

31 October 2014

# Army Public Health Weekly Update

U.S. Army Public Health Command



*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 Department.*

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- India considers ban on e-cigarettes, sale of single smokes

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- Chikungunya increases in the Caribbean
- Coast Guard rescues Cubans off Boca Raton in new sign of perilous efforts to flee
- Nicaragua's staggering child-sex abuse rates

## Airborne Hazards and Open Burn Pit Registry Overview for Healthcare Providers

Instruction for doctors, nurses and physicians assistants on the [Airborne Hazards and Open Burn Pit Registry](#) is now available on [MHS Learn](#).

To access, select MHS Staff Training > LOGIN > Search Catalog > Enter "airborne."

Topics include:

- The history leading up to the establishment of the registry
- Eligibility requirements
- Roles of medical staff for medical evaluations
- Medical considerations for the clinician seeing registry participants

The U.S. Army Medical Command designates this Enduring Material for a maximum of 1 AMA PRA Category 1 Credit™.



## U.S. MILITARY

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### Suicides and suicide attempts among active component members of the U.S. Armed Forces, 2010–2012: Methods of self-harm vary by major geographic region of assignment

October 2014 - This report analyzed data from the Department of Defense Suicide Event Report program about suicide events (suicide attempts and suicides) among active component service members during 2010–2012. Most attempts (85.2%) and suicides (83.5%) occurred among service members stationed in the U.S. Drugs were identified as the method of self-harm in 54.8% of attempts but in only 3.6% of suicides. Firearms were the leading method of suicide in both the U.S. and combat zones (61.1% and 97.2%, respectively) but accounted for only 5.4% of suicides in those stationed in Europe/Asia. Hanging/asphyxiation (22.9% overall) was the second most common method in suicides. For suicides using firearms, the rates of suicide and the types of firearm used varied according to service members' geographically related access to firearms. [Medical Surveillance Monthly Report](#)

### Troops to be checked for chemical exposure in Iraq

29 October - The Pentagon will offer medical examinations and long-term health monitoring to service members and veterans who were exposed to chemical warfare agents in Iraq, the Army and Navy said in separate statements this week, as part of a review of how the military handled encounters with thousands of abandoned chemical munitions during the American occupation. The review was ordered by Defense Secretary Chuck Hagel in response to an investigation by The New York Times of how troops who were exposed to nerve and mustard agents were treated by the military's medical and awards systems. The report found that while the United States had gone to war looking for an active weapons of mass destruction program, troops instead quietly found and suffered from the remnants of the long abandoned arsenal built by Saddam Hussein with help from the West. [New York Times](#)

### US deploys DU aircraft to Middle East

30 October - This month, the US has deployed a type of aircraft to the Middle East responsible for more Depleted Uranium (DU) contamination than any other platform. Twelve 'A-10's have arrived in the region along with 300 US airmen... The decision to position the controversial aircraft in the region comes against a backdrop of consultations at the highest diplomatic levels to remove DU as an international military resource. The First Committee of the United Nations General Assembly (UNGA) has been meeting to discuss a broad range of issues related to international security and peace. Several nations have presented appeals to the UNGA calling for study and mitigation of DU contamination in

### **Ebola Management center: Video**

ELWA 3, in Monrovia, Liberia, is the largest Ebola Management center ever built.



civilian areas... Jeena Shah at the Center for Constitutional Rights (CCR) told Al Jazeera: "The US has denied a relationship between DU and health problems in civilians and veterans. Studies of UK veterans are highly suggestive of a connection. The US doesn't want studies done." [Al Jazeera](#)

## **USFK bans buying drinks for 'juicy bar' workers**

28 October - U.S. Forces Korea has banned servicemembers from buying drinks for workers in "juicy bars," which have long been suspected of involvement in prostitution and human trafficking. While the military has maintained a zero-tolerance policy toward prostitution, buying drinks in exchange for female company was not strictly prohibited by USFK. That changed with a new policy letter released to troops on Oct. 15. "Paying for companionship directly supports human trafficking and is a precursor to prostitution," USFK commander Gen. Curtis Scaparrotti wrote in announcing the change. "This practice encourages the objectification of women, reinforces sexist attitudes, and is demeaning to all human beings." [Stars and Stripes](#)

## **With US women soon eligible for combat, the draft could be next**

28 October - The US Supreme Court decided that it's constitutional to exclude women from registering for the draft because they're banned from combat units. That ban ends in 2016... It was back in 1981 that the US Supreme Court ruled that requiring only men to register for the draft was constitutional, since there were US laws that banned women from fighting in combat. Essentially, the argument went, since the purpose of registration for selective service – which all men must do at the age of 18, regardless of whether there is a draft in effect – is to prepare for combat, and women are excluded from combat, then they would not be needed in the event of a draft... But with the Pentagon's decision to lift the ban on women in combat by January 2016 – and its move in recent months to open a number of jobs to female troops previously held only by men – those Supreme Court arguments from 33 years ago may no longer apply, analysts note, adding that mandatory registration for the draft may be the next logical step. [Christian Science Monitor](#)

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### **GLOBAL**

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## **A heart risk in drinking water**

30 October - ...Dr. Navas-Acien and her colleagues compared urinary arsenic levels and disease rates among the Native Americans in the study. As levels of arsenic rose in individuals, she found, so did the incidences of atherosclerosis, of stroke, of heart attack. For those with chronic exposure to arsenic, rates of cardiovascular illness were often doubled,

## Ebola Epidemic Response Efforts

U.S. Army North (Fifth Army) coordinated the training of the 30 person medical support team (MST) consisting of health care providers from across the nation.

