

18 October 2013

# Army Public Health Weekly Update

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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## Army Medical Department Journal

The articles in the latest Army Medical Department Journal address The Foundation of a System for Health: Army Medicine's Performance Triad.



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**U.S. MILITARY**

**Dept. of Defense advises all military personnel to stop using OxyElite Pro**

15 October - The Department of Defense sent out a warning this week advising all servicemembers and their families to stop using OxyElite Pro products. The DoD followed the same recommendations handed down by the Centers for Disease Control and Prevention and the Food and Drug Administration last week, after the Hawaii Department of Health's investigation revealed acute hepatitis and liver failure in people who had allegedly taken the product. In a statement from the DoD, we have learned that they ordered the removal of all OxyElite Pro products from bases. [KDBC](#)

**Female infertility, active component service women, U.S. Armed Forces, 2000-2012**

September 2013 - During the 13-year surveillance period, 16,807 active component service women were diagnosed with infertility. The overall incidence rate of infertility among active component service members was 62.4 per 10,000 person-years (p-yrs). Incidence rates of infertility diagnoses (all types) increased by 15 percent from 2005 to 2011 (mainly due to increasing rates of infertility of unspecified origin) but then decreased by 15 percent in 2012; as such, the rates in 2005 and 2012 were similar. Infertility of tubal origin and infertility due to anovulation were the most common specified types of infertility (incidence rates: 6.8 and 6.6 per 10,000 p-yrs, respectively). The incidence rate of diagnoses of unspecified infertility exceeded the rates of diagnoses of each of the five specific types of infertility considered here; rates of diagnoses of each of the specified types of infertility declined during the surveillance period. [Medical Surveillance Monthly Report](#)

**Fisher House donates extra \$25,000 to families of fallen**

11 October - After an outpouring of generosity from the American public, Fisher House Foundation officials are sending a \$25,000 check to the families of each of the 29 service members who died between Oct. 1 and Oct. 10. President Barack Obama signed a law on Oct. 10 that allowed the Defense Department to resume the death gratuity payments of \$100,000 to each family, to those designated by service members prior to death. Fisher House had volunteered to pay the death gratuity to families of the fallen after the payments were suspended during the government stalemate, and Defense officials entered into an agreement, but on the condition that they would reimburse Fisher House after funding was restored. "Now that assistance is no longer needed, we wish to recognize the families who were impacted by the shutdown," said Ken Fisher, chairman and CEO of Fisher House Foundation, in a statement announcing the \$25,000 donations. "The response from the public during this crisis has been incredible. We wish to pass along the generosity of a grateful nation, to honor their loved ones' service and sacrifice." The donations to the 29 families will total \$725,000. [Marine Corps 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.

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## Taking stock of research on sleepless soldiers

16 October - ..Insomnia is reported by up to 54 percent of the two million men and women who have served in various American combat efforts since 11 September 2001, compared to up to 22 percent of civilian adults... Soldiers who suffer from insomnia while being deployed have a bigger chance of developing traumatic stress reactions such as depression and posttraumatic stress disorders, and even committing suicide... Behavioral interventions such as cognitive-behavioral therapy and imagery rehearsal therapy often yield positive results in trying to reduce the effects of insomnia and nightmares, respectively. These treatments can be delivered during in-person sessions with clinicians, brief follow up sessions via telephone, or online and mobile resources. Training was recently rolled out to prepare providers in the Veterans Health Administration to use cognitive behavioral treatment of insomnia. The goal is to eventually educate 1,000 clinicians in an effort to bridge the gap between veterans who need treatment, and available providers. [Medical Xpress](#)

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## GLOBAL

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### Asius's mission: Making the quiet audible



16 October - Asius has developed two types of earpieces to help people safely and effectively listen to sounds at low volumes. The first, which is designed for the hearing-impaired, gradually expands in the ear to conform to its shape. The second, meant for anyone who wants to listen to music or speech without cranking up the volume to potentially unsafe levels, is placed inside ear buds, and acts as a second eardrum... Mr. Ambrose hopes to sell his company's products to people who have difficulty hearing, as well as consumers seeking a safer listening experience and higher fidelity. [Wall Street Journal](#)

### Blood test 'detects sepsis in hours'

16 October - A rapid blood test to diagnose blood poisoning, or sepsis, at the hospital bedside could potentially save thousands of lives, say researchers. Early studies at King's College London suggest the condition can be diagnosed in two hours using a simple blood test. Current diagnostic methods take up to two days, which may delay treatment with life-saving antibiotics... In the study, published in the journal PLOS ONE, researchers identified a biomarker for diagnosing sepsis rapidly in blood samples. It is based on detecting nucleotides specific to sepsis to rule out similar conditions that can mimic its symptoms. A small study at a London hospital and a larger study in Sweden demonstrated that sepsis could be diagnosed within two hours, with an accuracy of 86%. [BBC News](#)

