3 October 2014

Army Public Health Weekly Update

U.S. Army Public Health Command

Contents

U.S. MILITARY

- Federal research seeks alternatives to addictive opioids for veterans in pain
- Study finds troops aren’t ready for civilian life
- U.S. military hospitals are ordered to improve care, access and safety
- Walgreens partners with the Department of Veterans Affairs to expand veterans access to flu and other recommended vaccinations

GLOBAL

- Afghanistan is worst country for older people: index
- Child mortality falls worldwide, but not fast enough, study finds
- HHS awards contract for drug to combat ‘cytokine storm’
- Lower IQ in children linked to chemical in water
- Scientists put living human tissue on silicon chip
- WHO: Saudi MERS patient in Austria was sick during travel
- EBOLA VIRUS DISEASE
  - A hospital from hell, in a city swamped by Ebola
  - African children orphaned by Ebola shunned, face death, UNICEF says
  - Canada vaccine shipped to Geneva, U.S. hospitals as precaution
  - Delay in Dallas Ebola cleanup as workers balk at task
  - Ebola outbreak: Liberia’s newest, largest treatment clinic already at capacity
  - MSF rejects Ebola cash and asks for medics
  - Nigeria’s actions seem to contain Ebola outbreak
  - Official: No problems in transfer of patient exposed to Ebola
  - Officials: ‘About 100’ people may have had contact with the Texas Ebola patient
  - Rappers tune up the fight against Ebola
  - Scientists grapple with ethics in rush to release Ebola vaccines
  - U.S. patient aided Ebola victim in Liberia
  - U.S. troops head to Africa for Ebola mission
  - U.S. will increase production of the Ebola drug ZMapp, but may not meet demand
  - WHO experts flesh out Ebola vaccine plans
INFLUENZA

- CDC unveils 6-phase pandemic response blueprint
- CDC: Weekly Influenza Surveillance Report
- Federal contracts aim at faster flu testing, better pandemic response
- Naval Health Research Center: Febrile Respiratory Illness Surveillance Update
- Plant-based vaccines challenge big pharma for $3 billion flu market
- Study finds higher flu vaccine protection in previously unvaccinated
- Update: Influenza activity — United States and Worldwide, May 18–September 20, 2014

VETERINARY/FOOD SAFETY

- FDA notes mixed findings regarding antibiotic use in animals
- Multistate live-poultry *Salmonella* outbreak reaches 344 cases
- Vets face rising worry over fleas

WELLNESS

- A weakening sense of smell could mean death is near
- Free, long-acting birth control cuts teen pregnancy, abortions
- How exercise may protect against depression
- Most painkiller abusers unprepared for overdose
- Study: ‘Fat tongue’ may be a factor in sleep apnea
- Study: Public feels more negative toward people with drug addiction than those with mental illness

USAFRICOM

- Ebola outbreak shuts down malaria-control efforts
- Now hunger threat shadows Ebola in West Africa
- South Africa: Health and health care in South Africa — 20 years after Mandela

USCENTCOM

- Pakistan: Karachi’s polio vaccinators in the crosshairs
- Saudi Arabia: Surgical masks, travel bans as Hajj begins
- Syria: Drug in vaccine that killed Syrian children has been identified, says WHO

USEUCOM

- Dramatic rise in gonorrhea cases in Northern Ireland - Public Health Agency
- Macedonia: Public health self-assessment process initiated in the former Yugoslav Republic of Macedonia
- The Netherlands: Four ‘holy grail’ objectives for future public health

USNORTHCOM

- U.S.: Child dies from Enterovirus D68 complications; neurologic symptoms increasingly reported
- U.S.: Chikungunya cases reach 1,200
- U.S.: DEA makes Vicodin, some other pain meds harder to get
- U.S.: Five babies in Texas test positive for TB after possible mass exposure
- U.S.: HHS releases 13th report on carcinogens
- U.S.: HIV treatment, awareness lacking among U.S. gay, bisexual men
- U.S.: Limb frailty in children is studied for link to virus
- U.S.: OIG - FEMA’s system for distributing emergency supplies not up to the task
- U.S.: Study - *C diff* rose 82% in US hospitals in 10 years
Scholarly articles and other sources about the Ebola outbreak

Scientific American has listed reliable information sources on the topic of the Ebola outbreak:

- U.S. National Library of Medicine’s Disaster Information Management Research Center: Ebola Outbreak 2014
- MedlinePlus
- WebMD
- European Centre for Disease Prevention and Control
- News stories and collections
  - Scientific American: Ebola: What you need to know
  - British Medical Journal: Ebola virus disease
  - Nature: Ebola outbreak in West Africa

