

23 September 2016

# Army Public Health Weekly Update

Army Public Health Center

The Army Public Health Update is a collection of articles taken verbatim from public sources to offer awareness of current health issues and the media coverage given to them. The articles do not necessarily represent US Army Medical Department opinions, views, policy, or guidance, and should not be construed or interpreted as being endorsed by the US Army Medical Command.

U.S. Military | Global | Influenza | Veterinary/Food Safety | Wellness | Contact Us

USAFRICOM | USCENTCOM | USEUCOM | USNORTHCOM | USPACOM | USSOUTHCOM

## Subscription or Comments

If you wish to be added to the APH Weekly Update mailing list, removed from the mailing list, or if you have comments or questions about the update, please [contact us](#). We welcome your comments. Please feel free to share this update with others who may be interested.



*Approved for public release, distribution unlimited.*

## Contents

### U.S. MILITARY

---

- [Fort Rucker closes school building after 24 fifth-graders become ill](#)
- [Incidence of hiatal hernia in service members, active component, U.S. Armed Forces, 2005–2014](#)
- [ISIS suspected of mustard attack against U.S. and Iraqi troops](#)
- [West Point women have a new, bloody requirement as the Army completes gender integration](#)

### GLOBAL

---

- [Could ancient remedies hold the answer to the looming antibiotics crisis?](#)
- [Drug resistance in people and animals may push millions into poverty - World Bank](#)
- ["Just the beginning": UN adopts AMR declaration](#)
- [Mark Zuckerberg and Priscilla Chan pledge \\$3 billion to fighting disease](#)
- [Overt racism linked to poorer health outcomes for all](#)
- [Report: 57% case-fatality rate in children with Ebola](#)
- [Rickettsia felis: the next mosquito-borne outbreak?](#)
- [West Africa Ebola strain deadlier than central African strain](#)
- [ZIKA VIRUS](#)
- [Aerial spraying, naled helped curb Zika in Miami, federal health officials say](#)
- [CDC ups Zika testing support; Florida reports more local cases](#)
- [Want a Zika test? It's not easy](#)
- [Zika case counts in the U.S.](#)
- [Zika virus and global health security](#)

### INFLUENZA

---

- [CDC: Flu View - Weekly U.S. Influenza Surveillance Report](#)
- [Older people might consider waiting a bit longer to get flu shot](#)
- [Update: Influenza activity — United States and worldwide, May 22–September 10, 2016](#)

### VETERINARY/FOOD SAFETY

---

- [Cowboys turn to high-tech ear tags to monitor animal health](#)
- [Eggo waffles recalled amid listeria fears](#)
- [Texas brucellosis outbreak linked to raw cheese from Mexico](#)

## Follow us!



Facebook



Twitter



YouTube



Instagram

### WELLNESS

---

- Brain benefits of aerobic exercise lost to mercury exposure
- Could turmeric really boost your health?
- E-cig flavoring, battery voltage linked to cellular toxicity
- Researchers show effects of long-term marijuana use on the brain
- Smoking can cause permanent damage to DNA
- The health benefits of gamification
- Weight loss on your wrist? Fitness trackers may not help

### USAFRICOM

---

- Africans choking on toxic fuel in health 'ticking time bomb': lobby group
- Mali: Rift valley fever outbreak in Mali
- Niger: Rift Valley fever outbreak kills 21 in western Niger
- Nigeria: Starving to death -Boko Haram's food crisis in Nigeria

### USCENTCOM

---

- Saudi Arabia: New camel-linked MERS case in Saudi Arabia
- Syria: Syria aid convoy attack - what we know

### USEUCOM

---

- Austria: WHO details MERS case in Austria
- Europe: Teenage cannabis use rises in Europe - EU Espad survey
- France: French researchers report non-MCR-1 colistin resistance in CRE
- Romania: Romania sees an 'alarming' increase in measles
- United Kingdom: Green spaces worth £2.2bn to public health in England
- United Kingdom: UK health officials detail progress on AMR strategy

### USNORTHCOM

---

- U.S.: Could it be sepsis? C.D.C. wants more people to ask
- U.S.: Disease-related malnutrition costs U.S. \$15.5 billion annually: study
- U.S.: EPA weighs in on glyphosate, says it likely doesn't cause cancer
- U.S.: Gonorrhea is more dangerous than ever as resistance to antibiotics grows
- U.S.: HHS take steps to provide more information about clinical trials to the public
- U.S.: Lawmakers grill Mylan CEO over EpiPen price hikes
- U.S.: Maternal mortality rate in U.S. rises, defying global trend, study finds
- U.S.: Multidrug-resistant strain of MRSA found in Memphis fitness centers
- U.S.: One dead in growing Hopkins Legionnaires' disease outbreak
- U.S.: Sewage overflow again fouls Tampa Bay after storm
- U.S.: Study finds no changes in US hospitals' antibiotic use
- U.S.: Wildfire swells to 4,500 acres at Vandenberg Air Force Base

### USPACOM

---

- India: At the epicentre of Delhi's chikungunya epidemic
- Indonesia: 19 dead in floods, landslides on Indonesia's Java island
- Southeast Asia blazes may have led to deaths of over 100,000, study says

### USSOUTHCOM

---

- PAHO reports about 2,000 new chikungunya cases

**Updated Guidance  
for Travel and  
Testing of Pregnant  
Women and Women  
of Reproductive Age  
for Zika Virus -  
Miami-Dade  
County, Florida**

Investigation has shown an expanded area of active transmission in Miami Beach, now measuring 4.5 square miles. Active Zika virus transmission is no longer ongoing in the one-square-mile area of Wynwood.

Pregnant women and partners of pregnant women who are concerned about potential Zika virus exposure may consider postponing nonessential travel to all parts of Miami-Dade County.

Pregnant women with limited risk of possible Zika virus exposure who do not report symptoms should consult with their healthcare providers to obtain testing for Zika virus infection based on the elapsed interval since their last possible exposure.



**U.S. MILITARY**

## Fort Rucker closes school building after 24 fifth-graders become ill

21 September - Fort Rucker officials have temporarily closed the elementary school on the Alabama post for extensive environmental testing after 24 fifth-graders became ill. The students became sick Sept. 16 on the playground as they were participating in a team-building exercise followed by recess, said Cindy Gibson, spokeswoman for the Department of Defense Education Activity Americas area. Officials took 11 children to two local hospitals, where they were treated and released; the other 13 sick students were picked up by their parents at the school. ... The 379 elementary school students and their teachers and staff have been moved temporarily to other locations while the testing is being conducted.