Establish a world-class program of instruction for identified doctors, nurses, and trainers.

Upon certification, the MST may be employed to address multiple aspects of Ebola treatment such as facilitating additional training, serving as an interim staff while the existing staff is receiving training, augmenting a staff treating Ebola patients, and serving as a trained surge capability to deploy anywhere in the homeland.

**STAND-TO!**  
THE OFFICIAL JOURNAL OF THE ISDA

even after taking into account various lifestyle and genetic risks... [A] growing cohort of researchers and clinical cardiologists ...worry that environmental exposures generally are an underestimated risk in heart disease. The most troubling are thought to be air pollution, metallic elements like arsenic, and heavy metals such as cadmium and lead... "Arsenic can stimulate enzymes to produce hydrogen peroxide," said Aaron Barchowsky, a professor of environmental and occupational health at the University of Pittsburgh. Hydrogen peroxide can prompt a cascade of inflammatory responses in cells. [New York Times](#)

## Experts sound alarm as diabetes fuels cases of TB

29 October - Cases of tuberculosis are set accelerate worldwide unless action is taken to curb diabetes, a chronic condition that weakens the immune system and triples the risk a person will develop the lung disease, health experts warned on Wednesday. Tuberculosis (TB), which killed an estimated 1.5 million people last year according to the World Health Organization (WHO), is caused by bacteria that lie dormant in many people. However, diabetics with TB become sick from latent TB infection far more often than other people because their immune systems are compromised -- a fact that could unleash an epidemic of co-infection as diabetes rates soar along with growing obesity. [Reuters](#)

## Genetic factors tied to violent behaviors

28 October - Variants in two genes were significantly more common in Finnish criminals convicted of multiple violent crimes compared with the general population, researchers said. Statistical analysis indicated that 5% to 10% of all severe violent crime in Finland could be attributed to these variants, affecting the genes for monoamine oxidase A (MAOA) and CDH13, a neuronal membrane adhesion molecule, according to Jari Tiihonen, MD, PhD, of the Karolinska Institute in Stockholm, and colleagues. Offenders who had committed 10 or more serious violent crimes were significantly more like to carry one of several loss-of-function variants in the MAOA gene (odds ratio 2.66, 95% CI 1.60-4.42) or the so-called rs11649622 variant in the CDH13 gene (OR 2.72, 95% CI 1.77-4.15), versus participants in population-based survey studies in Finland who were considered representative of the general population. [MedPage Today](#)

## Google is developing cancer and heart attack detector



29 October - Google is aiming to diagnose cancers, impending heart attacks or strokes and other diseases, at a much earlier stage than is currently possible. The company is working on technology that combines disease-detecting nanoparticles, which would enter a patient's bloodstream via a swallowed pill, with a wrist-worn sensor. The idea is to identify slight changes in the person's biochemistry that could act as an early warning system. The work is still at an early stage... Google's ambition is to constantly monitor the blood for the unique traces of cancer, allowing diagnosis long before any physical symptoms appear. [BBC News](#)

## The Advanced 7-Minute Workout

Ever since the magazine published [the Scientific 7-Minute Workout](#) in May last year, readers have been writing and tweeting their requests for an updated, more advanced version.



## Healthcare serial killings down in U.S. but up globally

28 October - The number of serial killings committed by healthcare providers has leveled off in the U.S. in recent decades, although it is rising internationally, Eindra Khin Khin, MD, said here at the annual meeting of the American Academy of Psychiatry and the Law. According to the literature, the number of cases of healthcare serial killings overall rose from 10 in the 1970s to 21 in the 1980s, 23 in the 1990s, and then to 40 in the years 2000 to 2006... One reason the rates of healthcare serial murders are rising internationally, but not in the U.S., is electronic medical records (EMR)... In terms of the site, the vast majority of killings (72%) occurred in a hospital, with the remainder occurring in nursing homes (20%), patients' homes (6%) and outpatient settings (2%). [MedPage Today](#)

## Study finds 30-year increase in infectious disease outbreaks

29 October - Infectious disease outbreaks, case numbers, and pathogen diversity increased globally from 1980 to 2013, according to a study today in the *Journal of the Royal Society Interface*... Bacteria and viruses were responsible for 88% of outbreaks, and non-vector pathogens caused 87% of outbreaks, the study said. The largest increases in outbreaks and pathogen diversity occurred from 2005 to 2010. *Salmonella* had the highest outbreak rate (7%), causing 855 outbreaks globally during the study period. Viral gastroenteritis had the highest case rate, responsible for 15 million illnesses worldwide, the study said. The study found that several pathogens responsible for causing outbreaks during the 30-year period were new to the list, most notably influenza A, chikungunya, mumps, and pertussis. [CIDRAP News Scan](#) (fifth item)

## WHO interim guidance on the use of delamanid in the treatment of MDR-TB

28 October - A new TB drug with a novel mechanism of action – delamanid - is now available for treatment of adults with multidrug-resistant tuberculosis (MDR-TB), a form of tuberculosis resistant to at least isoniazid and rifampicin, the main first-line drugs. Delamanid was granted conditional approval by the European Medicine Agency in April 2014. Information about this new drug however remains limited, since it has only been through Phase IIb trial and studies for safety and efficacy. WHO is therefore issuing “interim policy guidance” that lists five conditions that must be in place if delamanid is used to treat adults with MDR-TB. [WHO](#)