## Breaking through cancer's shield

14 October - For more than a century, researchers were puzzled by the uncanny ability of cancer cells to evade the immune system. They knew cancer cells were grotesquely abnormal and should be killed by white blood cells. In the laboratory, in Petri dishes, white blood cells could go on the attack against cancer cells. Why, then, could cancers survive in the body? The answer, when it finally came in recent years, arrived with a bonus: a way to thwart a cancer's strategy. Researchers discovered that cancers wrap themselves in an invisible protective shield. And they learned that they could break into that shield with the right drugs. When the immune system is free to attack, cancers can shrink and stop growing or even disappear in lucky patients with the best responses. It may not matter which type of cancer a person has. What matters is letting the immune system do its job. So far, the drugs have been tested and found to help patients with melanoma, kidney and lung cancer. In preliminary studies, they also appear to be effective in breast cancer, ovarian cancer and cancers of the colon, stomach, head and neck, but not the prostate. [New York Times](#)

## New discoveries about traumatic brain injuries: Fruit flies may be key

15 October - ...In order to better understand TBIs, the researchers examined fruit flies. The fly brain is encased in a hard cuticle, similar to a skull. Like with humans, very few flies die from immediate impact. Yet afterward, they show many of the same symptoms as humans who sustain concussions or other TBIs... From the flies, the scientists discovered that age plays an important role in TBI. Older flies are more susceptible than younger ones to the effects of impact. In addition, many of the outcomes of TBI are very similar to the normal aging processes. With this new model, the scientists should be able to draw on the vast collection of genetic tools and techniques to probe the underlying drivers of damage. [Science World Report](#)

## Mauritania, Haiti top new global slavery index

17 October - Mauritania, Haiti and Pakistan rank among the countries with the highest prevalence of modern slavery, according to a new global index released Thursday by an anti-slavery charity. The "Global Slavery Index" report by the Walk Free Foundation ranked 162 countries by estimating the number of people in each nation affected by a range of practices including forced and bonded labor, human trafficking, forced marriages, and the use of children in the military... Using reports from governments and non-profit organizations as well as statistical estimates, the charity said that Mauritania has the highest proportion of people in slavery, with many people inheriting slave status from their ancestors... In absolute terms, India, China, Pakistan and Nigeria have the highest numbers of people enslaved, the charity said. Together with five other countries, they account for three quarters of the total estimated number of people in modern slavery. [USA Today](#)

## Researchers propose new polio strategy



11 October - Researchers are calling for a different strategy to eradicate polio in countries where the disease remains endemic, namely, Nigeria, Pakistan and Afghanistan. They say greater community involvement and stronger health systems are needed. All three countries where polio remains entrenched face attack by militants, political unrest and a lack of trust among the populations. Dr. Seye Abimbola -- of Nigeria's National Primary Health Care Development Agency -- is one of the authors of two articles that appear in PLOS Medicine. He says it's time to move away from -- what's called -- a leader-centric approach to polio eradication.

[VOA](#)

## Survey shows gaps in first-responder anthrax knowledge

16 October - More than half of 70 first responders surveyed did not know that occupants of an entire building need decontamination following an indoor release of *Bacillus anthracis*, the bacterium that causes anthrax, according to a study in the *Journal of Homeland Security and Emergency Management*. The researchers recruited survey respondents from throughout the United States by a variety of means. They found that 57 of 69 (83%) who provided such information had some bioterrorism training, but most were trained on-site by a colleague. When asked about decontamination after an indoor *B anthracis* release from an envelope, 97% correctly said room occupants needed decontamination, while 80% correctly said the entire floor required the procedure and only 42% correctly applied the measure to the entire building. Also, 15% said they would don personal protective equipment inside the affected building, which could result in contamination. [CIDRAP News](#)

[Scan](#)

## U.N. agency calls outdoor air pollution leading cause of cancer



17 October - The air we breathe is laced with cancer-causing substances and should now be classified as carcinogenic to humans, the World Health Organisation's (WHO) cancer agency said on Thursday. The International Agency for Research on Cancer (IARC) cited data indicating that in 2010, 223,000 deaths from lung cancer worldwide resulted from air pollution, and said there was also convincing evidence it increases the risk of bladder cancer. [Reuters](#)

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## INFLUENZA

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### CDC: Weekly Influenza Surveillance Report