[Military Times](#)

## Incidence of hiatal hernia in service members, active component, U.S. Armed Forces, 2005–2014

August 2016 - From 2005 through 2014, a total of 27,276 active component service members had incident diagnoses of hiatal hernia documented in their medical records. The overall incidence rate was 19.7 cases per 10,000 person-years (p-yrs); annual incidence rates ranged from 16.5 to 22.2 cases per 10,000 p-yrs. Rates overall increased monotonically with increasing age and were higher among Air Force and Army members, officers, and healthcare workers than their respective counterparts. During the surveillance period, the 27,276 service members who had incident diagnoses of hiatal hernia accounted for 44,092 hiatal hernia-related encounters overall (1.6 encounters per case). Among all incident cases, 235 (0.86%) had surgical repairs documented during the period. The frequency of surgical treatment of hiatal hernias among military members mirrored the low frequency in U.S. civilian practice. During 2010–2014, most surgical procedures (79%) were accomplished via laparoscopic approaches. The incidence rates of hiatal hernia diagnoses reported here likely greatly underestimate the true incidence in U.S. military populations.

[Medical Surveillance Monthly Report](#)

## ISIS suspected of mustard attack against U.S. and Iraqi troops

22 September - ISIS is suspected of firing a shell with mustard agent that landed at the Qayyara air base in Iraq Tuesday where US and Iraqi troops are operating, according to several US officials. The shell was categorized by officials as either a rocket or artillery shell. After it landed on the base, just south of Mosul, US troops tested it and received an initial reading for a chemical agent they believe is mustard. No US troops were hurt or have displayed symptoms of exposure to mustard agent. One official said the agent had "low purity" and was "poorly weaponized." A second official called it "ineffective." ... [T]wo field

### Time-Lapse Satellite Imagery Shows Rapid Growth of Refugee Camps

The global refugee crisis has reached unprecedented proportions. There are upward of 65.3 million forcibly displaced people worldwide. A third of them are in countries other than their own. Ten million of them were born as refugees and remain stateless, which gives a sense of the intractability of many conflicts.

New time-lapse satellite imagery of the burgeoning camps from above provides a remarkable visual of the crisis.



tests were conducted. The first test was positive and the second was negative, the official said. The substance is now being sent to a lab for further examination. [CNN](#)

## West Point women have a new, bloody requirement as the Army completes gender integration



22 September - ... The female cadets are part of a first at West Point: women who must box. Beginning this fall, West Point officials shifted from allowing female cadets to take the course as an elective to requiring it for all approximately 1,000 students in the Class of 2020. The move follows the Pentagon's historic decision last year to fully integrate

women into all combat roles for the first time, and allowing women to box marked the fall of one of the last barriers to women being allowed to do anything they are qualified to in the U.S. military. ... A year ago, West Point faced scrutiny about how many concussions cadets had suffered, particularly in boxing class. The New York Times reported that nearly 1 in 5 concussions at West Point occurred during boxing class, and that senior Army officials had discussed for months how to deflect attention from the issue before finally releasing the data. Army officials acknowledge that there is an ongoing discussion about whether boxing should continue in service academies. But, they say, that's a separate debate than whether female cadets should be treated the same as male students and be required to take the same classes, including boxing. [The Washington Post](#)

[top of page...](#)

### GLOBAL

---

## Could ancient remedies hold the answer to the looming antibiotics crisis?

14 September - ... Ethnobotany is a historically small and obscure offshoot of the social sciences, focused on the myriad ways that indigenous peoples use plants for food, shelter, clothing, art and medicine. ... [R]esearchers are now trying to use this knowledge to derive new medicines, and [Cassandra] Quave has become a leader among them. ... [S]he unites the collective insights of traditional plant-based healing with the rigor of modern laboratory experiments. Over the past five years, Quave has gathered hundreds of therapeutic shrubs, weeds and herbs and taken them back to Emory for a thorough chemical analysis. ... Quave has discovered promising candidates for a new generation of drugs that might help resolve ... antibiotic [resistance]. Without effective antibiotics, common bacterial diseases that are curable today will become impossible to treat; childbirth, routine surgeries and even the occasional nick could turn lethal. The widespread emergence of resistant bacteria already claims 700,000 lives a year globally. [The New York Times](#)

## Classified Version of the Weekly Update

An Army Public Health Weekly Update is available with articles classified up to the **SECRET** level from the USAPHC SIPRNet site:

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

Look under Hot Topics & Current Issues.

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

## Links

[A-Z Index](#)

[About APHC](#)

[Army Public Health Weekly Update Archives](#)

[Medical Surveillance Monthly Report](#)

[Medical Threat Briefings \(AKO\)](#)

[Request APHC Services](#)

[APHC Resource Materials](#)

[APHC Homepage](#)

[APHC Training](#)

[Contact APHC](#)

## Drug resistance in people and animals may push millions into poverty - World Bank

19 September - If drug-resistant infections in people and animals are allowed to spread unchecked, some 28 million people will fall into poverty by 2050, and a century of progress in health will be reversed, the World Bank said on Monday. By 2050, annual global GDP would fall by at least 1.1 percent, although the loss could be as much as 3.8 percent - the equivalent of the 2008 financial crisis - the Bank said in a report released ahead of a high-level meeting on the issue at the United Nations in New York this week. ... The O'Neill report estimated that drug-resistant infections could kill more than 10 million people a year by 2050, up from half a million today, and the costs of treatment would soar. ... The bank estimates that by 2050, global livestock production could fall by between 2.6 percent and 7.5 percent a year, if the problem of drug resistant superbugs is not curbed.

[Thomson Reuters Foundation News](#)

## “Just the beginning”: UN adopts AMR declaration

21 September - To sustained applause, a high-level meeting at the 71st UN General Assembly adopted a political declaration on Wednesday that calls for a collaborative, global response to the threat of antimicrobial resistance (AMR). The meeting—only the fourth UN General Assembly high-level meeting on a global health issue—signaled growing recognition of the critical nature of AMR, which is estimated to kill 10 million people per year by 2050 if current trends continue. ... While the adoption of the declaration leavened the stark warnings about AMR, concerns about how to make inroads into the complex global problem persist. A paucity of new antibiotics, the fast-spreading resistance to antibiotics and other treatments, widespread usage of antibiotics for livestock, simultaneous over-prescription and lack of access to antibiotics, and a host of other issues await answers.

