

14 December 2012

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.

U.S. Army Public Health Command



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Potential Health Risks to DOD Firing-Range Personnel from Recurrent Lead Exposure

The Department of Defense (DOD) asked the National Research Council to evaluate potential health risks from recurrent lead exposure of firing-range personnel. This document will help to inform decisions about setting new air exposure limits for lead on firing ranges, about whether to implement limits for surface contamination, and about how to design lead-surveillance programs for range personnel appropriately.



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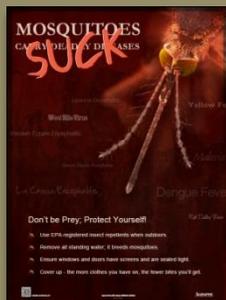
U.S. MILITARY

As Army thins its ranks, unfit miss the cut

11 December - Under intense pressure to trim its budget, the Army is dismissing a rising number of soldiers who do not meet its fitness standards, drawing from a growing pool of troops grappling with obesity. Obesity is now the leading cause of ineligibility for people who want to join the Army, according to military officials, who see expanding waistlines in the warrior corps as a national security concern. Between 1998 and 2010, the number of

Mosquito-borne Disease Poster

A new poster on mosquito-borne diseases and their prevention is available from the **USAPHC Health Information Products catalog**.



active-duty military personnel deemed overweight or obese more than tripled. In 2010, 86,186 troops, or 5.3 percent of the force, received at least one clinical diagnosis as overweight or obese, according to the Armed Forces Health Surveillance Center... During the first 10 months of this year, the Army kicked out 1,625 soldiers for being out of shape, about 15 times the number discharged for that reason in 2007, the peak of wartime deployment cycles. [Early Bird](#)

Substance use disorders in the U.S. Armed Forces, 2000-2011

November 2012 - Drug misuse is associated with serious health consequences and has detrimental effects on military readiness. During 2000 to 2011, 70,104 service members received an incident diagnosis of a substance use disorder (SUD) (excluding alcohol and tobacco-related disorders). Incidence rates declined with increasing age, time in service, rank, and number of combat deployments. Service members in a combat occupation had 1.2 times the rate of individuals in a health care or administration/supply occupation.

[Medical Surveillance Monthly Report](#)

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GLOBAL

HHS offers some forecasts on medical countermeasures

11 December– A new report from the US Department of Health and Human Services (HHS) offers a few predictions on when certain new countermeasures against biological threats will become available, including a forecast for two novel influenza drugs and possibly a next-generation anthrax vaccine within the next 5 years. The 2012 Public Health Emergency Medical Countermeasures (PHEMCE) Implementation Plan outlines expected developments for the next few years for anthrax, smallpox, pandemic flu, botulism, and other bacterial and viral threats. It says HHS's Biomedical Advanced Research and Development Agency (BARDA) "will support advanced development of at least two drugs with novel mechanisms of action through Phase III clinical studies; two drugs are expected to be approved in the U.S." in fiscal years 2015 to 2017. The report also says that two more flu antivirals are expected to be approved in the long term, meaning in fiscal 2018 or later. [CIDRAP](#)

Japan tops list of healthiest countries



13 December - No one knows whether it's their great diet, good health care or just great genes, but after two decades Japanese citizens are still the healthiest people in the world, according to a decades-long study on population health published today. The [Global Burden of Disease](#)

[Study 2010](#), a large-scale collaboration funded by the Bill and Melinda Gates Foundation to assess trends in health and disease in 187 countries, has released its rankings of the top 10 countries with the highest healthy life expectancies. Healthy life expectancy is the number of

**Help
Service members
quit tobacco
in the New Year!**

New Year's is a great time for service members to make smoking or chewing tobacco a thing of the past. Quit Tobacco - Make Everyone Proud (QTMEP) is pleased to offer a collection of free materials for order and download to support military health professionals' tobacco cessation efforts. The 2013 New Year's theme, "Overpower Tobacco", highlights the benefits of fitness to support tobacco cessation.