17 October - CDC is resuming analysis of influenza surveillance data and testing of influenza laboratory specimens collected during the partial government shut-down. An abbreviated FluView report summarizing these data for the most recent week (October 6-12) will be posted on Friday, October 18, 2013. At a later date, reports summarizing influenza surveillance data for September 22-October 5 also will be posted. Routine Friday posting of the full FluView report for the 2013-2014 season will resume October 25, 2013. [FluView](#)

### European Centre for Disease Prevention and Control: Weekly Influenza Surveillance Overview

In week 40/2013:

- All 26 reporting countries experienced low intensity of clinical influenza activity, 22 countries reported no geographic spread and 21 countries reported stable trends.
- Of 132 sentinel specimens tested by 15 countries, 3 (2%) were positive for influenza.
- One hospitalised laboratory-confirmed influenza case was reported by Ireland.
- During the first week of the 2013-2014 influenza season, there was no evidence of any significant influenza activity in Europe. [Weekly Influenza Surveillance Overview](#)

### Google.org: Flu Trends

17 October – Estimates of flu activity based on certain Internet search queries indicate that the level of flu activity in the northern hemisphere ranges from minimal in Bulgaria to moderate in Austria and Russia and in the southern hemisphere ranges from minimal to low. [Google.org Flu Trends](#)

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

For the week ending 12 October 2013:

- Influenza: One new case of NHRC laboratory-confirmed influenza (A/H1N1) among US military basic trainees.
- FRI surveillance at all eight U.S. military basic training centers indicated FRI rates were moderately elevated at Fort Benning. [NHRC Febrile Respiratory Illness Surveillance Update](#)

### Spotty data suggest slow start to US flu season

16 October – The United States is seeing little sign of rising flu indicators, though some areas are reporting sporadic activity, according to health groups that are working this week to fill gaps in national flu surveillance because of the government shutdown slated to end

today... Last week Centers for Disease Control and Prevention (CDC) officials said that during the shutdown, respiratory patient specimens that would normally be sent to the CDC for testing would be diverted to three state public health laboratories, in Utah, California, and Wisconsin. [CIDRAP](#)

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

For the week ending 05 October 2013 (Week 40)

- Influenza-like illness (ILI) activity is low in both Army and civilian populations.
- ILI Activity: Army incident ILI outpatient visits in week 40 were 51% lower than the same week last year.
- Influenza cases: Zero hospitalized influenza cases were reported to USAPHC in week 40, and zero hospitalized cases have been reported during this influenza season.
- Acute Respiratory Disease at BCT sites: ARD rates remain low; rates did not increase significantly at any sites during week 40.
- Viral specimens: During week 40, 26 of 392 (7%) laboratory specimens tested were positive for respiratory pathogens. RSV accounted for 35% of positive specimens. All 8 of the influenza positive specimens were from SRMC; ERM, NRM, PRM, and WRM did not submit any laboratory specimens that tested positive for respiratory pathogens.). [USAPHC U.S. Army Influenza Activity Report](#)

## PANDEMIC AND AVIAN INFLUENZA

### DOD funding contributes to U.S. biodefense infrastructure

16 October - The Defense Department has contributed core capabilities to a national center funded as a public-private partnership by the Department of Health and Human Services to enhance the U.S. response to infectious diseases and biological, chemical, radiological and nuclear threats. The HHS Texas A&M Center for Innovation in Advanced Development and Manufacturing is a response in part to pandemics such as the 2009-2010 H1N1 flu -- for which traditional biomanufacturing methods took 26 weeks to produce initial vaccine doses -- and the future threat of biological attacks and other public health emergencies... One aspect of the DARPA portfolio that was extremely challenging, even for DARPA, he said, was the ability to develop low-cost, highly flexible and adaptable biomanufacturing technologies that could provide tens of millions of doses of vaccines or medical countermeasures such as chemical-weapon antidotes within weeks of notification. [Defense.gov](#)

## Human infection with avian influenza A(H7N9) virus – update

16 October - The National Health and Family Planning Commission, China notified WHO of a new laboratory-confirmed case of human infection with avian influenza A(H7N9) virus. This is the first new confirmed case of human infection with avian influenza A(H7N9) virus since 11 August 2013. The patient is a 35-year-old man from Zhejiang Province. He was admitted to a hospital on 8 October 2013 and is in a critical condition. Additionally, a previously laboratory-confirmed patient from Hebei has died. To date, WHO has been informed of a total of 136 laboratory-confirmed human cases with avian influenza A(H7N9) virus infection including 45 deaths. Currently, three patients are hospitalized and 88 have been discharged. So far, there is no evidence of sustainable human-to-human transmission.