[Global Health Now](#)

## Mark Zuckerberg and Priscilla Chan pledge \$3 billion to fighting disease

21 September - Mark Zuckerberg, Facebook's chief executive, and his wife, Dr. Priscilla Chan, last year said they would give 99 percent of their Facebook shares to charitable causes. Now they are putting a large chunk of that money to work. The Chan Zuckerberg Initiative ... said it would invest at least \$3 billion over the next decade toward preventing, curing or managing all diseases by the end of the century. ... Dr. Chan said the work to cure disease was in keeping with her organization's mission to advance human potential and promote equality. [The New York Times](#)

## Overt racism linked to poorer health outcomes for all

19 September - Blacks living in highly racist communities are at an increased risk for health problems, including heart disease; whites as well as blacks in such communities are at increased risk for heart disease-related deaths, findings that underscore the negative effects

of racism for victims and racists alike. ... The study involved an evaluation of data on nearly 1.4 million respondents of Project Implicit, an online initiative to assess racial bias. ... The researchers compared that information with data from the Centers for Disease Control and Prevention on death rates in more than 1700 US counties during the same period. After controlling for factors that included age, education, income, population, rural vs urban residence, and other factors, they found that in counties with the highest reported racial bias, blacks reported significantly less access to affordable healthcare, compared with counties with lower bias and in comparison with whites. Rates of death due to circulatory diseases were higher in whites as well as blacks in highly racist counties compared with counties with lower racism; however, the relationship was stronger for blacks. [Medscape](#)

## Report: 57% case-fatality rate in children with Ebola

19 September - A new study ... shows children infected with Ebola virus disease (EVD) aged 2 to 12 years old suffered a 57% case-fatality rate. The numbers come from a retrospective cohort study of 282 children infected with the hemorrhagic fever in Sierra Leone. Researchers said more than half (55%) the deaths took place while the children were being treated in 1 of 11 Ebola holding units. Fever was the most common symptom present in the children (99%), followed by fatigue and loss of appetite (80%; 79%). Unexplained bleeding occurred in only 1% of patients. Forty-four percent of children presented with diarrhea, which was associated with death. Younger children were also more likely to die, and the median time until death was only 3 days after admission. The vast majority of children (78%) had household contact with someone infected with Ebola virus.

[CIDRAP News Scan](#) (second item)

## *Rickettsia felis*: the next mosquito-borne outbreak?

October 2016 – [T]he next pathogen transmitted by *Aedes* spp mosquitoes that could have a global impact is *Rickettsia felis*. Indeed, a growing number of reports implicate this intracellular bacterium as a human pathogen. In sub-Saharan Africa, *R felis* is responsible for up to 15% of fever of unknown origin and has been also detected in asymptomatic people. The cat flea *Ctenocephalides felis* was first considered the sole confirmed vector of *R felis*. However, we have recently shown that *Anopheles gambiae* mosquitoes, the primary malarial vector in sub-Saharan Africa, was a competent vector for *R felis*. Interestingly, both *An gambiae* and *Ae albopictus* mosquito cells support *R felis* growth. Additionally, *Ae albopictus* mosquitoes from Gabon tested positive for *R felis* by qPCR. Furthermore, *R felis* has been detected in febrile patients in tropical areas where *Ae albopictus* or *Ae aegypti* mosquitoes readily bite human beings. Therefore, we think that *Aedes* spp mosquitoes might be able to transmit *R felis*. It will be important to test this hypothesis in an experimental model, and look for *R felis* infection cases in febrile patients in the tropics and in returning travellers. [The Lancet](#)

## West Africa Ebola strain deadlier than central African strain

20 September - A study published yesterday in the Journal of Infectious Diseases compared two strains of Ebola virus in rhesus macaques, and found that the West Africa Ebola strain (Makona) causes more severe disease than the central African strain (Kikwit). ... Compared to earlier outbreaks in Central Africa, the West African Ebola outbreak was much deadlier, taking more than 11,000 lives in 3 years. To evaluate this hypothesis, researchers infected 15 monkeys with 3 different Ebola strains, two from West Africa. All monkeys infected with West African strains (EBOV-C05/C07) died, while two out of three monkeys infected with Central African strain (EBOV-K) died. Those infected with EBOV-C05 also showed more enhanced replication and disease pathology in their lungs than the monkeys infected with the other two strains. [CIDRAP News Scan](#) (fourth item)

## ZIKA VIRUS

### Aerial spraying, naled helped curb Zika in Miami, federal health officials say

19 September – U.S. health officials said Monday they were ending their strongest warning to pregnant women to stay out of Miami's Wynwood arts district. No new cases of mosquito-borne Zika illness have been reported in that area since early August, and in the past several weeks mosquito control workers have seen only low numbers of the kind of bugs that are the main spreaders of the virus. "The message with Wynwood is it was a huge success," said Dr. Lyle Petersen of the U.S. Centers for Disease Control and Prevention. CDC officials credit aggressive aerial spraying with naled, an insecticide that targets adult mosquitoes, and Bti, which kills mosquito larva. ... While the CDC lifted its sternest warning to pregnant women, the agency noted that a mosquito transmission zone in nearby Miami Beach grew last week from an area of roughly 1.5 square miles to 4.5 square miles (4 square kilometers to 7 square kilometers), after a cluster of new cases popped up north of earlier reports. [Sun Sentinel](#)

### CDC ups Zika testing support; Florida reports more local cases

20 September - The US Centers for Disease Control and Prevention (CDC) said today it recently purchased \$2.5 million in lab supplies and equipment to help US labs test for Zika virus and addressed testing delays due to increasing demand caused by rising numbers of local and travel-linked infections. In other developments, Florida health officials reported four more local Zika cases, the Zika funding impasse continued amid a report that federal officials are tapping into cancer research money, and Southeast Asian health leaders announced a strategy to collaborate on the Zika response. [CIDRAP](#)

## Want a Zika test? It's not easy

19 September - ... As worries about the spread of the virus in the United States continue to mount, public health department labs in Florida and New York City are running at or close to capacity, while private commercial labs have won emergency approval to run Zika tests and have ramped up their testing capacity. ... [T]he Centers for Disease Control and Prevention has issued strict guidelines about who should be tested, giving priority to pregnant women with possible exposure to Zika and people with Zika-like symptoms. Already public health officials in Florida say they face a backlog of tests for pregnant women, some of whom may be waiting to make decisions about whether to have abortions if they test positive. But the C.D.C.'s testing policy largely ignores a sizable subgroup of women and men also at risk — those who are trying to conceive but fear they have been exposed to Zika. [The New York Times](#)

## Zika case counts in the U.S.

As of September 21, 2016 (5 am EST):

### **US States**

Locally acquired mosquito-borne cases reported: 43

Travel-associated cases reported: 3,314

Laboratory acquired cases reported: 1

Total: 3,358

Sexually transmitted: 28

Guillain-Barré syndrome: 8

### **US Territories**

Locally acquired cases reported: 19,706

Travel-associated cases reported: 71

Total: 19,777\*

Guillain-Barré syndrome: 37

\*Sexually transmitted cases are not reported for US territories because with local transmission of Zika virus it is not possible to determine whether infection occurred due to mosquito-borne or sexual transmission.