Visit [QTMEP's New Year's site](#) for a downloadable poster, flyer, and web banners to help you promote tobacco free healthy living in 2013.



years that a person can expect to live in good health. It takes into account number of deaths as well as years of health lost to disability. The United States tied Norway for 29th place in male healthy life expectancy and tied Estonia for 33rd place in highest female healthy life expectancy. [ABC News](#)

Life expectancy rises around the world, study finds

13 December - A sharp decline in deaths from malnutrition and diseases like measles and tuberculosis has caused a shift in global mortality patterns over the past 20 years, according to a new report, with far more of the world's population now living into old age and dying from diseases more associated with rich countries, like cancer and heart disease. The shift reflects improvements in sanitation, medical services and access to food throughout the developing world, as well as the success of broad public health efforts like vaccine programs. The results are dramatic: infant mortality has declined by more than half between 1990 and 2010, and malnutrition, the No. 1 risk factor for death and years of life lost in 1990, has fallen to No. 8. At the same time, chronic diseases like cancer now account for about two out of every three deaths worldwide, up from just over half in 1990. Eight million people died of cancer in 2010, 38 percent more than in 1990. Diabetes claimed 1.3 million lives in 2010, double the number in 1990. [New York Times](#)

New SARS-like virus infects both humans and animals

12 December - A SARS-like virus discovered this summer in the Middle East may infect more than just humans. The pathogen, a close cousin to the one that caused the 2002 to 2003 SARS outbreak, may also be able to infect cells from pigs and a wide range of bat species, researchers report today. The findings may help public health officials track the source of the outbreak and identify the role of wild animals and livestock in spreading the virus, researchers say. Epidemiologists also want to know which species of animals it is capable of infecting to keep the new coronavirus from spreading further. To determine what types of animals hCoV-EMC can infect, Drosten and colleagues infected cells from humans, pigs, and a wide variety of bats, the key natural reservoirs of coronaviruses. The new virus could infect all of these types of cells. [Wired](#)

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INFLUENZA

Armed Forces Health Surveillance Center: DoD Influenza Surveillance Summary

For the week ending 13 December 2012,

- Throughout the MHS, Influenza-Like Illness (ILI) incidence rates decreased or remained the same compared to last week; the percent of all outpatient visits due to ILI increased slightly among the US Overall and EUCOM Other Beneficiaries.

Emergency Preparedness and Response

This page includes information on upcoming training and conference opportunities organized or sponsored by federal agencies or COCA partner organizations, which include non-federal organizations.



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.

- Influenza activity is at moderate levels across the overseas DoD laboratory surveillance network, except in Europe where the activity remains low; sites reported variable co-circulation of influenza A/H1, A/H3, and B. Currently, circulating influenza strains are similar for all components of the 2012-2013 vaccine formulation based recent results of molecular characterization. The influenza vaccination coverage for the DoD (Active Duty component only) is 93%. [AFHSC DoD Influenza Surveillance Summary](#)

CDC: Weekly Influenza Surveillance Report

During week 48 (November 25-December 1), influenza activity increased in the U.S.

- Viral Surveillance: Of 5,511 specimens tested and reported by U.S. World Health Organization (WHO) and National Respiratory and Enteric Virus Surveillance System (NREVSS) collaborating laboratories during week 48, 1,139 (20.7%) were positive for influenza.
- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was below the epidemic threshold.
- Influenza-associated Pediatric Deaths: Three influenza-associated pediatric deaths were reported. One of these deaths was associated with an influenza B virus and two were associated with influenza A viruses for which the subtype was not determined. [FluView](#)

DoD Global Laboratory-Based Influenza Surveillance Program

During week 48 (25 November – 1 December 2012), 61 specimens were collected and tested from 20 locations. There was one A(H1N1pdm09) at Luke AFB, AZ and 23 influenza A/H3 viruses detected (See Table 1 below). Results are preliminary and may change as more results are received.

- The H3N2 specimens characterized by USAFSAM exhibited an overall HA protein identity of 97.8% - 99.1% and an overall NA protein identity of 98.7%-99.4% compared to A/Victoria/361/2011-like virus, the H3N2 component of the 2012-2013 vaccine formulation.
- Since Week 47, there has been an increase in influenza A/H3 virus isolated by USAFSAM and CDC. The CDC reports recent testing on viruses collected since 1 October 2012: 0.0% (0 of 122) of A/H3 viruses tested were resistant to oseltamivir/zanamivir (81 influenza B and two A/(H1N1)pdm09 were also tested and none were resistant).
- To date, 490 specimens have been submitted and tested from 51 locations of which 72 were positive for influenza A (two co-infections of A/H3 & B, 65 A/H3, and five A(H1N1pdm09) and six were positive for influenza B. There have been 52 other respiratory viruses isolated (12 adenovirus, six RSV, four enterovirus, and 30 parainfluenza). [USAF School of Aerospace Medicine](#)