Governmental websites

- World Health Organization: Ebola Portal
- WHO Global Alert and Response: Ebola virus disease
- U.S. Centers for Disease Control (CDC): Ebola (Ebola Virus Disease)
- U.S. CDC Travelers Health: Ebola
- United Kingdom Topic: Ebola virus
- South Africa Department of Health: Ebola

USPACOM

- Japan: Why deadly Japan volcano erupted without warning
- Malaysia: Dengue cases expected to increase from end of November — Minister
- Philippines: Dengue cases in Northern Mindanao continue to rise
- Typhoid fever surveillance and vaccine use — South-East Asia and Western Pacific Regions, 2009–2013

USSOUTHCOM

- Brazil releases ‘good’ mosquitoes to fight dengue fever
- Caribbean chikungunya cases approach 750,000

U.S. MILITARY

Federal research seeks alternatives to addictive opioids for veterans in pain

25 September - The National Institutes of Health and the Department of Veterans Affairs this week announced that they will launch a five-year, $21.7 million initiative to study the effectiveness of alternative therapies to opioids through a series of 13 research projects. Nearly half of all troops returning home from Afghanistan and Iraq are suffering from chronic pain, more than double the civilian population, according to the Journal of the American Medical Association. Many of those veterans have been prescribed opioids. The drugs often have disabling side effects, and some studies show they are often addictive and may exacerbate pain conditions in some patients. Washington Post


September 2014 - From 1 January 2003 through 31 December 2012, active component service members were diagnosed with 244,248 incident fractures (19.4 per 1,000 person-years [p-yrs]). Hand and foot/ankle fractures were the most common types. During the same surveillance period, recruit trainees were diagnosed with 18,773 incident fractures (66.0 per 1,000 p-yrs). Annual incidence rates among trainees declined 38% from 2003 to 2012. Stress fractures were the most common type in this population. From 1 January 2008 through 31 December 2012, deployed service members were diagnosed with 12,328 incident fractures (16.5 per 1,000 p-yrs). The most common sites of fracture among the deployed population were the hand, foot/ankle, and arm. Medical Surveillance Monthly Report
Study finds troops aren't ready for civilian life

1 October - A new study released Tuesday says half of U.S. troops return to civilian life with untreated mental and physical illnesses, and one in every 10 has thought of suicide or planned to take their lives. The survey of Los Angeles County veterans showed that 80 percent of veterans didn’t have a job when they left the military, and close to a quarter earned salaries at or below the poverty level. It also discovered that 40 percent of the veterans surveyed hadn’t made arrangements for a permanent place to live before leaving the armed services, contributing to veterans’ homelessness. Though the snapshot of veterans was taken in Los Angeles County, where slightly more Hispanics and Asians resettle after leaving the armed forces, the lead author of the USC School of Social Work study said it reflected issues veterans face nationwide. Military.com

U.S. military hospitals are ordered to improve care, access and safety

1 October - Defense Secretary Chuck Hagel ordered the military on Wednesday to improve access to treatment, quality of care and patient safety at its hospitals and clinics, giving underperforming hospitals four to six weeks to show how they will address shortcomings. At a Pentagon news conference, Mr. Hagel said that the military’s 54 hospitals and hundreds of clinics in the United States and abroad deliver care that is comparable to that of an average civilian system. “But we cannot accept average,” he said. In three pages of directives to the heads of the armed services, he ordered efforts to improve a system that outside experts described as awash in mediocrity, with pockets of excellence and trouble spots... Mr. Hagel’s directives hew to the findings of a 645-page report that a panel of military and civilian experts produced. New York Times

Walgreens partners with the Department of Veterans Affairs to expand veterans access to flu and other recommended vaccinations

2 October – Walgreens... today announced a first-of-its-kind partnership with the Department of Veterans Affairs (VA) to improve care coordination and integrate immunization records for more than 8.5 million VA-enrolled patients. Through its 8,200 locations nationwide, Walgreens pharmacists can provide veterans with greater access to flu and other CDC-recommended vaccinations. Walgreens pharmacists also will leverage the eHealth exchange through Walgreens electronic health record (EHR) platform to securely share immunization records with the VA and help ensure complete patient medical records. MarketWatch
GLOBAL