[WHO](#)

## Study reports possible human-to-human H7N9 spread

16 October - An analysis of a six-patient cluster of H7N9 avian flu in Shanghai likely linked to live-bird markets revealed that two cases may have involved human-to-human spread, according to a report in PLoS One yesterday. Shanghai researchers examined the epidemiologic and clinical data from patients in the Minhang District of Shanghai who were referred to the same hospital during 2 weeks in February and March. All the patients were men... Only the 41-year-old had no underlying conditions. The 27-year-old, a pork butcher, had hepatitis B, and the four oldest all had hypertension. Three of those with hypertension also had two or more additional conditions. Three of the patients had a history of contact with poultry, but all six lived near two food markets where H7N9 was later detected in chickens and pigeons. All patients were treated with oseltamivir (Tamiflu) 3 to 8 days after symptom onset, and four died of acute respiratory distress. The 87-year-old and 67-year-old were a father and son who lived in the same house. The father died from his infection, while the son was discharged after 15 days. The father's other son had similar symptoms and died from severe pneumonia without H7N9 confirmation. The authors said the two cases "indicated that human transmission may be involved in the spread of this infection" and added that the two markets were the likely source of the virus. [CIDRAP News Scan](#)

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### **VETERINARY/FOOD SAFETY**

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## At least 27 sick in AL salmonella outbreak, beans possible cause

16 October - At least 27 people are sick with Salmonella after attending the annual "Bean Day fundraiser" at First Baptist Church Family Life Center in Athens, AL, reports WAFF-TV. The event was held Oct. 4 by the Limestone County Foundation on Aging, and 13 people

were later admitted to the Athens-Limestone Hospital after 50 people associated with the outbreak came to the emergency room. An Athens-Limestone Hospital spokesperson told WAFF that the number of people sick is actually higher than what is being reported because many did not seek medical attention. Alabama Department of Public Health officials told *Food Safety News* that beans served at the event tested positive for Salmonella, but that they are unable to confirm a link between the victims and the food because specific strains have not yet been identified in either. [Food Safety News](#)

## More ready-to-eat chicken and ham recalled for Listeria

17 October - On Thursday, Milwaukee-based Garden Fresh Foods added another 6,694 pounds of ready-to-eat chicken and ham products to the original Sept. 25, 2013 recall, for a total of 25,748 pounds of those meat products recalled due to possible contamination with *Listeria monocytogenes*. The suspect chicken and ham are contained in [this long list](#) of Garden Fresh salad products. [Food Safety News](#)

## Warnings as salmonella strains resist antibiotics

16 October - A virulent outbreak of salmonella poisoning traced to three Foster Farms chicken plants in the Central Valley [California] has peculiar features that food safety experts said should alarm regulators and consumers alike - in particular, the number of people who are coming down with a form of the disease that is resistant to antibiotics. "We've been warning for a long time, but we are about to reach a serious, critical mass here," said Rep. Louise Slaughter, D-N.Y., who has tried for a decade to restrict the use of antibiotics in food animals. The Centers for Disease Control and Prevention said the outbreak has sickened 317 people, 73 percent of them in California, with strains of salmonella Heidelberg that resist multiple antibiotics. Thirteen percent of victims developed blood poisoning, a potentially life-threatening complication, and 42 percent have been hospitalized, twice the typical rate for people who come down with salmonella. None of the victims has died. [SF Gate](#)

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### WELLNESS

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## Bigger postpartum challenges than just baby weight

14 October - ... Pregnancy and labor cause significant strain on muscle and bone structures. Some research shows that stretched, weakened or torn muscles and misaligned bones may seem simply annoying at first, but can develop into debilitating disorders years or decades later. More women in the U.S. are having babies older and in some cases spacing pregnancies closer together, giving the body less time to recover. There has also been an increase in fertility treatments such as in vitro fertilization, which lead to more twin pregnancies that add to the physical strain on women's bodies... Abdominal muscles lengthen significantly during pregnancy, the spine moves into an exaggerated S curve,

caesarean section can leave internal scar tissue, and the hammock of muscles in the pelvis that support organs and bones, called the pelvic floor, stretches or even tears, she says. [Wall Street Journal](#)

## Bullying prevention programs may have negative impact

10 October - As schools enact anti-bullying programs for National Bullying Prevention Month this October, a new study suggests that those efforts may not be as effective as intended. Released in September by the University of Texas in Arlington, the study found that [unintended consequences may result from campaigns designed to educate students about the harms of physical and emotional harassment](#). According to researchers' findings, bullying prevention programs in schools generally increase incidences of physical and emotional attacks among students by teaching kids about the ins and outs of bullying. [Huffington Post](#)