# EBOLA VIRUS DISEASE

## Australia: No immigration from Ebola nations

27 October - Australia has suspended migration from Ebola-hit West African nations to try to prevent the virus from crossing its borders, as a teenager who arrived from Guinea tested negative for the disease. Immigration minister, Scott Morrison, told parliament on Monday that the government had stopped issuing visas to people from those countries hit by the disease, which has killed close to 5,000 lives in its worst outbreak, with over 10,000 cases ... People who had already been granted visas on humanitarian grounds would be able to travel to Australia, but would be subject to three separate health checks before departure as well as screening on arrival. But officials would cancel and refuse non-permanent or temporary visas for people who had not yet departed for Australia, Morrison said, according to a report from the AFP news agency. [Al Jazeera](#)

## China to send elite army unit to help fight Ebola in Liberia

31 October - China will dispatch an elite unit of the People's Liberation Army to help Ebola-hit Liberia, the Foreign Ministry said on Friday, responding to U.N. calls for a greater global effort to fight the deadly virus in West Africa... The PLA squad, which has experience from a 2002 outbreak of Severe Acute Respiratory Syndrome (SARS), will build a 100-bed treatment center in Liberia, the first such facility in the three countries most impacted by Ebola to be constructed and run by a foreign country, said Lin Songtian, director general of the ministry's Department of African Affairs. The center will be open for operation in a month's time, he told a briefing in Beijing. China will also dispatch 480 PLA medical staff to treat Ebola patients, he said. [Reuters](#)

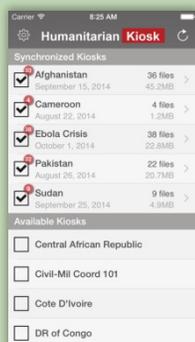
## Clinical illness and outcomes in patients with Ebola in Sierra Leone

29 October - Of 106 patients in whom EVD was diagnosed, 87 had a known outcome, and 44 had detailed clinical information available. The incubation period was estimated to be 6 to 12 days, and the case fatality rate was 74%. Common findings at presentation included fever (in 89% of the patients), headache (in 80%), weakness (in 66%), dizziness (in 60%), diarrhea (in 51%), abdominal pain (in 40%), and vomiting (in 34%). Clinical and laboratory factors at presentation that were associated with a fatal outcome included fever, weakness, dizziness, diarrhea, and elevated levels of blood urea nitrogen, aspartate aminotransferase, and creatinine. Exploratory analyses indicated that patients under the age of 21 years had a lower case fatality rate than those over the age of 45 years (57% vs. 94%,  $P=0.03$ ), and patients presenting with fewer than 100,000 EBOV copies per milliliter had a lower case fatality rate than those with 10 million EBOV copies per milliliter or more (33% vs. 94%,  $P=0.003$ ). Bleeding occurred in only 1 patient. [New England Journal of Medicine](#)

### Humanitarian Kiosk

The Humanitarian Kiosk (H.Kiosk) application which was developed by the UN's Office for the Coordination of Humanitarian Affairs, provides a range of up-to-the-minute humanitarian related information from emergencies around the world.

One kiosk, called Ebola Crisis, provides information on Ebola cases and involved organizations from Liberia, Guinea, and Sierra Leone as well as contact information, dashboards, maps and situation reports.



## 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.

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## Ebola: Experienced doctors still rare

27 October - The difficulty of finding doctors with field experience is hampering international medical intervention to help curb Ebola in West Africa. Fear of contracting the virus and restricted air travel have also slowed the response. During a visit to the three most affected countries that began in Guinea this weekend, the US ambassador to the United Nations, Samantha Power, criticized those countries who promised to send doctors and other aid, but have not yet delivered. More than 240 medical workers have died of Ebola in Guinea, Liberia and Sierra Leone, [according](#) to World Health Organization (WHO), while regular commercial flights to the affected countries have dwindled, throttling travel and aid delivery. [IRIN](#)

## Ebola 'warriors' step forward for training in Sierra Leone

28 October - In a stifling room in a sports stadium in Freetown, a dozen young people watch intently as three British soldiers show them how to put on several layers of protective clothing needed to enter an Ebola treatment center "red zone"... The World Health Organization estimates that 1,000 foreign medical workers and 20,000 locals are needed to man the 50 Ebola treatment units due to be rolled out across the region. Only a fraction of these have so far come forward, amid fear of the disease... At the WHO center, supported by Britain, some 750 people have been trained to work in treatment units. By the end of this month, the training center is expected to be graduating 240 educated workers a week, British officials say. [Reuters](#)

## Finally, some good news in Liberia: WHO says rate of new cases appears to be slowing down

29 October - World Health Organization officials on Wednesday said they see "glimmers of hope" in Liberia, the epicenter of the Ebola epidemic, with strong evidence that the rate of new cases is declining for the first time since the crisis began. Bruce Aylward, the WHO's assistant director-general in charge of the operational response, said... the recent decline in new cases "is real" and is confirmed not only by the scores of empty beds in many clinics, but also by a decrease in laboratory confirmed cases and in burials. As recently as a week ago, local officials expressed alarm that the virus was spreading exponentially. But Aylward said it appears that strategies such as tracing and monitoring those who had come into contact with Ebola patients, the adoption of safe burial practices and an aggressive public awareness campaign were working. [Washington Post](#)