Afghanistan is worst country for older people: index

1 October - Afghanistan is the worst country to live in as an older person, an annual index on the wellbeing of the elderly showed on Wednesday. The Asian country was ranked bottom for the second consecutive year in HelpAge International's Global AgeWatch Index, its health situation in particular the poorest in the world. Norway topped the index - up one place from last year - followed by Sweden, Switzerland, Canada and Germany, all of which remained in the top 10. Apart from Japan - ranked ninth - the 10 best performers were again in western Europe, North America and Australasia. The report, which focused on pensions and warned that half the world’s population faces a bleak future without one, comes at a time when life expectancy continues to rise. Reuters

Child mortality falls worldwide, but not fast enough, study finds

1 October - Despite advances, millions of children worldwide still die before their fifth birthday, with complications from preterm birth and pneumonia together killing nearly 2 million young children in 2013, according to a study led by the Johns Hopkins Bloomberg School of Public Health. Their report, published online Oct. 1 in The Lancet, examines what caused an estimated 6.3 million children under the age of five to die in 2013, one-third fewer than the 9.9 million estimated to have died around the world in 2000. While preterm births and pneumonia were also the top killers in 2000, complications from childbirth are now the third most common cause of death in this group, displacing diarrhea, a disease for which there have been many advances in treatment in the developing world. Johns Hopkins Bloomberg School of Public Health News

HHS awards contract for drug to combat 'cytokine storm'

29 September - The Department of Health and Human Services (HHS) has awarded Atox Bio of Israel up to $23.9 million to develop a drug candidate that modulates the inflammatory response and may combat a complication of severe infections known as a "cytokine storm," HHS said in a news release today. The drug, called AB103, might be used to treat "flesh-eating" bacteria and potential bioterror diseases such as plague. It modulates the body’s cytokine response without repressing the normal immune response, HHS said in the release... One condition the drug might be able to counter is sepsis, which might or might not be associated with a cytokine storm, HHS said. Sepsis can occur with several diseases, including plague and tularemia, avian flu, bacterial pneumonia, and infection with multidrug resistant bacteria. CIDRAP News Scan (fourth item)

Lower IQ in children linked to chemical in water

30 September - Babies born to mothers with high levels of perchlorate during their first trimester are more likely to have lower IQs later in life, according to a new study. The
research is the first to link pregnant women’s perchlorate levels to their babies’ brain development. It adds to evidence that the drinking water contaminant may disrupt thyroid hormones that are crucial for proper brain development. Perchlorate, which is both naturally occurring and manmade, is used in rocket fuel, fireworks and fertilizers. It has been found in 4 percent of U.S. public water systems serving an estimated 5 to 17 million people, largely near military bases and defense contractors in the U.S. West, particularly around Las Vegas and in Southern California. Scientific American

Scientists put living human tissue on silicon chip

2 October - Testing new drugs for safety and effectiveness is an expensive and time-consuming process. Designing silicon computer chips that mimic human organs, can make that process faster and cheaper. The silicon chips, smaller than a child's hand, are lined with living cells that function and respond like specific organs. The chips are being created as part of the Tissue Chip for Drug Screening Program to evaluate the safety of drug compounds. VOA

WHO: Saudi MERS patient in Austria was sick during travel

2 October - The Saudi Arabian woman who was found to have MERS-CoV during a visit to Austria was sick before she arrived in the country, and two of her close contacts are being tested for the virus as a result of respiratory symptoms, the World Health Organization (WHO) said today. In addition, late yesterday the Saudi Arabian Ministry of Health (MOH) reported a new case involving a 65-year-old man and the death of a 43-year-old whose case was announced earlier. CIDRAP

EBOLA VIRUS DISEASE

A hospital from hell, in a city swamped by Ebola

1 October - ... As the Ebola epidemic intensifies across parts of West Africa, nations and aid agencies are pledging to respond with increasing force. But the disease has already raced far ahead of the promises, sweeping into areas that had been largely spared the onslaught and are not in the least prepared for it. The consequences in places like Makeni, one of Sierra Leone’s largest cities, have been devastating... Bombali, the district that includes this city, went from one confirmed case on Aug. 15 to more than 190 this weekend, with dozens more suspected. In a sign of how quickly the disease has spread, at least six dozen new cases have been confirmed in the district in the past few days alone, health officials said. The government put this district, 120 miles northeast of the capital, Freetown, under
quarantine late last week, making official what was already established on the ground. Ebola patients are dying under trees at holding centers or in foul-smelling hospital wards surrounded by pools of infectious waste, cared for as best they can by lightly trained and minimally protected nurses, some wearing merely bluejeans. New York Times