## Zika virus and global health security

October 2016 - A recent poll found that 77% of the US public is not seriously concerned about Zika virus. Congress went on summer recess without authorising President Obama's US\$1.8 billion emergency Zika appropriation request. By Aug 30, 2016, the US Centers for Disease Control and Prevention had spent \$194 million of the \$222 million allocated to respond to the Zika virus outbreak. WHO's \$122 million strategic plan for response, to be implemented until December, 2017, grossly underestimates the resources required. Still worse, WHO has raised only \$14.2 million in direct contributions for a worldwide response. WHO's emergency contingency fund has a meagre balance of \$31.5 million, spread thinly among ongoing health threats. Consequences of fiscal apathy can be measured in lives lost

and long-term disabilities. Therefore, prevention of Zika virus infection is a matter of global health security. [The Lancet](#)

[top of page...](#)

## INFLUENZA

---

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

For 2015-2016 Influenza Season Week 36 ending September 10, 2016:

**Novel Influenza A Viruses:** No additional human infections with novel influenza A viruses were reported to CDC during week 36. To date, a total of 18 (Michigan [12] and Ohio [6]) human infections with H3N2v viruses have been identified during 2016, all reported during the month of August. One of the 18 persons were hospitalized as a result of H3N2v illness. No deaths have occurred. All variant virus infections have been associated with swine exposure in fair settings and no human-to-human transmission has been identified.

#### **Pneumonia and Influenza (P&I) Mortality Surveillance:**

- NCHS Mortality Surveillance Data: Based on NCHS mortality surveillance data available on September 15, 2016, 5.1% of the deaths occurring during the week ending August 27, 2016 (week 34) were due to P&I. This percentage is below the epidemic threshold of 6.1% for week 34.
- 122 Cities Mortality Reporting System: During week 36, 5.2% of all deaths reported through the 122 Cities Mortality Reporting System were due to P&I. This percentage was below the epidemic threshold of 5.7% for week 36. [CDC](#)

### Older people might consider waiting a bit longer to get flu shot

17 September - Immunologist Laura Haynes suggests people over 65 wait until Halloween to get their flu shots, to make sure the immunity lasts through the flu season. [NPR](#)

### Update: Influenza activity – United States and worldwide, May 22–September 10, 2016

23 September - During May 22–September 10, 2016,\* the United States experienced typical low levels of seasonal influenza activity overall; beginning in late August, clinical laboratories reported a slight increase in influenza positive test results and CDC received reports of a small number of localized influenza outbreaks caused by influenza A (H3N2) viruses. Influenza A (H1N1)pdm09, influenza A (H3N2), and influenza B viruses were detected during

May–September in the United States and worldwide. The majority of the influenza viruses collected from the United States and other countries during that time have been characterized antigenically or genetically or both as being similar to the reference viruses representing vaccine components recommended for the 2016–17 Northern Hemisphere vaccine. During May 22–September 10, 2016, 20 influenza variant virus† infections were reported; two were influenza A (H1N2) variant (H1N2v) viruses (Minnesota and Wisconsin) and 18 were influenza A (H3N2) variant (H3N2v) viruses (12 from Michigan and six from Ohio). [Morbidity and Mortality Weekly Report](#)

[top of page...](#)

## VETERINARY/FOOD SAFETY

---

### Cowboys turn to high-tech ear tags to monitor animal health

20 September - ... Drugmakers, startups and cattlemen are betting that sensors and data-sifting software can help keep cattle in Western U.S. feedlots healthier than cowboys can alone. New tags clipped to animals' ears aim to monitor movement and feeding patterns for early signs of sickness. ... [D]evelopers believe they can save feedlots money on drugs like antibiotics and avoid treating healthy cattle. The tactic also appeals to some health officials and consumers who say antibiotics are overused. ... Developers say their systems can reduce medication costs by about 15% per animal and save more sick cattle from death. ... Southfork's system monitors the trips steers and heifers make to the feed trough for signs they aren't eating enough and might be getting sick. [The Wall Street Journal](#)

### Eggo waffles recalled amid listeria fears



20 September - About 10,000 cases of Eggo Nutri-Grain Whole Wheat Waffles are being voluntarily recalled in 25 states because they could be contaminated with the bacteria listeria, Kellogg Co. announced Monday on its website. The Michigan company said it has received no reports of illnesses and learned of the potential problem after routine tests. No other Eggo products are affected by this recall. [CNN](#)

### Texas brucellosis outbreak linked to raw cheese from Mexico

21 September - A brucellosis outbreak in Texas has been linked to unpasteurized cheese from Mexico, according to a health advisory issued by the Dallas County Department of Health and Human Services. A record number of 13 people have been diagnosed in 2016 so

far. Dallas usually has only 2 to 6 cases of brucellosis every year. There were 11 Brucella infections total in 2014. The cheeses were brought into the U.S. from Mexico by friends or relatives, consumed while traveling in Mexico, or bought from local street vendors.

[Food Poisoning Bulletin](#)

[top of page...](#)

## WELLNESS

---

### Brain benefits of aerobic exercise lost to mercury exposure

16 September - Cognitive function improves with aerobic exercise, but not for people exposed to high levels of mercury before birth, according to research funded by the National Institute of Environmental Health Sciences (NIEHS), part of the National Institutes of Health. Adults with high prenatal exposure to methylmercury, which mainly comes from maternal consumption of fish with high mercury levels, did not experience the faster cognitive processing and better short term memory benefits of exercise that were seen in those with low prenatal methylmercury exposures. [NIH](#)

### Could turmeric really boost your health?

20 September - ... [W]e tracked down leading researchers from across the country and with their help recruited nearly 100 volunteers from the North East to do a novel experiment. ... We asked one group to consume a teaspoon of turmeric every day for six weeks, ideally mixed in with their food. Another group were asked to swallow a supplement containing the same amount of turmeric, and a third group were given a placebo, or dummy pill. ... "We didn't find any changes in the group taking the placebo," he told me. ... "The supplement group also didn't also show any difference," he went on. ... "But the group who mixed turmeric powder into their food," he continued, "there we saw quite substantial changes. It was really exciting, to be honest. We found one particular gene which showed the biggest difference. And what's interesting is that we know this particular gene is involved in three specific diseases: depression, asthma and eczema, and cancer. This is a really striking finding." [BBC News](#)