## Genes influence Ebola infections in mice, study suggests

30 October - Some people exposed to the Ebola virus quickly sicken and die. Others become gravely ill but recover, while still others only react mildly or are thought to be resistant to the virus. Now researchers working with mice have found that these laboratory animals, too, can have a range of responses to Ebola, and that in mice, the responses are determined by differences in genes. This is the first time scientists have been able to breed

mice that developed Ebola infections resembling those in humans complete with some puzzling features seen in people... The mouse studies showed that animals that died after bleeding had an overblown inflammatory response to the virus. They also had low activity of two genes, Tie1 and Tek, that made their blood vessels more permeable. The leaky vessels allowed white blood cells to stream out, escalating the inflammatory response and causing a chain reaction of damaging immune system chemicals that destroyed organs. [New York Times](#)

## **Hagel: Monitoring returning troops provides ‘safety valve’**

29 October – A 21-day monitoring period for U.S. service members returning from areas affected by Ebola in West Africa provides a margin of safety that troops and their families wanted, Defense Secretary Chuck Hagel said here today... The order implements a recommendation from the Joint Chiefs of Staff to place all U.S. military service members returning from Operation United Assistance into a 21-day controlled monitoring regimen. It applies to all military services contributing personnel to the fight against Ebola at its source, Pentagon Press Secretary Navy Rear Adm. John Kirby said in a statement. Hagel's directive to the Joint Chiefs also stipulates that they provide operational specifics for the program within 15 days and a review of the new regimen within 45 days. The review will take into account what officials learn and observe from the initial waves of personnel returning from Operation United Assistance, and will result in a recommendation on whether the controlled monitoring should continue, Kirby said. [Department of Defense](#)

## **Interim U.S. guidance for monitoring and movement of persons with potential Ebola virus exposure**

28 October - ...CDC has created interim guidance for monitoring people potentially exposed to Ebola and for evaluating their intended travel, including the application of movement restrictions when indicated. This interim guidance has been updated by establishing a “low (but not zero) risk” category; adding a “no identifiable risk” category; modifying the recommended public health actions in the high, some, and low (but not zero) risk categories; and adding recommendations for specific groups and settings. [CDC](#)

## **More outbreak responders feel Ebola quarantine impact**

30 October - Controversy continued to swirl today around travel restrictions and quarantine for health workers and others who return from serving in Ebola-stricken countries, with a Maine nurse defying a state order, while a Texas nurse returning from Sierra Leone has agreed to home quarantine... Several states and the Department of Defense have announced mandatory quarantine policies for returning health workers and others that are more stringent than the CDC's, which put health workers in a category that would warrant active detailed monitoring, with restrictions on activities such as work and travel decided on a case-by-case basis. [CIDRAP](#)

## Update: Ebola virus disease outbreak — West Africa, October 2014

31 October - ...CDC is assisting ministries of health and working with other organizations to control and end the ongoing outbreak of Ebola virus disease (Ebola) in West Africa... Total case counts include all suspected, probable, and confirmed cases as defined by each country. These data reflect reported cases, which make up an unknown proportion of all actual cases and reporting delays that vary from country to country. According to the latest World Health Organization update as of October 22, 2014, a total of 9,911 Ebola cases have been reported as of October 19 from three highly affected West African countries (Guinea, Liberia, and Sierra Leone). The highest reported case counts were from Liberia (4,665 cases), followed by Sierra Leone (3,706) and Guinea (1,540). The geographic distribution of the number of Ebola cases reported during September 28–October 18 changed from the distribution of cases reported during August 31–September 23, when counts were highest in the areas where Liberia, Sierra Leone, and Guinea meet. Counts of Ebola cases reported during September 28–October 18 were highest in the area around Monrovia and in the district of Bong, Liberia; the Freetown area and the northwest districts of Sierra Leone; and the district of Macenta, Guinea. [Morbidity and Mortality Weekly Report](#)

## U.S. military starts training its Ebola rapid-response team



25 October - ...U.S. military personnel in Texas were in the first stages of training a new rapid-response team that could head to hospitals the next time an outbreak occurs. The 30-member U.S. Military Ebola Rapid Response Team assembled at the Army's San Antonio Military Medical Center on Wednesday and consists of five physicians, 20 nurses and five certified trainers. The group will supervise treatment and help hospitals deal with the intricacies of treating Ebola... It will deploy on the request of the U.S. Department of Health and Human Services. [Reuters](#)

## WHO: Ebola outbreak cases pass 10,000

26 October - The death toll from the Ebola epidemic has risen to 4,922 out of 10,141 recorded infections, with three West African countries accounting for most of the cases through October 23, the World Health Organization (WHO) said. Guinea, Liberia and Sierra Leone have reported 4,912 deaths out of 10,114 cases, the WHO said in its update on Saturday. The virus, which reached Mali through a two-year-old girl who died on Friday, now also threatens Ivory Coast, having infected people virtually all along its borders with Guinea and Liberia, the United Nations agency said... The overall figures include outbreaks in Nigeria and Senegal, deemed by the WHO to be now over, as well as isolated cases in Spain, the United States and a single case in Mali. But the true toll may be three times as

much: by a factor of 1.5 in Guinea, 2 in Sierra Leone and 2.5 in Liberia, while the death rate is thought to be about 70 percent of all cases. [Al Jazeera](#)