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Early-season rise in U.S. flu activity continues

7 December - Influenza is widespread in eight US states, and some other indicators of an early flu season continue to rise, the Centers for Disease Control and Prevention (CDC) said today. The percentage of patients' respiratory samples testing positive for flu grew to 20.7% in the week ending Dec 1, up from 15.2% the week before. And, as before, the H3N2 strain continues to dominate, which can be a sign of a more severe flu season. The percentage of flu-positive specimens varied widely by region, from 6.2% in the Southwest to 33.5% in Midwestern states. Southern states also reported percentages above the national average... In contrast to the US situation, flu activity in the rest of the Northern Hemisphere has picked up only slowly, the World Health Organization (WHO) said in an update. [CIDRAP](#)

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

7 December - During week 48, all 28 countries reporting experienced low-intensity activity of influenza-like illness or acute respiratory infection.

- Of 520 sentinel specimens tested across 21 countries, 46 (8.8%) were positive for influenza virus. This is an increase compared with week 47/2012 when 3.1% of specimens were positive.
- Of the influenza virus detections in sentinel specimens since week 40/2012, 46% were type A and 54% were type B viruses. Of the A viruses subtyped, two thirds were A(H3) and one third were A(H1).
- The number of RSV detections continued to increase in week 48.
- No hospitalised laboratory-confirmed influenza cases were reported in week 48.
- The proportion of sentinel specimens positive for influenza virus has increased since the early weeks of the season, but there is still little epidemiological evidence of sustained influenza virus transmission in EU/EEA countries. [Weekly Influenza Surveillance Overview](#)

Google.org: Flu Trends

13 December – Estimates of flu activity based on Internet search queries indicate that the levels of flu activity in the northern hemisphere range from minimal in eastern Europe to high in the U.S. and Russia. Levels range from minimal to low in the southern hemisphere.

[Google.org Flu Trends](#)

Naval Health Research Center: Febrile Respiratory Illness Surveillance Update

For the week ending 8 December 2011:

[Adenovirus](#)

Type 14 adenovirus cases continue at MCRD Parris Island, though FRI rates remain low.

[FRI surveillance](#) at all eight U.S. military basic training centers indicated FRI rates were at or below expected values. [NHRC Febrile Respiratory Illness Surveillance Update](#)

Study finds influenza C in kids hospitalized with pneumonia

7 December - Influenza C generally isn't thought to be a cause clinically significant disease, but a study in Italian children who were seen in the emergency department for pneumonia found the virus in five children, with a disease severity that resembled influenza A... Of 391 children included in the study, influenza C was identified in 5 (1.3%). Influenza A was detected in 26 children, and influenza B was found in 3. Influenza C was found only during two of the four seasons: 2008-09 and 2009-10. [CIDRAP](#)

Study finds substantial flu virus shedding even without symptoms

12 December - In a German study, 30% of patients' tested positive for flu the day before symptoms developed, and asymptomatic patients had about the same viral loads as sick patients, according to [a report yesterday in PLoS One](#). Investigators conducted a prospective household study using data from 2007 to 2011 in Berlin and Munich. They analyzed data from 122 index patients and 320 household contacts, of whom 67 became secondary flu case-patients. Of the 189 case-patients, 12 had seasonal H1N1 flu, 19 had H3N2, 98 had pandemic 2009 H1N1, and 60 had influenza B. Nine (14%) of 65 unvaccinated secondary case-patients—all adults—were asymptomatic. Viral loads in patients' nasal specimens peaked on day 1, 2, or 3 for all flu strains, then declined steadily till days 7 through 9. On the day before symptom onset, 12 of 40 specimens (30%) were positive. Viral load in six asymptomatic patients was similar to that in those having symptoms. Infectiousness, as measured by viral culture, lasted 4 to 6 days after symptom onset, and viral load did not seem to be influenced by antiviral therapy, age, or vaccination status, the team found. They conclude, "Asymptomatic/subclinical infections occur infrequently, but may be associated with substantial amounts of viral shedding." [CIDRAP](#)

USAPHC: U.S. Army Influenza Activity Report

1 December – Every state is now reporting influenza activity. Although the season is starting early, there is insufficient data to draw conclusions about severity. Circulating viruses appear well-matched to vaccine.

