri International Airport described the storm as being "unprecedented" in Lebanon's modern history. The storm also hit Syria, Jordan, Israel, the West Bank, Gaza and Egypt. [Al Jazeera](#)

Saudi Arabia: As Saudi MERS total grows, study hints at increased transmissibility

9 September - Saudi Arabia's government today reported two more MERS-CoV infections, one involving a healthcare worker likely infected in Riyadh's outbreak, and Chinese researchers detailed a comparison of recent samples that hints at increased transmissibility. In other developments, the Saudi agriculture ministry announced new results from a large camel sampling project, which revealed that 3.3% of the country's animals are probably infected with MERS-CoV (Middle East respiratory syndrome coronavirus). ... A research team from China that conducted full-genome sequencing of a sample from the country's imported MERS-CoV case, detected in May in a traveler from South Korea, found amino acid changes and evidence of a fairly recent recombination event. The investigators said the changes could have played a role in enhanced human-to-human spread in South Korea's hospital outbreak. The team, writing yesterday in *mBio*, based its findings on a comparison of the sample with other recent viruses from South Korea and Saudi Arabia. [CIDRAP](#)

Saudi Arabia, Jordan MERS cases rise as WHO gives outbreak details

8 September - Saudi Arabia has reported 18 more MERS-CoV cases since Sep 4, 15 of them in Riyadh, and the number of patients infected with the virus in hospitals in both Saudi Arabia and Jordan continues to grow, the World Health Organization (WHO) said in its latest updates. Ongoing MERS-CoV (Middle East respiratory syndrome coronavirus) activity in the capital cities of the two countries during the lead-up to the Hajj pilgrimage, which begins in 2 weeks in Saudi Arabia, is raising concerns that international visitors might carry the virus back to their home countries. [CIDRAP](#)

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USEUCOM

Frequently asked questions on migration and health

September 2015 - ... The health problems of refugees and migrants are similar to those of the rest of the population, although some groups may have a higher prevalence. The most frequent health problems of newly arrived migrants include accidental injuries, hypothermia, burns, cardiovascular events, pregnancy and delivery-related complications, diabetes and hypertension. Female migrants frequently face specific challenges, particularly in maternal, newborn and child health, sexual and reproductive health, and violence. The exposure of migrants to the risks associated with population movements – psychosocial disorders, reproductive health problems, higher newborn mortality, drug abuse, nutrition disorders, alcoholism and exposure to violence – increase their vulnerability to noncommunicable diseases (NCDs). The key issue with regard to NCDs is the interruption of care, due either to lack of access or to the decimation of health care systems and providers; displacement results in interruption of the continuous treatment that is crucial for chronic conditions.

[WHO](#)

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USNORTHCOM

U.S.: Battling youth suicide on Pine Ridge Indian Reservation

8 September - Native Americans have always had a higher suicide rate than non-natives in the U.S., and the number is rising, especially on Pine Ridge Indian Reservation, home of the

Oglala Lakota people. This year alone, more than 100 Pine Ridge youths between the ages of 9 and 24 attempted suicide. At least 19 succeeded, said Keith Janis. ... There's no industry or commerce on the reservation, which accounts for its 80-90 percent unemployment rate and an average per capita income of \$3,000 a year. ... Life expectancy on Pine Ridge is the second lowest in the Western Hemisphere. Infant mortality is 300 percent higher than elsewhere in the U.S. The majority of Lakota struggle with alcoholism. More than half of all adults on Pine Ridge suffer from diabetes and related illness. [VOA](#)

U.S.: Congress weighs budget cuts for wide range of health programs

8 September - Federal funding for Planned Parenthood will clearly be a flashpoint when Congress returns this week from its summer break. But the fate of many other health programs, from the National Institutes of Health to efforts to reduce teen pregnancy, hang in the balance as well, as lawmakers decide whether and how to fund the government after the current fiscal year expires Sept. 30. ... But Planned Parenthood is not the only GOP health target. The House Appropriations Committee earlier this summer approved a proposed spending bill for the Department of Health and Human Services that would eliminate all funding for the Title X federal family planning program, which mainly funds state and local health departments but also provides some of the federal funds Planned Parenthood receives. The House bill also zeroed out the Agency for Healthcare Research and Quality, which conducts and funds research on how health care is delivered and paid for. And while most of the Affordable Care Act can't be fully defunded through the annual appropriations process, the bill also rescinded or transferred funds for the law's implementation that it does control. [NPR](#)