## Pounding pavement by heel or toe



16 October - ... [A]new study suggest[s] that each style of running has advantages and drawbacks, and the right way to run almost certainly depends on what kind of runner you already are... [Researchers] matched the 19 forefoot-striking female runners with an equal number of female heel strikers of similar age, height, weight, and running pace... [M]any of the women runners jarred their knees, especially when they landed on their heels. That running form resulted in about 16 percent more force moving through the knee joint than when women landed near their forefeet. The elevated forces were particularly evident along the heel strikers' kneecaps and the medial or inside portion of their knees, where the joint is known to be particularly vulnerable to overuse injuries. But the forefoot strikers' legs were not immune from force. They simply absorbed it differently, with almost 20 percent more force moving through their ankles and Achilles' tendons than among the women who hit with their heels. [New York Times](#)

## Study: Diet supplement has meth-like chemical

14 October - Driven Sports attorney Marc Ullman says Driven Sports suspended the production and sales of Craze several months ago while it investigated reports regarding the safety of Craze; the company does not currently have plans to resume production. Less than a week after health officials asked stores to pull a fat-burning supplement from shelves, another dietary supplement is coming under fire. Craze, a sports supplement marketed to bodybuilders, contains a chemical compound similar to the illegal drug methamphetamine, [according to a study](#) published in the peer-reviewed Drug Testing and Analysis journal. The substance, called N,alpha-diethylphenylethylamine or N,a-DEPEA, has never been studied in humans, according to Dr. Pieter Cohen, an assistant professor of medicine at Harvard Medical School and lead author of the study. [CNN](#)

## Study: Good night's sleep cleans out gunk in brain

17 October - When we sleep, our brains get rid of gunk that builds up while we're awake, suggests a study that may provide new clues to treat Alzheimer's disease and other disorders. This cleaning was detected in the brains of sleeping mice, but scientists said there's reason to think it happens in people too... The team previously found a plumbing network in mouse brains that flushes out cellular waste. For the new study, the scientists injected the brains of mice with beta-amyloid, a substance that builds up in Alzheimer's disease, and followed its movement. They determined that it was removed faster from the brains of sleeping mice than awake mice. The team also noticed that brain cells tend to shrink during sleep, which widens the space between the cells. This allows waste to pass through that space more easily. [USA Today](#)

## U.S. teens more vulnerable to genital herpes: Study

17 October - Today's teens may be at higher risk than ever of contracting genital herpes because they don't have enough immune system antibodies to shield them against the sexually transmitted virus, a new study suggests. This increase in risk may be the result of fewer teens being exposed in childhood to the herpes simplex virus type 1 (HSV-1), a common cause of cold sores, researchers reported Oct. 17 in the online edition of the *Journal of Infectious Diseases*... [T]he new findings suggest that almost one in 10 adolescents who a decade ago would have already acquired HSV-1 and built up some immunity may now encounter HSV-1 when they first become sexually active. That could leave them more susceptible to genital herpes than young people were in the past. [WebMD](#)

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### USAFRICOM

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## Hookworm vaccine will be tried in Africa

14 October - The first African clinical trial of an experimental vaccine against hookworm is planned for next year. While rarely fatal, hookworm infestations are a serious problem for 600 million of the world's poor, especially for children going barefoot. By constantly draining their victims' blood, the worms cause anemia, stunted growth and learning problems, and leave children too weak to go to school. When they infest pregnant women, both mother and fetus are weakened. [New York Times](#)

## Madagascar: Bubonic plague – Madagascar faces new, terrifying threat



11 October - The already troubled African island of Madagascar faces a new and terrifying threat: bubonic plague. In recent years, the Indian Ocean nation has become the world's top site for the storied disease, with hundreds of cases and scored of plague deaths last year.

Aid officials are warning that things could get worse unless more is done to prevent and fight the spread of the often-deadly disease. Madagascar is the world's hotspot for this flea-borne disease. [VOA](#)

## Sierra Leone: Flashmob promotes Global Handwashing Day

15 October - Tuesday is Global Handwashing Day, and Sierra Leone is using an innovative way to promote awareness of proper hand washing to prevent illnesses like cholera and diarrhea. A consortium created the country's first flashmob to get people's attention... A flashmob is a group of people who suddenly assemble in a public place, perform some sort of action together, then just as suddenly, disperse... leaving those who watched them entertained, and - in this case - informed. [Voice of America](#)