- ILI Activity: Army incident ILI outpatient visits in week 48 were 21% higher than the same week last year.
- Influenza cases: Two hospitalized influenza cases were reported in DRSi in week 48, and a total of 13 hospitalized cases have been reported during this influenza season.
- Acute Respiratory Disease at BCT sites: ARDS rates remain lower at all Army BCT sites compared to the same period last year.

- Viral specimens: During week 48, 212 of 856 (25%) clinical specimens tested were positive for respiratory pathogens. Influenza A and RSV are the main viruses currently circulating. [USAPHC U.S. Army Influenza Activity Report](#)

PANDEMIC AND AVIAN INFLUENZA

Public health infrastructure key to fighting pandemics, outbreaks: review

A breakdown or absence of public health infrastructure was by far the No. 1 driving factor in recent infectious disease outbreaks of international concern, such as the 2009 H1N1 pandemic and polio, cholera, and yellow fever epidemics, according to a review of nearly 400 outbreaks. A team of US scientists reviewed 197 internationally significant outbreaks from 1996 through 2009 and identified driving factors that contributed to each. They found that a breakdown or absence of public health infrastructure was the driving factor in 39.5% of the outbreaks, and that all other driving factors—such as climate change, urbanization, and international travel and trade—accounted for less than 10% of outbreaks. They conclude: "We suggest a central role for development agencies in pandemic prevention and highlight three critical policy issues." The team suggests that agencies (1) develop policies that deal with different stages of emergence, from spillover and localized outbreaks to pandemic spread, (2) use a systems approach to pandemic prevention that addresses pathogen dynamics at the intersection of people and their environment, and (3) shift funding from short-term emergency funds to a longer-term strategy. [CIDRAP](#)

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VETERINARY/FOOD SAFETY

Beef's raw edges

9 December - ..."If you look at tonnage, 80 percent of the total of all the antibiotics we use in the states is used in meat animals," [Jason Newland, director of the Children Mercy's] said. As in humans, bacteria growing inside animals that are given antibiotics can develop a resistance to the medicines, Newland explained. That resistant bacteria can then be transferred to the soil through animal waste. During severe storms, such as the EF5 tornado which killed 161 people in Joplin, that contaminated soil can end up in open wounds, and even modern medicine is challenged in combating the serious infections that can occur... A yearlong investigation by The Kansas City Star found a multimillion-dollar-a-year pharmaceutical arms race in the beef industry is not just about curing sick cows. It's also about fattening cattle cheaply and quickly, driven in part by efforts to maximize profits, according to food safety advocates. In fact, the same number of cattle today are producing twice as much meat as they did in the 1950s because of genetics, drugs and more efficient processing. [Kansas City Star](#)

New tests could hamper food outbreak detection



11 December - New tests that promise to speed up diagnosis of food poisoning pose an unexpected problem: They could make it more difficult to identify dangerous outbreaks like the one that sickened people who ate a variety of Trader Joe's peanut butter this fall. The new tests could reach medical laboratories as early as next year, an exciting development for patients. They could shave a few days off the time needed to tell whether E. coli, salmonella or other foodborne bacteria caused a patient's illness, allowing faster treatment of sometimes deadly diseases. The problem: These new tests can't detect crucial differences between different subtypes of bacteria, as today's tests can. And that fingerprint is what states and the federal government use to match sick people to a contaminated food. [Huffington Post](#)

Service dogs pick up scent of diabetes danger

10 December - ... Diabetic, or hypoglycemic, "alert dogs" are a growing class of service dogs best known for guiding the visually impaired, sniffing out drugs and bombs, or providing mobility assistance for people with severe disabilities. Most recently, they have been trained to sniff out cancer and oncoming seizures. Toni Eames, president of International Association of Assistance Dog Partners, estimates there are over 30,000 assistance dogs working in the U.S., including dogs that have been trained by individuals. The dog's accuracy and speed can beat medical devices, such as glucose meters and continuous glucose monitors, according to doctors, owners and trainers. With their acute sense of smell, the dogs—mostly retrievers—are able to react to a scent that researchers haven't yet identified. [Wall Street Journal](#)

U.S., China agree to continue cooperation on food safety

11 December - The U.S. Food and Drug Administration (FDA) announced today that it has renewed an agreement with the General Administration of Quality Supervision, Inspection, and Quarantine of China (AQSIQ) to enhance cooperation between the U.S. and China on food and feed safety. The two countries entered into the original agreement in 2007, and today's announcement extends the agreement for an additional five years.