African children orphaned by Ebola shunned, face death, UNICEF says

30 September - Sept. 28, 2014: Thousands of African children who have lost parents to Ebola are facing a “potential death sentence” as they are at risk of being shunned from society, UNICEF says. The U.N. organization said Tuesday that at least 3,700 children in Guinea, Liberia and Sierra Leone have lost one or both parents to Ebola… “Orphans are usually taken in by a member of the extended family, but in some communities, the fear surrounding Ebola is becoming stronger than family ties.” UNICEF says reports suggest that the number of children orphaned by Ebola has spiked in recent weeks and is projected to double by mid-October. Fox News

Canada vaccine shipped to Geneva, U.S. hospitals as precaution

1 October - Canada has shipped small amounts of its experimental vaccine for the Ebola virus to hospitals in Geneva and Atlanta, Georgia for possible use by exposed health care workers, Canadian chief public health officer Greg Taylor said on Wednesday. Taylor said Canada “pre-shipped” some vaccine to Geneva some time ago, but that its donation to the World Health Organization of 800 to 1,000 doses remains in a Canadian government lab. Reuters

Delay in Dallas Ebola cleanup as workers balk at task

2 October - More than a week after a Liberian man fell ill with Ebola and four days after he was placed in isolation at a hospital in Dallas, the apartment where he was staying with four other people had not been cleaned and the sheets and dirty towels he used while sick remained in the home, health officials acknowledged on Thursday afternoon… The four family members who are living there are among a handful who have been directed by the authorities to remain in isolation, following what officials said was a failure to comply with an order to stay home… The Texas health commissioner, Dr. David Lakey, told reporters during an afternoon news conference that health workers should have moved more swiftly to clean the apartment but that they had had trouble finding an outside medical team to do the work. They encountered “a little bit of hesitancy,” he said. New York Times

Ebola outbreak: Liberia's newest, largest treatment clinic already at capacity

29 September - Liberia’s newest and largest Ebola treatment centre was desperately needed to combat the spread of the fatal virus, yet the facility has barely helped to stop the worst
outbreak in recorded history. The centre, known as Island Clinic, was exactly seven days old when CBC News toured the “green zone,” or safe zone, of the facility on Sunday. It has almost doubled the Ebola treatment capacity in Liberia’s capital city of Monrovia, a major urban centre overwhelmed by an exponentially increasing number of cases of the deadly virus. When it opened, there were 120 beds available. Within hours, the clinic was already stretched — every space available filled with the city’s most frightened and seriously ill. Somehow, room was made for more patients and currently, by adding beds and sofas where possible, staff estimate the total number is likely closer to 200. CBC

MSF rejects Ebola cash and asks for medics

2 October - Global aid agency Doctors Without Borders (MSF) has said it rejected cash for the Ebola response from Australia, asking the country instead to deploy desperately-needed medical teams to West Africa. Canberra initially offered 2.5m Australian dollars ($2.2m), the charity said on Wednesday, before providing an additional donation of 18m Australian dollars ($16m) on Thursday.”The government has assessed that, at this stage, financial contributions are the best and most efficient way Australia can make a rapid contribution to the global response and support front-line health services in the affected countries,” Foreign Minister Julie Bishop said in a statement. She said that the additional donation was provided in response to a UN appeal for $50m to meet needs over the next month. But MSF said the previous day that it had reached its logistical limitations and could not increase its assistance in Liberia, Sierra Leone, and Guinea, the three countries most affected by the epidemic which killed at least 3,000 people. Al Jazeera

Nigeria’s actions seem to contain Ebola outbreak

30 September - With quick and coordinated action by some of its top doctors, Nigeria, Africa’s most populous country, appears to have contained its first Ebola outbreak, the United States Centers for Disease Control and Prevention said Tuesday. As the epidemic rages out of control in three nations only a few hundred miles away, Nigeria is the only country to have beaten back an outbreak with the potential to harm many victims in a city with vast, teeming slums... Although officials are pleased that success was achieved in a country of 177 million that is a major transport and business hub — and whose largest city, Lagos, has 21 million people — the lessons here are not easily applicable to the countries at the epicenter: Guinea, Liberia and Sierra Leone. Public health officials in those countries remain overwhelmed by the scale of the outbreak and are desperate for additional international assistance. Nigeria’s outbreak grew from a single airport case, while in the three other countries the disease smoldered for months in remote rain-forest provinces and spread widely before a serious response was mounted.