### E-cig flavoring, battery voltage linked to cellular toxicity

21 September - There is more evidence that the flavorings used in e-cigarettes and other vaping products induce acute inhalation toxicity at a cellular level, and that some flavorings are more toxic than others. In the study, published online in the BMJ journal Tobacco Control, strawberry flavoring was found to be the most toxic to bronchial cells of the five flavors tested. As has been previously reported, higher battery output voltage was also associated with higher toxicity in a dose-dependent manner. [MedPage Today](#)

## Researchers show effects of long-term marijuana use on the brain

17 September - Long-term marijuana use affects the brain, but the exact effects may depend on duration of use and the age when cannabis was first consumed, according to researchers. ... [T]he researchers determined that long-term marijuana users tend to have smaller orbitofrontal cortices, the region of the brain usually connected to addiction. However, they also exhibited an increased connectivity in the brain. And the heavier the marijuana usage, the greater these brain connections were. "The results suggest increases in connectivity, both structural and functional that may be compensating for gray matter losses," said Sina Aslan, one of the authors of the study. The researchers also observed that structural connectivity in the brain starts to degrade after marijuana use was continued for between six and eight years, but these brain connections in users are more intense than what non-users have. This might be the reason why long-term marijuana users appear to be fine despite the reduced volume in their orbitofrontal cortices. [Tech Times](#)

## Smoking can cause permanent damage to DNA

21 September - Smoking cigarettes can leave a lasting imprint on human DNA, altering more than 7,000 genes in ways that may contribute to the development of smoking-related diseases, a new study says. Reviewing results from blood samples taken from nearly 16,000 people in 16 prior studies, the researchers also found that for those who stopped smoking, most genes "recovered" within five years of quitting. "Although this emphasizes the long-term residual effects of smoking, the good news is the sooner you can stop smoking, the better off you are," said study author Dr. Stephanie London. She is deputy chief of the epidemiology branch of the U.S. National Institute of Environmental Health Sciences. Even so, London's team found that some genetic changes remained, even 30 years after quitting smoking. London and her colleagues zeroed in on a process called DNA methylation -- genetic changes that don't alter genes' underlying code but can change how they're expressed, or turned on. [CBS News](#)

## The health benefits of gamification



19 September - ... "Games activate certain very deep and core aspects of our psychology, which is why every civilization has had them," says Kevin Werbach, ... a leader in the emerging field of gamification. ... In health, designers are creating apps that nudge people along in all sorts of ways. They use the intrinsic sense of accomplishment and the

extrinsic unlocking of achievements (and gifts) to encourage pregnant women on Medicaid to keep their doctors' appointments, for example. Or to get young cystic fibrosis patients to do their breathing exercises by puffing into a tube controller to speed an on-screen pirate ship. Insurance companies, of course, have embraced games because they can promote better lifestyle habits, such as walking or eating more vegetables. Minnesota-based

UnitedHealthcare, for example, even has a full-time games producer.

[U.S. News and Health Report](#)

## Weight loss on your wrist? Fitness trackers may not help

20 September - Fitness trackers remain wildly popular, but do they make us fit? Maybe not, according to a study that asked overweight or obese young adults to use the tiny tracking tools to lose weight. The 470 people in the study were put on a low-calorie diet and asked to exercise more. They all started losing weight. Six months in, half the group members started self-reporting their diet and exercise. The other half were given fitness trackers to monitor their activity. After two years, both groups were equally active. But the people with the fitness trackers lost less weight. ... This device was worn around the upper arm. Instead of using heart rate to estimate activity like some devices do, it measured the heat generated by exercise. ... Overall the participants without fitness trackers lost 13 pounds, while the tech-enhanced group lost 7.7 pounds. [NPR](#)

[top of page...](#)

### **USAFRICOM**

---

## Africans choking on toxic fuel in health 'ticking time bomb': lobby group

16 September - Much of Africa's population is being choked by deadly fuels that are banned in Europe and the United States, a campaign group said on Friday, blaming the international trading firms that sell high-sulfur fuels to the continent. Public Eye ... said low quality standards that permit on average 200 times the sulfur content of Europe's fuels allowed the sale of dirty-but-cheaper products that will "jeopardize the health of millions of people." "Swiss traders and others maximize profits by taking advantage of weak regulations to produce and sell harmful fuels," Public Eye said. "This form of regulatory arbitrage ignores the serious risks to public health." [Reuters](#)

## Mali: Rift valley fever outbreak in Mali

21 September - Close to 40 people have been infected following an outbreak of rift valley fever in Tchintabaraden, a border community between Mali and Niger. The outbreak of the fever was confirmed after blood samples sent to Dakar for analyses tested positive. The first case of rift valley fever diagnosed in August affected mostly nomads in the area. Mali's health minister and Médecins Sans Frontières have sent experts to find out the cause of the current outbreak and put in place an emergency intervention plan to stop the epidemic.

[Africa News](#)

## Niger: Rift Valley fever outbreak kills 21 in western Niger

21 September - The Alliance for International Medical Action (ALIMA) and Niger's health authorities have opened an emergency treatment center, in the region's hardest-hit district of Tchintabaraden, to look after the infected and stop the disease from spreading.

"Unfortunately, the 52 severe cases officially registered at present only represent the tip of the iceberg," ALIMA's medical coordinator Oumarou Maidadji said in a statement. With no specific treatment or effective human vaccine, Rift Valley fever can cause blindness and severe haemorrhaging, leading the victim to vomit blood or even bleed to death. Herders and farmers are deemed at higher risk of infection from the disease, which can devastate livestock. Niger's health ministry said people in the Tahoua region, especially pastoralists, should avoid handling meat from infected animals, boil raw milk before consumption, and ensure that the corpses of dead animals are buried carefully. [Fox News](#)

## Nigeria: Starving to death -Boko Haram's food crisis in Nigeria

21 September - ... There have been repeated warnings about the effects of food shortages caused by the Boko Haram conflict, which has killed at least 20,000 people and left 2.6 million homeless since 2009. But despite the huge numbers involved, the situation has received little attention compared with other humanitarian crises around the world -- even within Nigeria. In July, the United Nations said nearly 250,000 children under five could suffer from severe acute malnutrition this year in Borno state alone and one in five -- some 50,000 -- could die. Last month, the world body said 4.5 million people in three northeast states needed immediate food aid -- double the number in March. Of those, more than 65,000 people were said to be facing famine. But fighting and insecurity has left some hard-to-reach rural areas cut off from help. [France 24](#)