The agreement includes:

- enhancement of FDA's ability to identify high-risk food products entering the United States from China
- collaboration to facilitate inspections of facilities that process and produce food
- a focus on high-risk foods frequently exported from China to the United States, including canned and acidified foods, pet food and aquaculture
- the creation of processes for FDA to accept relevant, verified information from AQSIQ regarding registration and certification. [FDA](#)

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WELLNESS

Brief dynamic vs. supportive therapy for mild-to-moderate depression

10 December - ... The patients in this study had a mixture of diagnoses and had focal problems or life events that were presumably driving or contributing to their depressive symptoms. Within this population, brief dynamic therapy was the superior treatment for patients with moderate symptoms. [Journal Watch](#)

Calorie tracking apps may help boost weight loss



11 December - A [new study](#) published in the Archives of Internal Medicine concludes that a mobile app can help boost weight loss, if it's used as part of a more comprehensive strategy. Researchers at Northwestern University studied about 70 overweight men. Their average age was 58, so they weren't exactly born with smart phones in their hands. Some of the men were asked to log their eating and activity using old-fashioned pen and pad. Others were given a mobile app, and their behaviors were monitored by a coach who provided short, telephone-based check-in sessions periodically during the study. In addition, all of the participants were offered group classes in nutrition and behavior change. So who did best? The men who used the mobile app and attended 80 percent of the health education classes. [NPR](#)

How well do you rise from sitting on the floor?

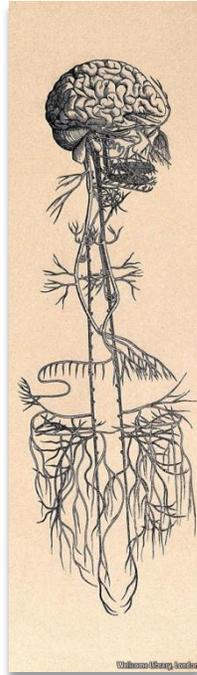
13 December - The ability to sit and then rise from the floor is a strong predictor of the risk of death in middle-aged and elderly people, according to a new study. The sitting-rising test reveals a person's level of musculoskeletal fitness, explained Dr. Claudio Gil Araujo and colleagues at the Clinimex Exercise Medicine Clinic in Rio de Janeiro, Brazil. Their study included more than 2,000 men and women, aged 51 to 80, who were told to sit on the floor and then try to rise, using only the minimum amount of support -- such as a hand or knee -- they needed. They were also told not to worry about how fast they did the test. The participants were ranked on a score of zero to 10. People who scored 10 did not use any support to sit or rise from the floor. After doing the sitting-rising test, the participants were followed for an average of about six years. During the follow-up period, nearly 8 percent of the participants died. Most of those deaths occurred among people with low test scores. Only two people who scored 10 on the test died. [U.S. News and World Report](#)

Stress-resilience/susceptibility traced to neurons in reward circuit

13 December - A specific pattern of neuronal firing in a brain reward circuit instantly rendered mice vulnerable to depression-like behavior induced by acute severe stress, a study supported by the National Institutes of Health has found. When researchers used a

high-tech method to mimic the pattern, previously resilient mice instantly succumbed to a depression-like syndrome of social withdrawal and reduced pleasure-seeking -- they avoided other animals and lost their sweet tooth. When the firing pattern was inhibited in vulnerable mice, they instantly became resilient. [NIH](#)