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## INFLUENZA

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### CDC: Weekly Influenza Surveillance Report

- During week 42 (October 12-18, 2014), influenza activity was low in the United States.
- Viral Surveillance: Of 8,412 specimens tested... 403 (4.8%) were positive for influenza.
- Novel Influenza A Virus: One human infection with a novel influenza A virus was reported.
- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.
- Influenza-associated Pediatric Deaths: Two influenza-associated pediatric deaths were reported, including one influenza-associated pediatric death that occurred during the 2013-2014 season. [FluView](#)

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

29 October - On 19 October 2014, the National Health and Family Planning Commission of China notified WHO of 2 additional laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus, including 1 death... WHO continues to closely monitor the H7N9 situation and conduct risk assessment. So far, the overall risk associated with the H7N9 virus has not changed. [WHO](#)

### DoD Global, Laboratory-Based, Influenza Surveillance Program

- During Surveillance Weeks 41 & 42, a total of 129 specimens were collected and received from 37 locations. Results were finalized for 98 specimens from 33 locations. During Week 41, five influenza A(H3N2) and three influenza B were identified. During Week 42, one influenza A/not subtyped was identified.
- The CDC has developed a faster confirmatory test for enterovirus D68 (EV-D68), a pathogen associated with a nationwide outbreak of severe respiratory illness. Accelerated testing will cause an increase in the number of confirmed cases, but this should not be interpreted as a real-time change or worsening of the outbreak. [USAF School of Aerospace Medicine](#)

## Flu News Europe

Week 42/2014

- This week, clinical primary care data were reported by 36 countries; virological data were provided by 41 countries, and hospital data by one country.
- In the third week of the season, influenza activity across the WHO European Region remained low.
- Out of 429 sentinel specimens tested in 25 countries, four detections (1%) were reported by three countries. One was subtyped as influenza A(H3N2), one as influenza A(H1N1) and two were influenza B unsubtype.
- Influenza A was detected in one patient admitted to hospital, but not intensive care.

Season

- Influenza activity in the European Region is typically low at this time of year and there is no indication that the influenza season has started in the Region.
- No indications of increased mortality due to influenza have been reported through the European monitoring of excess mortality for public health action (EuroMOMO). [Flu News Europe](#)

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

For week 43 through 25 October 2014:

- Influenza: One new of NHRC laboratory-confirmed influenza B among US military basic trainees.
- FRI surveillance at all eight U.S. military basic training centers indicated FRI rates were at or below expected values.
- NHRC has capability to test for novel H7N9 influenza virus, MERS coronavirus, enterovirus EV-68, and Ebola virus. [NHRC Febrile Respiratory Illness Surveillance Update](#)

## Study: Evidence of subclinical H10N8 avian flu in animal workers in China

27 October - Some animal workers in southern China, home of the first H10N8 avian flu infections, may have had asymptomatic or subclinical infections with the strain even before the first human case was recognized in November 2013, so surveillance should continue in this population as well as in healthcare workers, say the authors of a study today in *BMC Medicine*. The researchers, from Guangzhou, China, and Durham, N.C., retrospectively studied archived serum samples from 720 animal workers and 107 non-animal workers from May through August 2013 during a surveillance program for novel zoonotic flu in

occupationally exposed individuals... Of the 827 samples, 21 (2.5%) tested positive, three with titers of 1:40. None of those who tested positive had flu symptoms during the 3 months before sampling was done. Of the three people with the higher titers, two had MN antibody titers of 1:40, evidence of possible previous H10N8 infection, and one had a titer of 1:80, indicative of a probable previous infection. [CIDRAP Avian Flu Scan](#) (first item)

## Study shows Twitter reduces error in flu surveillance

29 October - Monitoring Twitter content reduced error in calculating influenza prevalence rates and forecasting weekly trends compared with other methods, a study yesterday in *PLoS Currents* found... Study coordinators found that using Twitter data reduced error in calculating current flu prevalence by 29.6% when combined with real-time [Outpatient Influenza-Like Illness Surveillance Network (ILINet)] reports. Twitter reduced forecasting error by 6.09% when combined with final ILINet reports, which include updated data from all US sentinel sites. [Google Flu Trends] failed to reduce error in current and forecasted flu rates in two of the three flu seasons, the study reported. CDC flu surveillance reports can often lag behind current numbers due to the time it takes to receive data from all sentinel sites, the authors said. The study suggested that use of Twitter content can augment official flu prevalence and forecasting data with significant accuracy. [CIDRAP News Scan](#) (fourth item)

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

For the week ending 18 October 2014 (Week 42)

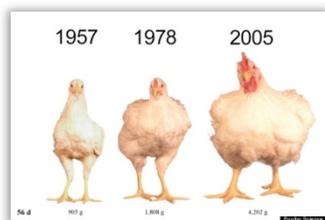
- Influenza-like illness (ILI) is low in both Army and civilian populations. All beneficiaries aged 6 months and older should receive this year's influenza vaccine, unless medically exempted.
- ILI Activity: Army incident ILI outpatient visits in week 42 were 8.5% lower than the same week last year.
- Influenza cases: Zero hospitalized influenza cases were reported to USAPHC through DRSi in week 42. To date, no cases have been reported during this influenza season.
- Viral specimens: During week 42, 30 of 431 (7%) laboratory specimens tested positive for respiratory pathogens; 5 of 347 (1.4%) specimens tested for influenza A were positive. WRMC and SRMC reported the most cases, with 2 cases each (40%), followed by PRMC which reported 1 (20%). [USAPHC U.S. Army Influenza Activity Report](#)