## Somalia: Where hyenas are used to treat mental illness

16 October - Somalia has one of the highest rates of mental illness in the world and with a healthcare system devastated by years of war, most sufferers receive no medical help. Many are chained up - to trees or at home... Dr Hab is not actually a real psychiatrist. Rather it's the persona of Abdirahman Ali Awale, a nurse who after three months of specialist training from the World Health Organization (WHO), has made it his mission to rescue Somalia's mentally ill. He claims he is able to treat everything from post-natal depression to schizophrenia. But the alternative to a trip to Hab could be a visit to one of Somalia's popular herbalists or sheikhs who still advocate traditional - and sometimes barbaric - cures. "There is a belief in my country that hyenas can see everything including the evil spirits people think cause mental illness," says Hab. "So in Mogadishu, you will find hyenas that have been brought from the bush and families will pay £350 (\$560) to have their loved one locked in the room overnight with the animal." ...There were only three practising psychiatrists in the whole of Somalia at the last count, and Hab - despite his lack of advanced qualifications - is head of what has become the country's leading provider of mental health services. [BBC News](#)

## Uganda fights stigma and poverty to take on breast cancer

15 October - ...Cancer has long been neglected in developing countries, overshadowed by the struggle against more acute threats like malaria and AIDS. But as nations across the

continent have made remarkable progress against infectious diseases once thought too daunting to tackle, more people are living long enough to develop cancer, and the disease is coming to the forefront. Given the strides poor countries have made against other health problems, they should also be able to improve the treatment of cancer, public health experts increasingly say... Uganda is trying to improve the treatment of all types of cancer in ways that make sense in a place with limited resources. A new hospital and clinic, paid for by the Ugandan government, have been added to the Uganda Cancer Institute in Kampala, though they have not yet opened, for lack of equipment. A research center is being built.

[New York Times](#)

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## **USCENTCOM**

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### **Saudi Arabia: Middle East respiratory syndrome coronavirus (MERS-CoV) – WHO update**

14 October - WHO has been informed of an additional two laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) infection in Saudi Arabia. The patients, both men, aged 55 and 78, were from Riyadh region. They became ill at the end of September 2013 and died in the beginning of October 2013. Both the patients were reported to have had no contact to a known laboratory-confirmed case with MERS-CoV. Globally, from September 2012 to date, WHO has been informed of a total of 138 laboratory-confirmed cases of infection with MERS-CoV, including 60 deaths. [WHO](#)

### **Saudi health authorities ready to assist Hajj pilgrims**

16 October - Between two and three million pilgrims are expected to tour the holy places of Mecca and Medina during the next three days to perform the Hajj, a religious pilgrimage that every Muslim should undertake at least once in his/her lifetime. This represents an enormous organizational challenge including the provision of health care... This year 22 500 health workers from across the Kingdom arrived to staff 25 hospitals with 5250 beds and 141 health centres at 4 main pilgrimage areas. The Emergency Hospital of Mena is built exclusively to serve pilgrims, as it is located between holy sites of Mecca and Arafat, where every pilgrim is supposed to begin the pilgrimage. Closed the rest of the year, the Mena hospital has 190 beds and sees between 10 000 and 12 000 patients daily during the Hajj. New equipment is being introduced this year. Ninety-five small ambulances, described as 'mobile Intensive Care Units (ICU)', each with a doctor, nurse and latest state-of-art technology, will be positioned in crowded areas as to rapidly treat or transfer patients in need, bringing total number of ambulances to 175. [WHO](#)

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## Bulgaria's air is dirtiest in Europe, study finds, followed by Poland



15 October - Hold your breath if you visit Bulgaria. The air in the small Black Sea nation is thicker with several major air pollutants than the air in any other country in Europe, according to [a new study](#) prepared by

Europe's environmental regulators. Bulgaria has the highest concentrations of the two major varieties of particulate matter, which are tiny airborne droplets or gas particles that come from smokestacks, vehicle tailpipes or a variety of other sources. They can lead to health problems from asthma to cancer. Bulgaria also has the highest concentrations of carbon monoxide and sulfur dioxide, according to the report by the European Environment Agency.

[New York Times](#)

## Cancer costing European Union countries 'billions'

13 October - Cancer costs countries in the European Union 126bn euro (£107bn) a year, according to the first EU-wide analysis of the economic impact of the disease. The charity Cancer Research UK said it was a "huge burden". The figures, [published in the Lancet Oncology](#), included the cost of drugs and health care as well as earnings lost through sickness or families providing care. Lung cancer was the most costly form of the disease.