Think yourself well



8 December – ...[R]espectable research has demonstrated that those who frequently experience positive emotions live longer and healthier lives. They have fewer heart attacks, for example, and fewer colds too. Why this happens, though, is only slowly becoming understood. What is needed is an experiment that points out specific and measurable ways in which such emotions alter an individual's biology. And a study published in *Psychological Science*, by Barbara Fredrickson and Bethany Kok at the University of North Carolina at Chapel Hill, does precisely that. Dr Fredrickson and Dr Kok concentrated their attentions on the vagus nerve. This nerve (illustrated right, in an early anatomical drawing) starts in the brain and runs, via numerous branches, to several thoracic and abdominal organs including the heart. Among its jobs is to send signals telling that organ to slow down during moments of calm and safety. How effectively the vagus nerve is working can be tracked by monitoring someone's heart rate as he breathes in and out. Healthy vagal function is reflected in a subtle increase in heart rate while breathing in and a subtle decrease while breathing out. The difference yields an index of vagal tone, and the value of this index is known to be connected with health. Low values are, for example, linked to inflammation and heart attacks. ...[R]ecent work that showed something else about the vagal-tone index: people with high tone are better than those with low at stopping bad feelings getting overblown. They also show more positive emotions in general. This may provide the missing link between emotional well-being and physical health. [Economist](#)

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USAFRICOM

Nigeria: EU expresses concern over outbreak of polio

12 December - The European Union yesterday expressed its concern over the latest outbreak of wild polio virus in Nigeria. The Kaduna State government recently recorded 10 cases of wild polio virus in Birnin Gwari, Ikara, Igabi, Kubau and Zaria local government areas of the state. The Head of the EU Delegation to Nigeria, Dr David Macrae, raised the concern at a forum with reporters in Abuja on the operations of the EU in Nigeria and the West African sub-region. Macrae who expressed the union's determination to support the immunisation process in Northern Nigeria to curb the spread of the disease, noted that there was need for access to potable water in the affected areas. [allAfrica](#)

Republic of Congo: Torrential rains kill 13, displace hundreds



13 December - Torrential rains have killed at least 13 people, injured 29 and displaced hundreds in districts south of Brazzaville, the capital of the Republic of Congo, say officials. The heavy rains came on 8-9 December. "After the rains, we sent rescue services, who were able to recover nine bodies. The [Congolese] Red Cross recovered four bodies of people who had drowned," said Maurel Kihounzou, the mayor of the first district of Makélékélé, south of the capital. The seventh district of Mfilou was also affected, according to a 10 December report from the government, which noted that houses collapsed under the pressure of the flood waters, killing several people as they slept. Some 564 families had also been left without shelter, according to Clément Essiéké, the minister of humanitarian action. [IRIN](#)

Yellow fever in Sudan - update

6 December - As of 4 December, a total of 732 suspected cases of yellow fever, including 165 deaths have been reported in 33 out of 64 localities in Darfur. Laboratory results have confirmed yellow fever by IgM ELISA test and PCR in 40 clinical samples... Currently, the Federal Ministry of Health is organizing an emergency mass vaccination campaign against yellow fever. [WHO](#)

Yellow fever in the Republic of Congo

12 December - The Ministry of Health of the Republic of Congo is launching an emergency mass-vaccination campaign against yellow fever in Ewo District in Cuvette-Ouest region, beginning next week. The emergency vaccination campaign aims to cover approximately 35,000 people in three health districts of Mbama, Ewo and Okoyo, all of which belong to the administrative district of Ewo. The emergency vaccination campaign is being carried out after recent confirmation of a case with yellow fever virus infection that occurred in October 2012. The case was identified through the national surveillance programme for yellow fever. [WHO](#)

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USCENTCOM

Chief Army Nurse visits Afghanistan



11 December - Maj. Gen. Jimmie O. Keenan, the commanding general of U.S. Army Public Health Command, and chief of the Army Nurse Corps, met with medical providers at Bagram Airfield, Afghanistan, Dec. 8. The visit included updates from critical care nurses attached to Charlie Company, 6th Battalion, 101st Combat Aviation Brigade, plus Airmen from 455th Air Expeditionary Wing at the Craig

Joint Theater Hospital, and various medical detachments. The command team also met with chief nurses across theater via teleconference to discuss various issues.... Addressing Soldiers of the 791st Preventive Medicine Detachment, Command Sgt. Major Gerald C. Ecker of U.S. Army Public Health Command, praised the unit for their work. Ecker described PM as "forward thinking medicine" and "stealth health." Though often a forgotten science, PM provides mission-essential force health protection and has gained respect across the Army. [Army.mil](#)