U.S.: Health officials baffled by rise of 'rabbit fever' across U.S. West

10 September - U.S. health officials said on Thursday they were puzzled by a surge in the number of people who have contracted a rare bacterial disease usually found in rabbits that has already killed a Wyoming man and sickened dozens of people in Colorado, South Dakota and Nebraska this year. The unusually high number of cases of tularemia, sometimes called rabbit fever, have been concentrated in northeastern Wyoming and in neighboring parts of South Dakota and Nebraska and farther south in the Colorado Front Range, where there have been reported die-offs of animals like rabbits and voles that can carry the infectious disease, Wyoming health officials said. While tularemia, ... is often present in the environment, it rarely sickens more than a few people a year in Wyoming, a handful in Colorado and just a few in South Dakota, health officials said. That compares to 41 confirmed human cases so far this year in Colorado, 14 in Wyoming - the highest number in the quarter century that reliable records have been compiled - and at least 19 in South Dakota, the most since 34 people acquired the ailment in 1984, state epidemiologists said. [Reuters](#)

U.S.: Influences of preparedness knowledge and beliefs on household disaster preparedness

11 September - ... In 2012, only 52% of U.S. residents surveyed by FEMA reported having supplies for a disaster, a decline from 57% who reported having such supplies in 2009. ... Compared with persons with basic preparedness knowledge, persons with advanced knowledge were more likely to have assembled an emergency kit (44% versus 17%), developed a written household disaster plan (9% versus 4%), and received county emergency alert notifications (63% versus 41%). Similarly, differences in household preparedness behaviors were correlated with beliefs about preparedness. Persons identified as having strong beliefs in the effectiveness of disaster preparedness engaged in preparedness behaviors at levels 7%–30% higher than those with weaker preparedness beliefs. ... This study identified demographic and social connectedness characteristics as correlates of household preparedness adoption. In this study, men were more likely to report personal preparedness than women. A 2009 personal preparedness survey conducted by FEMA suggested that education and income are correlated with preparedness behaviors. [Morbidity and Mortality Weekly Report](#)

U.S.: One third of diabetes in the U.S. is undiagnosed

8 September - Diabetes affects up to 14 percent of the U.S. population – an increase from nearly 10 percent in the early 1990s – yet over a third of cases still go undiagnosed, according to a new analysis. Screening seems to be catching more cases, accounting for the general rise over two decades, the study authors say, but mainly whites have benefited; for Hispanic and Asian people in particular, more than half of cases go undetected. [Reuters](#)

U.S.: Plague cases in U.S. on the rise

7 September - There have been 13 cases and three deaths from plague in the United States in the past five months, but researchers do not know why the disease appears to be on the rise. The number of plague cases in the United States usually averages about three a year. The Centers for Disease Control and Prevention reported last week that the recent cases of plague have afflicted residents of Arizona, California, Colorado, Georgia, New Mexico, Oregon and Utah. Two cases have been linked to exposure in or near Yosemite National Park. [New York Times](#)

U.S.: Price soars for key weapon against heroin overdoses

10 September - Around the U.S., a worsening heroin epidemic has more and more cities turning to the anti-overdose drug naloxone to reduce deaths from abuse. Also known as Narcan, the medication blocks the effects of opioids and reverses the respiratory depression that occurs during an overdose. ... A big concern for Baltimore and other cities is the price of naloxone, which has risen dramatically as demand has gone up. In February, the Baltimore City Health Department was paying about \$20 a dose. By July, the price had climbed to nearly \$40 a dose. ... Today, Baltimore and other cities are choosing intranasal naloxone for

community use — naloxone that can be sprayed into the nostril and doesn't require needles. The intranasal delivery method isn't explicitly approved by the FDA. Amphastar is currently the only company that makes naloxone in a dosage that can be administered that way. [NPR](#)

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USPACOM

Japan: More than 100,000 flee after torrential rain unleashes flooding



10 September - Powerful floods have ripped through parts of Japan in the wake of unprecedented rains, tearing houses from their foundations, uprooting trees and forcing more than 100,000 people from their homes. The rains came in the wake of Typhoon Etau, which smashed through Japan on Wednesday, bringing strong winds and causing travel chaos.

... Military helicopters plucked stranded residents from roofs after waters surged over a wide area when the raging Kinugawa river burst its banks in Joso, north of Tokyo, swamping the city of 65,000 people. Dramatic aerial footage showed whole houses being swept away by raging torrents, in scenes eerily reminiscent of the devastating tsunami that crushed Japan's north-east coast in 2011. ... No one has so far been confirmed dead, but there are reports of people missing, including in landslides that buried buildings. ... The torrential downpour has exacerbated a contaminated water problem at the Fukushima nuclear plant as it overwhelmed the site's drainage pumps, sending hundreds of tonnes of contaminated water flowing into the ocean, a spokesman for operator Tokyo Electric Power (TEPCO) said.

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USSOUTHCOM

PAHO reports 4,800 new cases of chikungunya

8 September - A total of only 4,857 new chikungunya cases in the Caribbean and the Americas have brought the outbreak total to 1,711,947, the Pan American Health Organization (PAHO) reported late last week. The previous two weekly updates from PAHO reported 34,866 and 27,867 new cases, respectively. [CIDRAP News Scan](#) (third item)

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