New York Times
Official: No problems in transfer of patient exposed to Ebola

30 September - The National Institutes of Health is saying little about a physician who was exposed to Ebola in Sierra Leone and landed Sunday at Frederick Municipal Airport. The patient is an American doctor who was volunteering for an aid organization, according to Jennifer Routh, a spokeswoman for the National Institute of Allergy and Infectious Diseases-Integrated Research Facility. The facility is NIAID’s lab at Fort Detrick and is part of the National Institutes of Health. “We have no other updates on the patient at this time,” Routh said. It is unclear why the Frederick airport was chosen for the physician’s trip to Bethesda and whether the physician has contracted the deadly disease, which has killed more than 3,000 people in West Africa. The physician was admitted to the National Institutes of Health’s Clinical Center in Bethesda, according to Routh, where studies of an Ebola treatment are taking place. According to Caree Vander Linden, spokeswoman for the U.S. Army Medical Research Institute of Infectious Diseases, NIAID took the lead on the physician’s transportation into the country. Frederick News Post

Officials: ‘About 100′ people may have had contact with the Texas Ebola patient

2 October - Texas health officials said Thursday that there are "about 100" people who may have had contact with Thomas Eric Duncan, the man who is being treated in a Dallas-area hospital for Ebola. "We are working from a list of about 100 potential or possible contacts and will soon have an official contact tracing number that will be lower," Texas Department of State Health Services spokeswoman Carrie Williams said in a statement. "Out of an abundance of caution, we’re starting with this very wide net, including people who have had even brief encounters with the patient or the patient’s home. The number will drop as we focus in on those whose contact may represent a potential risk of infection." Washington Post

Rappers tune up the fight against Ebola

2 October - Slick music videos — many featuring graphic imagery, computer animation and teams of actors — depict virus’ terrible symptoms. A rapper in white doctor’s scrubs reels off life-saving advice on Ebola to the sound of a hip-hop anthem, one of the many African artists putting their talents to work to fight the killer virus. Upbeat songs and caustic cartoons have cropped up across Ebola-hit west Africa and beyond to spread a public health message that the authorities often struggle to convey. Ebola knows no borders, Senegal’s Xuman warns in “Ebola Est La” (Ebola Is Here), a parody of the hit “Umbrella” by Rihanna and Jay-Z released after Senegal’s first case of the disease in August. "The disease is among our neighbours, Liberians and Guineans," warns the rapper clad in medical garb and white gloves, in a video seen more than 20,000 times on YouTube. Gulf News
Scientists grapple with ethics in rush to release Ebola vaccines

28 September - ...In an effort to save lives, health authorities are determined to roll out potential vaccines within months, dispensing with some of the usual testing, and raising unprecedented ethical and practical questions... Even if a drug is shown to be safe, it takes longer to prove it is effective - time that is simply not available when cases of Ebola infection are doubling every few weeks and projected by the World Health Organization to reach 20,000 by November. Among questions that scientists are grappling with: should an unproven vaccine be given to everybody, or just a few? Should it be offered to healthcare workers first? The young before the old? Should it be used first in Liberia where Ebola is spreading fastest, or Guinea where it is closer to being under control? Reuters

U.S. patient aided Ebola victim in Liberia

1 October - The man who has become the first Ebola patient to develop symptoms in the United States told officials at Texas Health Presbyterian Hospital last Friday that he had just arrived from West Africa but was not admitted that day because that information was not passed along at the hospital, officials acknowledged Wednesday. The man, Thomas E. Duncan, was sent home under the mistaken belief that he had only a mild fever, a hospital administrator said; the information that he had traveled from Liberia, one of the nations at the heart of the Ebola epidemic, was overlooked. Mr. Duncan came back to Texas Health Presbyterian Hospital on Sunday and was admitted for treatment, but in those two days in between, his contacts with a number of people — including five schoolchildren and the medics who helped transport him to the hospital — potentially exposed them to Ebola, forcing officials to monitor and isolate them in their homes and to begin a thorough cleaning of the schools the students attended. Mr. Duncan is now in serious but stable condition. Mr. Duncan’s case began with him playing the part of good Samaritan on another continent. Mr. Duncan — a Liberian national in his mid-40s who had come to America to visit relatives in Dallas — had direct contact with a woman stricken by Ebola in Monrovia, the Liberian capital, on Sept. 15, days before he left Liberia for the United States, the woman’s parents and Mr. Duncan’s neighbors said. New York Times

U.S. troops head to Africa for Ebola mission

30 September - About 1,400 soldiers will head to Liberia in October to help support the fight against the Ebola virus that is spreading across West Africa, a Pentagon official said Tuesday. The Army’s 101st Airborne Division (Air Assault), based at Fort Campbell, Kentucky, will provide about 700 of those soldiers, while the other 700 will be mostly combat engineers culled from Army units across the force, Defense Department spokesman Rear Adm. John Kirby told reporters. The soldiers will be among the total of 3,000 U.S. troops whom the Pentagon plans to send into West Africa this fall. Military Times
U.S. will increase production of the Ebola drug ZMapp, but may not meet demand