[top of page...](#)

### USCENTCOM

---

## Saudi Arabia: New camel-linked MERS case in Saudi Arabia

19 September - On Sep 17 the Saudi Arabia Ministry of Health (MOH) reported one new MERS-CoV case, involving a Saudi man from Riyadh who had contact with camels. The 50-year-old man is in stable condition after presenting with symptoms of MERS-CoV (Middle East respiratory syndrome coronavirus). The MOH said the patient had direct contact with camels, a known risk factor for contracting the respiratory virus. Late last week, meanwhile, the World Health Organization (WHO) released details of 8 cases of MERS-CoV reported by Saudi Arabia between Jul 20 and Aug 18. Direct or indirect contact with camels is cited in 3

cases, contact with a sick patient is noted in 1 case, and sources are still unknown for the remaining 4 cases. One of the patients died, on Jul 20. ... Saudi Arabia's MERS case count since 2012 has now reached 1,453, including 610 deaths. Four patients are still being treated, according to the MOH. [CIDRAP News Scan](#) (first item)

## Syria: Syria aid convoy attack - what we know

21 September - An attack on a Syrian Arab Red Crescent (SARC) warehouse and a United Nations aid convoy in a rebel-held part of northern Syria on Monday killed more than 20 civilians, including one aid worker. The United States believes Russian warplanes bombed the convoy. Russia, a key ally of the Syrian government, has rejected the accusation and blamed an incident on the ground. ... The SARC said the convoy consisted of 31 lorries loaded with non-food items, clothes and paediatric nutrients, supported by the World Food Programme, UN Refugee Agency (UNHCR) and UN Children's Fund (Unicef), and the International Organisation for Migration. ... At around 19:10 (16:10 GMT), as they were being unloaded, the attack on the lorries began, witnesses said. It was to last more than three hours. [BBC News](#)

[top of page...](#)

### USEUCOM

---

## Austria: WHO details MERS case in Austria

20 September - The World Health Organization (WHO) today described a case of MERS-CoV in a Saudi man diagnosed with the virus while he was visiting Vienna, Austria. This is the second case of MERS-CoV (Middle East respiratory syndrome coronavirus) reported in that country and was noted in recent media reports. A 67-year-old camel breeder was visiting Austria when he first experienced fever and a cough on Sep 6. ... On Sep 8, MERS-CoV was confirmed by a reference laboratory in Vienna. ... The WHO said the case represents a serious public health threat for Austria, as hospital-based outbreaks are common with MERS-CoV. The last MERS case in Austria was also in a Saudi visitor, in 2014. [CIDRAP News Scan](#) (first item)

## Europe: Teenage cannabis use rises in Europe - EU Espad survey

20 September - Cigarette and alcohol use among 15- and 16-year-olds is declining across Europe but the numbers using cannabis are growing, an EU survey shows. The Espad report for 2015 includes most EU countries, but not Germany or the UK, and data for Spain is incomplete. In 2015 "current smokers" accounted for 21% of those surveyed, and the highest total was in Italy (37%). In 1995-2015 those using alcohol in the past 30 days fell from 56% to 47%. Top in cannabis use were the Czechs (37%). That figure for Czech

teenagers reporting a lifetime experience of cannabis was higher than the level in the US - 31% in comparable surveys. The average for cannabis use in the European countries surveyed was 16%. [BBC News](#)

## France: French researchers report non-MCR-1 colistin resistance in CRE

16 September - In analyzing samples from a French national database of carbapenem-resistant Enterobacteriaceae (CRE) from patients, Swiss and French scientists found that from 6% to 8% of *Klebsiella* and *Enterobacter* isolates were resistant to collagen without carrying the MCR-1 colistin-resistance gene that has now been reported in more than 30 nations. In their report in *Eurosurveillance* yesterday, the investigators note that the rate is markedly lower than in other southern European countries.

[CIDRAP ASP News Scan](#) (first item)

## Romania: Romania sees an 'alarming' increase in measles

21 September - In 2015, Romanian health officials say only seven confirmed cases of measles were reported through the whole year and no fatalities. During the first eight months of 2016 is a totally different story as the Health Ministry has registered 675 cases to date, including 2 deaths in infants (a third death is under investigation). ... Health officials blame the surge in measles in the country on anti-vaccination campaigns, which have attracted the support of many Romanian parents in recent years. [Outbreak News Today](#)

## United Kingdom: Green spaces worth £2.2bn to public health in England



20 September - ... [Dr. Mathew White from the European Centre for Environment and Human Health at the University of Exeter] told BBC News that ... "There are very clear ideas about how much physical activity needs to be done in order to benefit health. What we have done here is to focus on those people who use the natural environment for enough activity a week (5x30 minutes) in order to justify gains in their health," he added. First of all we looked at the total number of people that went to the natural environment in England each year. Then we looked at the total number of people who engage in what we call an active visit (cycling, walking, running etc.). "We then looked at how often they did that, and if they did it enough times to benefit their health which we converted into something called Quality Adjusted Life Years, which could then be converted into monetary estimates." The study estimated that it was worth an average of £2.2bn each year. [BBC News](#)

## United Kingdom: UK health officials detail progress on AMR strategy

19 September - The second annual report on the United Kingdom's 5-year antimicrobial resistance (AMR) strategy suggests that while little substantive progress has been made in the 2 years since implementation, the "building blocks" are in place to produce better results in the coming years. ... [T]he report documents encouraging trends in resistance in both human and animal health, and a reduction in antibiotic use in the poultry industry. Analysis of five microorganisms (*Neisseria gonorrhoea*, *Escherichia coli*, *Klebsiella pneumoniae*, *Streptococcus pneumoniae*, and *Pseudomonas*) found that, with the exception of *Pseudomonas*, the proportion of isolates of each species that are resistant to different types of antibiotics remained stable from 2013 to 2014. *Pseudomonas* isolates, however, showed a statistically significant increase in resistance to carbapenem antibiotics. On the animal side, the report showed that the proportion of antibiotic-resistant *E coli*, *Salmonella*, *Campylobacter jejuni*, and *Campylobacter coli* isolates found in chickens, turkeys, and pigs in the UK was low compared with other European countries, with the UK having the lowest levels of resistance to several different types of antibiotics. [CIDRAP](#)