Early warning disease surveillance after a flood emergency — Pakistan, 2010

14 December - During July–August 2010, Pakistan experienced extreme flooding that affected approximately 18 million persons. In response to the emergency, Pakistan's Ministry of Health and the World Health Organization (WHO) enhanced an existing disease early warning system (DEWS) for outbreak detection and response... Daily disease counts were reported from health facilities in four provinces containing 98% of the flood-affected population. During July 29, 2010–September 15, 2010, approximately 5.6 million new patient visits were reported. The most frequent conditions reported were skin diseases (18.3%), acute respiratory infection (15.1%), and acute diarrhea (13.3%). A total of 130 outbreak alerts were documented, of which 115 (88.5%) were for acute watery diarrhea (AWD) (suspected cholera). Of these, 55 alerts (47.8%) had at least one microbiological sample with confirmed cholera. Overall, DEWS was useful in detecting outbreaks, but it was limited by problems with data quality. [Morbidity and Mortality Weekly Report](#)

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USEUCOM

Portugal: Madeira dengue fever outbreak tops 2,000 cases

13 December - In what is the first sustained transmission of dengue fever on the European continent in nine decades, Portuguese health authorities report that the Madeira Island dengue outbreak has topped 2,000 cases since its beginning in early October, according to a [European Centre for Disease Prevention and Control \(ECDC\) news release](#) Dec. 13. According to the Portuguese Ministry of Health, as of Dec. 9, there has been 2,050 cases of dengue infection from the Autonomous Region of Madeira. This total is up from 1,993 cases reported four days prior. During the current outbreak than began Oct. 3, 12 people required hospitalization for their illness. Although the vast majority of the cases were in the local population, the number of European tourists to the island contracting the mosquito borne viral disease has continued to rise. [Global Dispatch](#)

United Kingdom: Norovirus outbreak 'could hit 750,000 people'



13 December - More than 750,000 people could be affected by an outbreak of norovirus in the UK, the Health Protection Agency (HPA) has said. There have been 2,630 confirmed reports of norovirus so far this season, but for every reported case there were likely to be a further 288 unreported sufferers, the HPA said. It means 757,440 people could be affected by the stomach bug – a 72% increase so far this season. The HPA said: "Laboratory-confirmed reports represent only a small proportion of the actual amount of norovirus activity in the community, because the vast majority of affected people do not access healthcare services as a result of their illness." Among those affected are passengers on board a cruise liner in the Baltic, who have been confined to their rooms and warned not to leave the ship. [Guardian](#)

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USNORTHCOM

2012 West Nile virus update

11 December - As of December 11, 2012, 48 states have reported West Nile virus infections in people, birds, or mosquitoes. A total of 5,387 cases of West Nile virus disease in people, including 243 deaths, have been reported to CDC. Of these, 2,734 (51%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 2,653 (49%) were classified as non-neuroinvasive disease. The 5,387 cases reported thus far in 2012 is the highest number of West Nile virus disease cases reported to CDC through the second week in December since 2003. Eighty percent of the cases have been reported from 13 states (Texas, California, Louisiana, Illinois, Mississippi, South Dakota, Michigan, Oklahoma, Nebraska, Colorado, Arizona, Ohio, and New York) and a third of all cases have been reported from Texas. [CDC](#)

Drug-resistant C. difficile bug traced to source in US and Canadian hospitals

9 December - A lethal drug-resistant bug that spread rapidly around the world and killed tens of thousands of people has been traced to hospitals in the US and Canada. British researchers used powerful genetic techniques to reconstruct *Clostridium difficile*'s route as it circled the globe, and identified four separate waves that brought the bug to Britain. In all but one instance, the pathogen crossed the Atlantic. The detailed map of the epidemic shows that two highly virulent strains emerged independently in North America after the pathogens evolved resistance to a frontline antibiotic in wide use at the time. The genetic sleuthing demonstrates the extraordinary information that scientists can glean from the DNA of infectious organisms. Within the next few years, rapid and real-time surveillance of pathogens is expected to become standard practice. [Guardian](#)