1 October - Federal officials are planning to sharply increase production of ZMapp, which is viewed by many experts as the most promising experimental drug for treating people infected with Ebola in West Africa. The Department of Health and Human Services is in advanced discussions to enlist Caliber Biotherapeutics, a Texas company that can produce the drug in millions of tobacco plants, according to federal officials and pharmaceutical industry executives. Federal officials, along with two of the world’s biggest charities — the Bill & Melinda Gates Foundation and the Wellcome Trust — are also looking at arranging for production of ZMapp in animal cells, the more conventional method used by the biotechnology industry. Although that would take longer, it would allow for greater output by tapping into the biotechnology industry’s huge production capacity... Despite the new efforts, supplies of the drug are expected to be limited to hundreds or thousands of treatment courses by early next year, which would not be nearly enough if the epidemic continues to spiral out of control.

New York Times

WHO experts flesh out Ebola vaccine plans

1 October - A World Health Organization (WHO) expert group met this week to map out the quickest way to get an Ebola virus disease (EVD) vaccine into West Africa’s epidemic response arsenal, focusing on two experimental vaccines that already have clinical-grade vials ready for human trials... Three strong themes that carried through the meeting were allowing nothing to delay the vaccine work, making sure the products are safe and effective, and solidarity with the people of West Africa, the WHO said. The two most promising candidates so far are the ones that have clinical-grade material available for phase 1 clinical trials, some of which are already under way: a chimpanzee-derived adenovirus vector vaccine developed by GSK and the US National Institute of Allergy and Infectious Diseases (NIAID) and an attenuated vesicular stomatitis virus vaccine developed by the Public Health Agency of Canada and being licensed by NewLink Genetics, based in Ames, Iowa. Both companies are boosting their manufacturing capacity, with the goal of very significantly scaling up production during the first half of 2015. CIDRAP
CDC unveils 6-phase pandemic response blueprint

26 September - The Centers for Disease Control and Prevention (CDC) today released a new influenza pandemic response plan that features six phases of activity, with the aim of providing clearer guidance on the timing of key actions, such as school closings and vaccinations. The "Updated Preparedness and Response Framework for Influenza Pandemics" represents a revision of a framework issued in 2008, which itself was a modification of a 2006 plan. The latest iteration reflects lessons from the 2009 H1N1 pandemic and recent responses to outbreaks of novel flu viruses, such as the swine-origin variant H3N2 (H3N2v). CIDRAP

CDC: Weekly Influenza Surveillance Report

During week 38 ending September 20, 2014, 5.2% of all deaths reported through the 122-Cities Mortality Reporting System were due to pneumonia and influenza. This percentage was below the epidemic threshold of 6.0% for week 38. FluView

Federal contracts aim at faster flu testing, better pandemic response

1 October - Large contracts for developing improved diagnostics for influenza in point-of-care settings have been awarded to two companies by the federal government’s Biomedical Advanced Research and Development Authority (BARDA), the Department of Health and Human Services (HHS) announced today. In general, the tests will allow faster differentiation of influenza from bacterial infections as well as differentiation of seasonal flu strains from novel ones in settings such as doctors’ offices, clinics, and hospitals, HHS said in a news release. Above and beyond the day-to-day advantages they will allow in diagnosing individual flu cases, they could help boost preparedness for a flu pandemic. CIDRAP News Scan (first item)

Naval Health Research Center: Febrile Respiratory Illness Surveillance Update

For week 39 ending 27 September 2014:

- Influenza: No new cases of NHRC laboratory-confirmed influenza among US military basic trainees.
- FRI surveillance at all eight U.S. military basic training centers indicated elevated FRI rates at Fort Jackson and Lackland AFB.
• NHRC has capability to test for novel H7N9 influenza virus, MERS coronavirus, enterovirus EV-68, and Ebola virus