[top of page...](#)

### USNORTHCOM

---

## U.S.: Could it be sepsis? C.D.C. wants more people to ask

19 September - ... Between one million and three million Americans are given diagnoses of sepsis each year, and 15 to 30 percent of them will die, Dr. Frieden said. Sepsis most commonly affects people over 65, but children also are susceptible. According to one estimate, more than 42,000 children develop sepsis in the United States every year, and 4,400 die. ... Sepsis appears to be on the rise. The rate of hospitalizations that listed sepsis as the primary illness more than doubled between 2000 and 2008, according to a 2011 C.D.C. study, which attributed the increase to factors like the aging of the population, a rise in antibiotic resistance and, to some extent, better diagnosis. [The New York Times](#)

## U.S.: Disease-related malnutrition costs U.S. \$15.5 billion annually: study

21 September - The United States could save at least \$15.5 billion in annual healthcare spending if malnutrition caused by chronic diseases is better addressed, according to a study. The study, conducted by Abbott Laboratories' nutrition division and the University of Illinois, noted one in three patients who arrive at a U.S.-hospital suffer from malnutrition. A further one-third become malnourished during their stay. Disease-associated malnutrition (DAM), which is linked with longer hospital stays, higher rates of readmission and increased

mortality, is considered an invisible affliction as it occurs in both obese and underweight individuals. It disproportionately affects the elderly, who have vulnerable immune systems and are commonly afflicted with chronic diseases. While individuals over 65 represent only 14 percent of the American population, they accounted for nearly a third, or \$4.3 billion, of DAM costs, according to the study. [Reuters](#)

## U.S.: EPA weighs in on glyphosate, says it likely doesn't cause cancer



17 September - No chemical used by farmers, it seems, gets more attention than glyphosate, also known by its trade name, Roundup. That's mainly because it is a cornerstone of the shift to genetically modified crops, many of which have been modified to tolerate glyphosate. This, in turn, persuaded farmers to rely on this chemical for easy control of their weeds. ... Glyphosate had been considered among the safest of herbicides. So it was a shock to many, last year, when the International Agency for Research on Cancer announced that this chemical is probably carcinogenic. Since that announcement, however, others have looked at the same collection of data and come to contrary conclusions. The European Food Safety Agency convened a group of experts who concluded that glyphosate probably does not cause cancer. So did the UN's Food and Agriculture Organization. Now the Environmental Protection Agency has issued its own report, and it also concludes that glyphosate is not likely to cause cancer in humans. Outside scientists will review the report in October. [NPR](#)

## U.S.: Gonorrhea is more dangerous than ever as resistance to antibiotics grows



21 September - U.S. health officials have identified a cluster of gonorrhea infections that show sharply increased resistance to the last effective treatment available for the country's second most commonly reported infectious disease. The findings from a cluster of Hawaii cases, presented Wednesday at a conference on prevention of sexually transmitted diseases, represent the first cluster of cases in the United States that have shown such decreased susceptibility to the double-antibiotic combination used when other drugs have failed. If the bacteria continue to develop resistance, that end-of-the-line therapy ultimately will fail, and an estimated 800,000 Americans a year could face untreatable gonorrhea and the serious health problems it causes, health officials said. [The Washington Post](#)

## U.S.: HHS take steps to provide more information about clinical trials to the public

16 September - In an effort to make information about clinical trials widely available to the

public, the U.S. Department of Health and Human Services today issued a final rule that specifies requirements for registering certain clinical trials and submitting summary results information to ClinicalTrials.gov. The new rule expands the legal requirements for submitting registration and results information for clinical trials involving U.S. Food and Drug Administration-regulated drug, biological and device products. ... Expanding the registration information in ClinicalTrials.gov improves people's ability to find clinical trials in which they may be able to participate and access investigational therapies. More information about the scientific results of trials, whether positive or negative, may help inform healthcare providers and patients regarding medical decisions. Additional information will help researchers avoid unnecessary duplication of studies, focus on areas in need of study and improve study designs, ultimately advancing the development of clinical interventions. [NIH](#)

## **U.S.: Lawmakers grill Mylan CEO over EpiPen price hikes**

22 September - Lawmakers at a contentious congressional hearing Wednesday chastised Mylan's chief executive for amassing an \$18 million salary, while she evaded questions about how much profit the pharmaceutical company made off a lifesaving allergy treatment. ... At the hearing, outrage over drug-pricing once again united politicians from both sides of the aisle. It came months after "pharma bro" Martin Shkreli, former chief executive of Turing Pharmaceuticals, appeared in the same chamber because he had increased the price of a decades-old drug called Darparim from \$13.50 to \$750 a pill. ... Proposed solutions included finding ways for the Food and Drug Administration to ease the drug-approval process so competition can help bring down prices and calls for greater transparency in pharmaceutical pricing. [The Washington Post](#)

## **U.S.: Maternal mortality rate in U.S. rises, defying global trend, study finds**

21 September - One of the biggest worldwide public health triumphs in recent years has been maternal mortality. Global death rates fell by more than a third from 2000 to 2015. The United States, however, is one of the few countries in the world that have gone against the grain, new data show. Its maternal mortality rate has risen despite improvements in health care and an overwhelming global trend in the other direction. ... There were 28 maternal deaths — defined as deaths due to complications from pregnancy or childbirth — per 100,000 births in the United States in 2013, up from 23 in 2005, the institute found. [The New York Times](#)

## **U.S.: Multidrug-resistant strain of MRSA found in Memphis fitness centers**

20 September - An uncommon multidrug-resistant (MDR) strain of methicillin-resistant *Staphylococcus aureus* (MRSA) has been found on indoor surfaces in the United States for

the first time. ... Researchers from the University of Memphis and the Food and Drug Administration's Southeast Regional Laboratory tested 32 samples from exercise machines, dumbbells, toilet handles, and stair handrails at four Memphis fitness centers. All but three of the samples (29, or 90.6%) had evidence of *S aureus* colonies, 12 (37.5%) of which were identified as MRSA. All MRSA isolates were resistant to 7 to 12 antibiotics, and, troublingly, six were resistant to linezolid, one of the few remaining antibiotics considered effective against MRSA. [CIDRAP Antimicrobial Resistance Scan](#) (third item)