[BBC News](#)

## United Kingdom: Estimate doubled for vCJD carriers

15 October - Twice as many Britons as previously thought could be carrying the human form of "mad cow" disease, variant CJD. Researchers believe one in 2,000 people in the UK is a carrier of the disease linked to eating contaminated beef. Their estimate in the [BMJ](#) comes from studying more than 32,000 samples of human tissue removed during appendix operations carried out between 2000 and 2012 at 41 hospitals. It remains unclear if any of these carriers will ever develop symptoms... To date, there have been 177 UK deaths from vCJD. Most of these occurred in the late 90s and early 2000s. There has been only one death in the last two years... But it appears that relatively few who catch the infectious agent that causes the disease develop symptoms. People can be "silent" carriers for decades and not even know it. [BBC News](#)

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## Mexican cholera outbreak spreads, preventative campaign launched

14 October - A cholera outbreak in central Mexico has risen to 159 confirmed cases and spread to four states as well as the capital, the country's health minister said on Monday. One death has been attributed to the outbreak, the ministry said as it launched a nationwide public health campaign aimed at preventing further infections. [Reuters](#)

## Mexico: Cholera outbreak that first hit Dominican Republic and Cuba now has infected 159 in Mexico

16 October - A cholera outbreak in central Mexico has risen to 159 confirmed cases and spread to four states as well as the capital, the country's health minister said. One death has been attributed to the outbreak, the ministry said as it launched a nationwide public health campaign aimed at preventing further infections. The east-central state of Hidalgo has been the worst affected, with 145 confirmed cases, including the death of a 75-year-old woman... Eight in 10 cases have been successfully treated, the minister said, while those infected with the disease in the past several weeks range in age from three to 86. She added that another 3,075 "probable cases" have been detected. [Fox News Latino](#)

## Mexico takes Bloomberg-like swing at soaring obesity

15 October - ...In a bet against an epidemic of obesity and diabetes, President Enrique Peña Nieto has proposed a tax on sales of all sugary drinks. If it goes through, the tax will make Mexico a rare test case of a national soda tax directed at a severe obesity problem. The proposal has set off heated arguments in Mexico, but in the middle of the debate is an anti-obesity crusader from New York, Mayor Michael R. Bloomberg. Beyond his push to limit the sale of large sugary drinks in his own city, Mr. Bloomberg's foundation is helping to finance the drive to curb them in Mexico as well. Its three-year, \$10 million grant is being used to support anti-obesity advertising campaigns, finance research at Mexico's National Institute of Public Health and promote policies like the soda tax, nutrition labeling and controls on junk-food television advertising aimed at children. The foundation, Bloomberg Philanthropies, calls its work in Mexico a pilot project that could be adapted to other developing countries if it is successful. [New York Times](#)

## U.S.: Dengue virus identified in Houston

9 October - Dengue fever, a virulent tropical disease thought to be eradicated from the United States in the 1950s, has re-emerged in Houston, according to a new study. Baylor College of Medicine scientists are reporting the mosquito-borne virus has recently been transmitted in Houston, the first evidence the disease so prevalent in the developing world has spread to a major U.S. city in large numbers. In the past decade, it has been identified in

Hawaii, south Florida and along the Texas-Mexico border... Murray's team investigated the possibility that dengue might be in Houston because the area has the type of mosquitoes known to carry the virus and a dense population full of frequent travelers south of the border, where the virus is endemic. But the study, published Wednesday in the journal *Vector-Borne and Zoonotic Diseases*, found that most of the infections were transmitted in Houston. [Houston Chronicle](#)

## U.S.: Notes from the field - acute hepatitis and liver failure following the use of a dietary supplement intended for weight loss or muscle building — May–October 2013

11 October - On September 9, 2013, the Hawaii Department of Health (HDOH) was notified of seven patients with severe acute hepatitis and fulminant liver failure of unknown etiology. Patients were previously healthy and sought medical care during May-September 2013. Clinicians reported that the seven patients had all used OxyELITE Pro, a dietary supplement marketed for weight loss and muscle gain, before illness onset... Clinicians reported 45 possible cases to the Hawaii DOH in response to a public health alert. Of those, 29 have been identified as cases. The patients have a median age of 33 years (range: 16–66); 14 (48%) were male. The date of first reported laboratory test was used as a proxy for illness onset and ranged from May 10 through October 3, 2013 (Figure). The most commonly reported symptoms included loss of appetite, light-colored stools, dark urine, and jaundice. [Morbidity and Mortality Weekly Report](#)

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## Australia: More Australians classed obese