**Plant-based vaccines challenge big pharma for $3 billion flu market**

1 October - Two tiny companies are preparing to challenge some of the world’s largest drug makers in the battle for dominance in the $3 billion global market for influenza vaccines, armed with little more than tiny tobacco plants. The use of plants to produce life-saving pharmaceuticals captured global attention when it was revealed that the Ebola drug ZMapp is produced in the leaves of tobacco plants. Even as Ebola cases multiply in West Africa, a far greater market for plant-based biopharmaceuticals will likely be influenza vaccines used to fight pandemics, industry experts said. Making vaccines from plants may turn out to be faster and cheaper than current methods which use chicken eggs to grow the virus needed to make the vaccines. Leading producers such as GlaxoSmithKline Plc and Sanofi SA need six months to produce flu vaccine once scientists identify the dominant virus expected to circulate during flu season. Vaccine production from tobacco plants by Quebec City-based Medicago or Bryan, Texas-based Caliber Biotherapeutics could do it in weeks. [Reuters](https://www.reuters.com/)

**Study finds higher flu vaccine protection in previously unvaccinated**

30 September - Results of a 5-year longitudinal study indicate that people not recently vaccinated against influenza have the most protective immune response to the seasonal flu vaccine, according to a study yesterday in *Clinical Infectious Diseases* that focused on two flu strains... They found that vaccination during the current season only, previous season only, or both seasons yielded similar protection against H3N2 (adjusted VE range, 31%-36%) and B (52%-66%). When they analyzed 5 seasons’ data, however, they determined that current-season VE against H3N2 was significantly higher among those who had not received a vaccine in the previous 5 years (65%) compared with those who had frequently received the vaccine (24%, *P* = .01). VE against influenza B was 75% and 48%, respectively (*P* = .05). They had similar results when they restricted their analysis to adults aged 49 and younger. [CIDRAP News Scan](https://www.cidrap.umn.edu/news Scan) (third item)

**Update: Influenza activity — United States and Worldwide, May 18–September 20, 2014**

3 October - During May 18–September 20, 2014, the United States experienced low levels of seasonal influenza activity overall. Influenza A (H1N1)pdm09 (pH1N1), influenza A (H3N2), and influenza B viruses were detected worldwide and were identified sporadically in the United States. In August, two influenza A (H3N2) variant viruses (H3N2v) were detected in Ohio... During May 18–September 20, WHO and National Respiratory and Enteric Virus Surveillance System collaborating laboratories in the United States tested 66,006 specimens for influenza; 3,209 (4.9%) were positive for influenza. Of the 3,209 specimens positive for
influenza during the summer months of 2014, a total of 1,728 (54%) were influenza A viruses, and 1,481 (46%) were influenza B viruses...

During May 18–September 20, typical seasonal patterns of influenza activity occurred in temperate climate Southern Hemisphere countries. In Australia and New Zealand, influenza activity began to increase in late July and remained elevated through mid-September. Influenza A viruses predominated in both countries. Although pH1N1 viruses were identified more frequently than influenza A (H3N2) viruses, the proportion of influenza A (H3N2) viruses reported in Australia increased during August to mid-September. Influenza B viruses were reported in much smaller numbers from both countries. In South Africa, influenza activity began to increase in late May and decreased in early August. Influenza A (H3N2) viruses predominated in that country, but pH1N1 and influenza B viruses also were reported. In temperate countries of South America, influenza activity began to increase in June, remained elevated through July and mid-August, and decreased in September. Influenza A viruses were reported more frequently than influenza B viruses, and influenza A (H3N2) viruses were predominant in Chile, Argentina, Uruguay, and Paraguay. In temperate climate countries of Europe and North America, influenza activity was low, and small numbers of pH1N1, influenza A (H3N2), and influenza B viruses were identified. Morbidity and Mortality Weekly Report

top of page...

VETERINARY/FOOD SAFETY

FDA notes mixed findings regarding antibiotic use in animals

2 October - The fourth annual summary report on sales and distribution of antimicrobials for use in food-producing animals, covering data for 2012, was issued today by the US Food and Drug Administration (FDA) and noted mixed findings. Among trends noted for medically important antimicrobials for use in US food-producing animals from 2009 through 2012 are:

- The total quantity sold and distributed increased by 16%.
- The percentage of domestic sales and distribution of agents with an approved indication for production use or with approval for both production and therapeutic use decreased by 4 percentage points, from 72% to 68%, a decrease that does not reflect drugs labeled solely for production. The percentage for products labeled solely for therapeutic indications increased 4 percentage points, from 28% to 32%.
- The percentage of sales and distribution of over-the-counter agents decreased from 98% to 97%, a nonappreciable difference. CIDRAP News Scan (second item)
Multistate live-poultry *Salmonella* outbreak reaches 344 cases