FDA review of tobacco products grinds to a halt

13 December - Tobacco companies have introduced almost no new cigarettes or smokeless tobacco products in the U.S. in more than 18 months because the federal government has prevented them from doing so, an Associated Press review has found. It's an unprecedented pause for an industry that historically has introduced dozens of new products annually, and reflects its increasingly uneasy relationship with the Food and Drug Administration, which in 2009 began regulating tobacco. Officials at the FDA say applications for new products have languished because of "significant deficiencies" and because the agency is taking extra care in reviewing products that pose public health risks. Industry executives say cigarettes haven't changed in any meaningful way and the delays don't make sense. [Yahoo! News](#)

Traffic deaths at lowest point in 62 years

10 December - Deaths behind the wheel of an automobile fell last year to the lowest level since the Truman administration, but there was an increase in fatalities among bicyclists, pedestrians, motorcycle riders and big-rig truck drivers, according to federal figures released Monday. Overall, highway deaths dropped to 32,367, almost two percent lower than they were in 2010, and a 26 percent decline since a peak in 2005... The downward national trend began before the recession took some drivers off the roads, and it accelerated last year. It has been attributed to several factors, including increased use of air bags, seat belts and other vehicle safety features, improved roadway designs, and increasing awareness of the perils of driving drunk... The NHTSA data said the number of people killed in distraction-related accidents increased almost 2 percent, to 3,331, from 2010 to 2011. Federal and highway safety advocates said the increase may reflect better reporting of the distraction issue than an actual increase in fatalities. [Washington Post](#)

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Disasters: Asia's 2012 figures and trends



11 December - The good news: fewer people died from natural disasters in Asia in 2012 than in previous years. The bad news: between January and October, natural disasters still claimed more lives here than anywhere else in the world - and experts predict the trend will continue as populations and industries expand in a region that already houses the world's largest number of urban residents. "Cities are growing. There will be even more people and factories. If you think we have a problem now, we will have even more in the future," said Jerry Velasquez, head of the Asia-Pacific office for the UN Office for Disaster Risk Reduction (UNISDR). The agency estimates the number of people living in flood-prone urban areas in East Asia may reach 67 million by 2060. [IRIN](#)

Philippines: Toll from typhoon above 700 and likely to rise, authorities say

11 December - The death toll from the destructive typhoon that savaged the southern Philippines last week has climbed above 700, authorities said Tuesday, warning that the final number may be much higher. Nearly 900 people are still unaccounted for in the aftermath of Typhoon Bopha, the strongest and deadliest storm to hit the Philippines this year, according to the country's emergency management agency. The numbers of dead and missing have risen drastically during the past several days as government officials have gathered information from isolated areas where the scale of the devastation was previously unknown. Both of the grim totals are likely to increase further this week, said Benito Ramos, head of the National Disaster Risk Reduction and Management Council, the emergency agency. Search and rescue efforts are continuing, he said, despite the declining chances of finding people alive... Hundreds of thousands of people are living in evacuation centers or relying on the government for other kinds of assistance, according to the national emergency agency. [CNN](#)

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USSOUTHCOM

Cholera outbreak in Cuba kept mostly quiet

9 December – Cuba, especially the eastern third of the island, is suffering an alarming outbreak of cholera, brewed in its decrepit water and sewer systems and fueled by Hurricane Sandy's floods, according to residents. More than a dozen deaths have been reliably reported. Hospitals and prisons have been quarantined at times. Schools have been shut down, and so have restaurants and street kiosks... Cuba's government has said nothing publicly about cholera since Aug. 28, when it announced that an outbreak in the eastern city of Manzanillo – the first in a century – had ended after 417 confirmed cases, three fatal.

[McClatchy](#)

UN unveils cholera elimination plan for Haiti, Dominican Republic

12 December – United Nations (UN) officials yesterday launched a new initiative to eliminate cholera from Haiti and the Dominican Republic, using short-term measures such as targeted vaccine use and more permanent ones such as ensuring a clean drinking water supply. UN Secretary-General Ban Ki-moon announced the details at UN headquarters in New York City, according to a UN press release. The comprehensive plan has been anticipated by some global health experts, who have predicted that it would cost \$2.2 billion over the next decade and would include the biggest effort yet to improve Haiti's almost nonexistent water and sanitation system, thought to be a crucial step for halting the disease. [CIDRAP](#)

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