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## VETERINARY/FOOD SAFETY

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### Chickens look way different today, and here's the reason why



21 October - Chickens have changed. Today's broiler chickens are several times larger than broiler chickens of past decades -- and a new study by researchers in Canada offers an explanation for why the birds got so big. For the study, the scientists raised three breeds of broiler chickens: one breed that was common in 1957, another from 1978,

and a third from 2005, called the Ross 308 breed, CBC News reported. "We fed them exactly the same things, so we did not provide hormones," lead author Dr. Martin Zuidhof, associate professor of agricultural science at the University of Alberta, told the CBC. "The only difference that was part of our study treatments was the genetics." ... The Ross 308 chickens grew to be much bigger than the 1978 breed and four times larger than the 1957 breed. [Huffington Post](#)

### Pennsylvania firm recalls chicken products due to Staphylococcal enterotoxin contamination

25 October - Murry's Inc., a Lebanon, Pa. establishment, is recalling approximately 31,689 pounds of gluten free breaded chicken products that may be contaminated with Staphylococcal enterotoxin, the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) announced today... The problem was discovered by the Colorado Department of Agriculture during a retail surveillance and sampling program funded by the USDA at a Federal Emergency Response Network lab. After being notified of the positive test result, FSIS conducted traceback activities. [Food Safety and Inspection Service](#)

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## WELLNESS

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### Antidepressants' black-box warning — 10 years later

30 October - In 2004, the Food and Drug Administration (FDA) issued a black-box warning on antidepressants indicating that they were associated with an increased risk of suicidal thinking, feeling, and behavior in young people...[This] increased risk was significant only among children and adolescents under the age of 18 years; there was no evidence of increased risk among adults older than 24 years, and among adults 65 years of age or older, antidepressants had a clear protective effect against the development of suicidal ideation

and behavior... [A] very large cohort study... revealed significant reductions in antidepressant use within 2 years after the FDA advisory was issued: relative reductions of 31.0%, 24.3%, and 14.5% among adolescents, young adults, and adults, respectively. Although the downward trend in antidepressant use among adolescents reversed somewhat after 2008, utilization stayed below 2004 rates. In all age groups, rates of antidepressant use since the FDA warning was issued appear to have remained below the levels that would have been expected on the basis of pre-warning patterns. [New England Journal of Medicine](#)

## Exchange stores again pull fitness supplements



27 October - Exchange stores at military bases around the world again pulled fitness supplements from shelves earlier this month after concerns they contained a potentially dangerous and untested stimulant... [A] study published Oct. 8 found the substance causing the latest military recalls, DMBA, closely mirrors the effects of DMAA as well as its name... At least a dozen supplement products were found to contain the new synthetic stimulant, which has unknown effects and could pose significant health risks, according to a study co-authored by Cohen and published in the *Journal of Drug Testing and Analysis*. The Army and Air Force Exchange Service said it pulled the weight-loss supplement MD2 Meltdown on Oct. 14 and Marine Corps exchanges reported removing it a day later due to concerns over DMBA. [Stars & Stripes](#)

## High milk diet 'may not cut risk of bone fractures'



28 October - Drinking lots of milk may not lower the risk of fracturing bones, a study in the *British Medical Journal* suggests... A team of scientists in Sweden examined the dietary habits of 61,400 women in 1987-1990 and 45,300 men in 1997 and then monitored their health for years afterwards... In the 20-year follow-up period in which the women were monitored, those who drank more than three glasses, or 680ml, of milk a day were more likely to develop fractures than those who had consumed less. The high-intake group had a higher risk of death too. Prof Karl Michaelsson, lead researcher at Uppsala University, said: "Women who drank three or more glasses a day had twice the chance of dying at the end of the study than those who drank less than one glass a day. "And those who had a high milk intake also had a 50% higher risk of hip fracture." Men were monitored for an average of 11 years after the initial survey and the results showed a similar but less pronounced trend. [BBC News](#)

## This is your brain on drugs

29 October - The gray matter of the nucleus accumbens, the walnut-shaped pleasure center of the brain, was glowing like a flame, showing a notable increase in density. "It could mean

that there's some sort of drug learning taking place," speculated Jodi Gilman, at her computer screen at the Massachusetts General Hospital-Harvard Center for Addiction Medicine... Dr. Gilman was reviewing a composite scan of the brains of 20 pot smokers, ages 18 to 25. What she and fellow researchers at Harvard and Northwestern University found within those scans surprised them. Even in the seven participants who smoked only once or twice a week, there was evidence of structural differences in two significant regions of the brain. The more the subjects smoked, the greater the differences... [Researchers] suggest existing studies are no longer sufficient. Much of what's known is based on studies conducted years ago with much less powerful pot. Marijuana samples seized by the federal Drug Enforcement Agency show the concentration of THC, the drug's psychoactive compound, rising from a mean of 3.75 percent in 1995 to 13 percent in 2013. [New York Times](#)

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## **USAFRICOM**

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### **Nearly 25 million food insecure in Sahel**