## U.S.: One dead in growing Hopkins Legionnaires' disease outbreak

21 September – One person has died in connection with a Legionnaires' disease outbreak among people who live, work or recently visited Hopkins. The number of cases related to the Hopkins outbreak, which began in early September, is now 14, up from 12 cases reported earlier this week. "While it's unfortunate to see a death, we are not surprised that one has occurred in an outbreak of this size," the Minnesota Health Department said Wednesday in a prepared statement. According to the Centers for Disease Control and Prevention, the average death rate in such outbreaks is 10 percent. A health department official said the person who died was "elderly" but declined to identify the person's age or gender. [Minneapolis Star Tribune](#)

## U.S.: Sewage overflow again fouls Tampa Bay after storm

16 September - When Hurricane Hermine bowled onto Florida's Gulf Coast this month, officials in this city were confronted with a familiar problem: The hurricane and days of rain before it had overloaded St. Petersburg's water pipes and treatment tanks so there was no room for the city's waste. As a result, city officials said, over the course of roughly 10 days, the St. Petersburg authorities released 136 million to 151 million gallons of partly treated raw sewage, mixed with rainwater, into Tampa Bay. ... It was the third time in the last 13 months that St. Petersburg had discharged significant amounts of sewage containing a variety of bacteria and contaminants into local waters. ... [A]ging infrastructure, increased rainfall and rising sea levels — in this city and in many other areas across the country — are conspiring to make this dilemma more common. [The New York Times](#)

## U.S.: Study finds no changes in US hospitals' antibiotic use

20 September - A new study has found that overall use of antibiotics in US hospitals has not declined in recent years, despite growing awareness of antibiotic resistance. More concerning is that the findings indicate that the use of newer, broad-spectrum antibiotics is on the rise. The study ... analyzed discharge records from more than 34 million patients at more than 300 US hospitals between 2006 and 2012, looking specifically at antibiotic doses administered to patients during their stay. ... Overall, the researchers found that 55.1% of patients discharged received at least one antibiotic during their stay, with little change in that proportion between 2006 and 2012. The overall rate of antibiotic use for all study years

was 755 days of therapy per 1,000 patient-days, a rate that also saw little change over the period of the study. But the study also showed significant increases in the use of carbapenem antibiotics, third- and fourth-generation cephalosporins, beta-lactam/beta-lactamase inhibitor combination antibiotics, tetracyclines, and vancomycin. Usage of these antibiotics was significantly greater in critical care locations. The authors note that these increases offset the decreases observed in the use of fluoroquinolones and first- and second-generation cephalosporins. [CIDRAP](#)

## U.S.: Wildfire swells to 4,500 acres at Vandenberg Air Force Base

19 September - A wildfire burning on the south side of Vandenberg Air Force Base near Lompoc grew to 4,500 acres Monday despite an aggressive air and ground attack to stop flames from advancing. Over the weekend, the Canyon fire forced officials to postpone the launch of an Atlas V rocket. ... Civil engineers worked on Sunday to restore power in a remote canyon on the base, according to the base. The Air Force has further restricted public access to the site as fire crews worked feverishly to cut new fire lines and douse spot fires. ... No injuries have been reported. The cause of the fire is under investigation.

[Military Times](#)

[top of page...](#)

### USPACOM

---

## India: At the epicentre of Delhi's chikungunya epidemic

16 September - ... Located in Delhi's north-eastern frontier, Karkardooma is at the epicentre of the city's current chikungunya outbreak, among the worst the Indian capital has ever witnessed. More than 1,000 cases of the illness have been reported across the city. Media reports say 11 people have also died of chikungunya-related complications, although this is yet to be officially confirmed. More than 12,250 cases of chikungunya have been reported across India until the end of August, according to the National Vector Borne Disease Control Programme. [BBC News](#)

## Indonesia: 19 dead in floods, landslides on Indonesia's Java island

21 September - Torrential rains have triggered floods and landslides on the Indonesian island of Java, killing at least 19 villagers. National Disaster Management Mitigation Agency spokesman Sutopo Purwo Nugroho says several people are still missing in West Java's Garut and Sumedang districts. The worst hit was Garut district, where 16 people were found dead and eight others are still missing after two rivers overflowed Tuesday night. Nugroho

said Wednesday that about 1,000 villagers were evacuated to army barracks and other temporary shelters. He said three villagers were killed in Sumedang and one person was still missing after landslides that buried two houses. [Fox News](#)

## Southeast Asia blazes may have led to deaths of over 100,000, study says

19 September - The forest fire and haze disaster in Southeast Asia last year may have led to the deaths of more than 100,000 people, according to a study released Monday by researchers from two United States universities. The vast majority of the cases were in Indonesia, where fires were deliberately set to clear land for agriculture. The study, led by experts in public health and atmospheric modeling from Harvard and Columbia, estimated that 91,600 people in Indonesia, 6,500 in Malaysia and 2,200 in Singapore may have died prematurely because of exposure to fine particle pollution from burning forests, in particular carbon-rich peatlands. ... [The New York Times](#)

[top of page...](#)

### USSOUTHCOM

---

## PAHO reports about 2,000 new chikungunya cases

19 September - The Pan American Health Organization (PAHO) late last week reported 1,989 new chikungunya cases in the Americas, after 2 weeks of reporting cases below 1,000. The new cases raise the 2016 total to 255,009. Almost all the new cases are from Panama, which had 1,788 new cases in the past month after reporting only 10 before, to bring its total this year to 1,798 cases. [CIDRAP News Scan](#) (third item)

[top of page...](#)

[U.S. Military](#) | [Global](#) | [Influenza](#) | [Veterinary/Food Safety](#) | [Wellness](#) | [Contact Us](#)

[USAFRICOM](#) | [USCENTCOM](#) | [USEUCOM](#) | [USNORTHCOM](#) | [USPACOM](#) | [USSOUTHCOM](#)

The *Army Public Health Weekly Update* does not analyze the information as to its strategic or tactical impact on the US Army and is not a medical intelligence product. Medical intelligence is available from the [National Center for Medical Intelligence](#).

External Links: The appearance of external hyperlinks does not constitute endorsement by the U.S. Army of this Web site or the information, products, or services contained therein. For other than authorized activities such as military exchanges and MWR sites, the U.S. Army does not exercise any editorial control over the information you may find at these locations. Such links are provided consistent with the stated purpose of this product.

Although we avoid links to sites that may be blocked, all sites may not be accessible from all locations. While we verify the links at the time of publication, we cannot guarantee that they will be active in the future.

Articles appearing in the Update do not necessarily represent US Army Medical Command opinions/views, policy, or guidance, and should not be construed or interpreted as being endorsed by the US Army Medical Command.

The *Army Public Health Weekly Update* is published by the Public Health Information Directorate, Army Public Health Center.