17 October - Millions more Australians may be obese than previously thought, because the usual method of measuring obesity has dramatically underestimated the problem. A study of more than 4000 Australian adults found 27 per cent were obese according to their body mass index, a measure of the relationship between their height and weight. This figure matches the latest estimate for the prevalence of obesity in the Australian population. But when researchers measured the waists of their subjects, they found 49 per cent were obese. One of the researchers, Anna Peeters, the head of obesity and population health at the Baker IDI Heart and Diabetes Institute, said body mass index (BMI) was usually used to measure obesity because it was more straightforward than measuring waist circumference. But she said waist circumference was a stronger predictor of health problems such as heart disease and diabetes, and the latest findings showed relying on BMI missed many cases of obesity. [Sydney Morning Herald](#)

## China: Outcry over China plan to ban HIV patients from public baths

14 October - A government proposal to bar HIV patients from using public bathhouses has been condemned in China as discriminatory. The proposal orders public bathhouses to display signs prohibiting "people with sexually transmitted diseases, Aids and infectious skin diseases". It has been posted online for public consultation by China's State Council. But Aids activists and ordinary users of Weibo, China's version of Twitter have strongly criticised the move... The proposal has also been condemned by the United Nations' Aids agency.

[BBC News](#)

## Laos: Anti-cancer vaccine for Laos



14 October - A programme to vaccinate girls against the virus that causes cervical cancer has begun in Laos, South East Asia. It's one of nearly a dozen developing nations where the HPV vaccine is being introduced in the coming year as part of a scheme to enable poorer countries to benefit from the newest vaccines... The project is being organised with the support of the Global Alliance for Vaccines and Immunisation (Gavi)... Cervical cancer is a far bigger cancer killer in

developing countries because most lack a national screening programme, which can detect pre-cancerous changes in the cervix, enabling timely early treatment. In Laos, most cases are discovered too late. Cancer treatment in the world's poorest nations is also limited. Laos has no radiotherapy. Patients who can afford it are sent to Thailand. [BBC News](#)

## Philippines: More than 100 dead after earthquake hits

16 October - The death toll from the magnitude-7.1 earthquake in the central Philippines rose to 144 on Wednesday, authorities said. The quake, which struck Tuesday, injured 291 people and rattled many celebrating a religious holiday. The bulk of the casualties were in Bohol province. More than 20 people are missing, and authorities are checking into reports of people trapped in collapsed buildings, the Philippines News Agency reported. The quake was centered about 620 kilometers (385 miles) south-southeast of Manila, near Catigbian.

[CNN](#)

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## Argentina: Towards mercury-free health care

October 2013 – Like other health workers around the world, staff at the Rivadavia Hospital in Buenos Aires, Argentina depended until recently on medical devices that were, paradoxically, essential for enhancing human health yet contained highly toxic material. The

traditional device to measure blood pressure (called a sphygmomanometer) and the medical fever thermometer both contain mercury. When such devices are broken or discarded, the mercury they contain contaminates the environment. "We did a calculation and realized that the mercury we were dumping during a single week was equivalent to the amount it would take to cause dangerous levels in lake Nahuel Huapi, one of the largest lakes in Patagonia, for a whole year," explains Dr Mercedes Zarlenga, who is responsible for neonatal services at Rivadavia Hospital. Subsequently, the hospital – followed by all medical facilities across Argentina – began phasing out medical devices containing mercury. [WHO](#)

## **Brazil: Thousands of caimans thrive in toxic, sewage-filled waters amid Rio de Janeiro's urban sprawl**

17 October - ...Some 5,000 to 6,000 broad-snouted caimans live in fetid lagoon systems of western Rio de Janeiro, conservationists say, and there's a chance that visitors could have an encounter with one, though experts hasten to add that the caimans, smaller and less aggressive than alligators or crocodiles, are not considered a threat to humans. Some of the animals have already taken refuge in ponds being built inside the Olympic golf course, which abuts a once pristine mangrove-filled lagoon that's now thick with tons of raw sewage pumped from nearby high-end condominiums. [Star Tribune](#)

## **Chile: Is America less mentally healthy than a Chilean jail?**

12 October - The average prison inmate in Chile has better mental health than the average American citizen, according to [an eyebrow raising report just published](#). Researchers Adrian Mundt and colleagues ran a random survey of 1000 participants from among Chile's 47,000 prisoners. Fieldworkers went into the prisons and aimed to determine rates of DSM-IV diagnoses. They found that the 12 month prevalence of any mental disorder in the Chilean prisoners was 26.6%. One in four. That sounds high. But in psychiatric epidemiology, high is relative. A 12-month prevalence 26.6% is higher than the most recent comparable data from the Chilean general population, slightly (22.2%). But 26.6% is quite a bit lower than the 12-month figure for the general population of the USA – 32.4% according to the National Comorbidity Survey Replication (NCS-R) study, which used the same CIDI instrument and assessed the same set of diagnoses. [Discover](#)

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