29 October - Food security and malnutrition rates across the Sahel are deteriorating, due in large part to ongoing conflict and instability in the Central African Republic (CAR), northern Mali, and northeast Nigeria, according to the UN Office for the Coordination of Humanitarian Affairs (OCHA). Nearly five million more people have joined the ranks of the food insecure since the beginning of the year, bringing the estimated total to 24.7 million - more than double the number in 2013, says OCHA. [IRIN](#)

### **South Africa's health system shuns asylum seekers**

31 October – ...[Gauteng] province, which is South Africa's most prosperous and encompasses the cities of Johannesburg and Pretoria, is also home to the highest concentration of migrants, including asylum seekers and refugees. National health policy guarantees asylum seekers, refugees and undocumented migrants from other SADC (Southern African Development Community) countries, the same rights to treatment at public sector hospitals as South African citizens. They are supposed to pay only what they can afford, based on their income. However, last August, Gauteng's provincial health department distributed a draft set of guidelines for managing non-South African patients that appears to have sowed confusion among healthcare providers and resulted in patients... being denied critical care. [IRIN](#)

### **Zimbabwe doctors walk out on strike**

28 October - Patients have been waiting in long queues while others were being turned away at state hospitals in Zimbabwe, as hundreds of doctors staged a strike to press for

higher pay. About 300 junior doctors went on strike at the lapse of a two-week ultimatum for the government to address their demands for a pay rise of nearly 400 percent. "The nationwide strike has attracted an overwhelming response from all government hospitals over 300 doctors withdrawing their services until the employer meets their demands," Farai Makoni, president of the Zimbabwe Hospital Doctors Association, told the AFP news agency... A few senior doctors were working at major government hospitals in the capital, with patients having a long wait in the outpatients' departments. [Al Jazeera](#)

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## USCENTCOM

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### **Pakistan's polio eradication efforts slammed by WHO group**

27 October - A global body issued a scathing report Monday on Pakistan's efforts to eradicate polio, saying the country was the biggest obstacle to the goal of stopping world-wide transmission of the disease by the end of 2014. The Global Polio Eradication Initiative... said in the report that Pakistan's anti-polio program was a "disaster" that threatened other efforts to eradicate the crippling disease. "It continues to flounder hopelessly, as the virus flourishes," the report said. "Home to 80% of the world's polio cases, Pakistan is now the major stumbling block to global polio eradication." The report comes weeks after Pakistan reported the highest number of polio cases in 14 years. This year so far, 220 cases have been confirmed, compared with 93 cases in the whole of last year. [Wall Street Journal](#)

### **Saudi Arabia confirms 3 new MERS cases plus 3 deaths**

30 October - After confirming six MERS-CoV cases yesterday, Saudi Arabia's Ministry of Health (MOH) reported three more cases today in various parts of the country, as well as three deaths in previously reported case-patients... All three patients are Saudi citizens who have underlying medical conditions, and none of them reported recent contact with animals... The new report pushes the Saudi MERS case count to 789 and the fatality total to 337. [CIDRAP News Scan](#) (first item)

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## USEUCOM

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### European consortium forms to tackle antimicrobial use and development

28 October - Eleven European countries will participate in a three-year initiative to define appropriate use for existing antibiotics and promote investment in research and development (R&D) for new ones, according to an Oct 27 press release from the University of Geneva. The initiative... brings together an international body of pharmaceutical experts from the academic, research, pharmaceutical, and biotechnology fields to define how the world's remaining effective antibiotics should be used. The group will also create and test new economic models for pharmaceutical industry investment in developing new antibiotics, an area of R&D that has traditionally come with high risks and little benefit to pharmaceutical companies, according to the press release. [CIDRAP News Scan](#) (third item)

### Turkey: Middle East respiratory syndrome coronavirus (MERS-CoV)

24 October - On 17 October 2014, WHO Regional Office for Europe (EURO) was notified by the National IHR Focal Point for Turkey of a laboratory-confirmed case of infection with Middle East respiratory syndrome coronavirus (MERS-CoV). On 11 October 2014, the patient died. This is the first MERS-CoV case in Turkey. The case is a 42-year-old male, Turkish citizen known to be working in Jeddah, Kingdom of Saudi Arabia (KSA). On 25 September 2014, the patient developed symptoms in Jeddah. Initially, he sought medical care in KSA; however, on 6 October 2014, as symptoms worsened, he travelled with a direct flight from Jeddah to Hatay, Turkey. Upon his arrival, he was admitted to a local hospital. On 8 October, he was transferred to the University Hospital in Hatay... Globally, WHO has received notification of 883 laboratory-confirmed cases of infection with MERS-CoV, including at least 319 related deaths. [WHO](#)

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## USNORTHCOM

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### U.S.: Doctors mystified by paralysis in dozens of children

28 October - More than 50 children in 23 states have had mysterious episodes of paralysis to their arms or legs, according to data gathered by the Centers for Disease Control and Prevention. The cause is not known, although some doctors suspect the cases may be linked to infection with enterovirus 68, a respiratory virus that has sickened thousands of children in recent months. Concerned by a cluster of cases in Colorado, the C.D.C. last month asked

doctors and state health officials nationwide to begin compiling detailed reports about cases of unusual limb weakness in children. Experts convened by the agency plan next week to release interim guidelines on managing the condition... More than 100 similar cases have been brought to the attention of the C.D.C. But only half fit the agency's strict definition: a case of sudden-onset limb weakness since August in a patient younger than 21 who has certain spinal cord lesions. [New York Times](#)

## **U.S.: FDA approves first US serogroup B meningococcal vaccine**

29 October - The US Food and Drug Administration (FDA) today approved Trumenba, the first vaccine licensed in the United States to prevent meningococcal disease caused by *Neisseria meningitidis* serogroup B, the strain that has caused cases in the past year on several US college campuses. [CIDRAP News Scan](#) (second item)

## **U.S.: Obama's health law: Who was helped most**

29 October - We know that about 10 million more people have insurance coverage this year as a result of the Affordable Care Act. But until now it has been difficult to say much about who was getting that coverage ...The biggest winners from the law include people between the ages of 18 and 34; blacks; Hispanics; and people who live in rural areas. The areas with the largest increases in the health insurance rate, for example, include rural Arkansas and Nevada; southern Texas; large swaths of New Mexico, Kentucky and West Virginia; and much of inland California and Oregon. Each of these trends is going in the opposite direction of larger economic patterns. Young people have fared substantially worse in the job market than older people in recent years. Blacks and Hispanics have fared worse than whites and Asians. Rural areas have fallen further behind larger metropolitan areas. [New York Times](#)

## **U.S.: Some Hep C patients may not get coverage for pricey drugs**

28 October - In the past year, new hepatitis C drugs that promise higher cure rates and fewer side effects have given hope to millions who are living with the disease. But many patients whose livers aren't yet significantly damaged by the viral infection face a vexing reality: They're not sick enough to qualify for the drugs that could prevent them from getting sicker. An estimated 3 million people have hepatitis C. Faced with a cost per patient of roughly \$95,000 or more for a 12-week course of treatment, many public and private insurers are restricting access to those who already have serious liver damage. Other strategies that limit access include restricting who can prescribe the drugs or requiring early proof the drug is working before continuing with treatment. In addition, many state Medicaid programs require that patients be drug- and alcohol-free for a period of months before they can get the hepatitis C drugs. [MedPage Today](#)

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## **China: Health shows scrutinized in China**

30 October - New rules for such programs aim at curbing misleading advice and the pushy sell of ungrounded theories on TV. China's top media regulator has tightened control over health-related TV programs, in a bid to provide viewers with better scientific content. Last month, the State Administration of Press, Publication, Radio, Film and Television said that such programs shown on TV must have only qualified doctors and medical experts to advise audiences on the prevention and treatment of diseases. The experts are also required to be certified by health authorities. Celebrities are barred from hosting health shows... Recently, health-related Chinese TV programs have become popular among audiences, and TV stations and production houses are suspected of making money from them, according to Chinese media reports. More than 50 health-related programs are aired on satellite TV channels every week, with many more on local TV stations. [Asia One](#)

## **India considers ban on e-cigarettes, sale of single smokes**

31 October - India is considering a ban on electronic cigarettes over the risks to public health that they may cause, a senior Health Ministry official told Reuters. The World Health Organization (WHO) in August called for stiff regulation of e-cigarettes as well as bans on indoor use, in the latest bid to control the booming \$3 billion global market... "Expert panels have recommended regulation or a ban. India cannot regulate easily," the official added, saying that the government would consider the ban in the next month or two. The European Union has agreed to requirements around advertising and packaging to ensure the safety and quality of e-cigarettes. The U.S. Food and Drug Administration has proposed banning sales to anyone under 18. [Reuters](#)

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## **Chikungunya increases in the Caribbean**

27 October - An Oct 24 update from the Pan American Health Organization (PAHO) shows chikungunya cases continuing to climb in the Caribbean and Americas, with 16,347 new suspected cases and 666 new confirmed cases since the Oct 17 PAHO update. The new cases bring the total outbreak numbers to 776,089 suspected and 12,993 confirmed cases, for 789,082 total cases. Since Oct 17, Guadeloupe reported 6 deaths, and Martinique reported 7 deaths due to chikungunya. Of the 152 deaths attributed to chikungunya, 93% have occurred on Guadeloupe and Martinique, according to the PAHO report. [CIDRAP News Scan](#) (second item)

## Coast Guard rescues Cubans off Boca Raton in new sign of perilous efforts to flee

29 October - In yet another signal of the increasingly dangerous voyages taken by Cuban migrants trying to make it to the United States, the Coast Guard rescued nearly three dozen men from a sinking rowboat off the shore of Boca Raton on Wednesday as the agency continued to search for two other rafters missing since Monday... The migrants were rescued and will be sent back to Cuba. Under United States policy, Cubans fleeing their homeland can stay here if they make landfall but must be sent back if they do not... The number of Cubans attempting to immigrate to the United States by sea has nearly doubled in the past two years, with many more of them in vessels that are unfit for the dangerous crossing over the Straits of Florida. [New York Times](#)

## Nicaragua's staggering child-sex abuse rates

30 October - ...Nicaragua has one of the highest rates of sexual violence against girls in the world that flourishes amid a patriarchal society, high levels of impunity, and discriminatory laws curtailing women's human rights. Last year, forensic doctors examined 6,069 sexual violence victims - a 27-percent rise from 2010, according to new Institute of Legal Medicine (IML) figures. A staggering 82 percent of victims were children: 3,065 aged 0-13 and 1,897 aged 14-17. Nine out of 10 victims were female, and more than 80 percent, like Velasquez, knew their abuser. The true number of victims is undoubtedly much higher, as an estimated 90 percent of sexual attacks are never reported to the authorities, according to IML.

[Al Jazeera](#)

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