26 September - A multistate outbreak of *Salmonella* illness linked to contact with live poultry from Mt. Healthy Hatcheries in Ohio has grown by 44 cases, to 344, the Centers for Disease Control and Prevention (CDC) said yesterday in an update. The outbreak involves three strains, *Salmonella* Infantis, Newport, and Hadar, and 42 states plus Puerto Rico, a number that hasn't changed since the CDC’s previous outbreak update on Aug 8. Illness onsets range from Feb 3 to Aug 23, 2014. Case-patients range in age from younger than 1 to 95 years, but 33% are 10 years or younger. The median age is 32. Of 224 patients with available information, 71 (32%) have been hospitalized. Also, 78% reported contact with live poultry in the week before they got sick... That hatchery was also implicated in multistate *Salmonella* outbreaks in 2012 and 2013, the agency said. CIDRAP News Scan (first item)

Vets face rising worry over fleas

29 September - Are fleas making a comeback? ... Michael W. Dryden, a professor of veterinary parasitology at Kansas State University, has conducted numerous studies on the efficacy of flea treatments. Dr. Dryden, who is commonly called “Dr. Flea,” said there are some areas, particularly in the southeastern United States, where flea populations are strong and some treatments may not be working as well as they did 10 to 15 years ago. However, flea products continue to work well in most parts of the country, so the real issue is educating consumers on the best way to use the products and what results to expect. New York Times

WELLNESS

A weakening sense of smell could mean death is near

2 October - ...According to a study published in *PLOS ONE*, olfactory dysfunction -- a weakening sense of smell -- is a strikingly good indicator of imminent death... When things are amiss, and systems are shutting down, the researchers suggest, our sense of smell might be one of the best outward indicators. In the study, 3,005 adults aged 57 through 85 were surveyed and put through an odor identification test. Most of the participants were found to have a normal sense of smell, with 20 percent showing a moderately reduced sense of smell (they got two or three out of five scents right) and 3.5 percent only identifying one scent or less. Unsurprisingly, sense of smell declined with age. Five years later, the researchers found that 430 of the original participants had died. Even when they adjusted
their analysis to control for age, gender, socioeconomic status, race, and overall health, they found that those with mild to severe smell loss had been more likely to die. Those with severe loss of smell were four times more likely to have died than the superior sniffers.

Washington Post

Free, long-acting birth control cuts teen pregnancy, abortions

2 October - A program that offered long-acting no-cost contraception to U.S. girls and women age 15 to 19 reduced the teenage pregnancy rate by 79 percent over five years and cut the abortion rate by 77 percent, according to the results of a new study... The teens, all of whom had sought contraceptive services through a clinic, were told about various types of birth control, including the long-term injectable and implantable contraceptives such as IUDs that have been used around the world for years and whose effects are reversible. Generally, fewer than 5 percent of U.S. teens use such methods. Ultimately, 72 percent of the 1,404 teenage girls and women enrolled in the study went with an intrauterine device (IUD) or an implant. Only 12.5 percent opted for an oral contraceptive pill. The volunteers were followed for as long as three years during the study period, which lasted from 2008 to 2013. The annual rate of pregnancy was 3.40 percent compared to 15.85 percent in a survey of sexually experienced U.S. teens and women in the same age group. The likelihood of giving birth each year was 1.94 percent among the St. Louis teens versus 9.40 percent nationally. Fox News

How exercise may protect against depression

1 October - Exercise may help to safeguard the mind against depression through previously unknown effects on working muscles, according to a new study involving mice... [Aerobic] exercise, in both mice and people, increases the production within muscles of an enzyme called PGC-1alpha... So the scientists looked for which processes were being most notably intensified in their PGC-1alpha1-rich mice. They found one in particular, involving a substance called kynurenine that accumulates in human and animal bloodstreams after stress. Kynurenine can pass the blood-brain barrier and, in animal studies, has been shown to cause damaging inflammation in the brain, leading, it is thought, to depression. But in the mice with high levels of PGC-1alpha1, the kynurenine produced by stress was set upon almost immediately by another protein expressed in response to signals from the PGC-1alpha1. This protein changed the kynurenine, breaking it into its component parts, which, interestingly, could not pass the blood-brain barrier. In effect, the extra PGC-1alpha1 had called up guards that defused the threat to the animals' brains and mood from frequent stress. New York Times
Most painkiller abusers unprepared for overdose

2 October -- Although teens and young adults who abuse prescription painkillers face a high risk of overdose, most don’t know how to respond when one occurs, new research shows. At issue is the increasingly popular, non-medicinal use of legal prescription narcotic pain medications, including so-called "opioids" such as Oxycontin and Vicodin. Such drugs can substantially slow or even halt the ability to breath, sometimes leading to death. And while safe and effective interventions are available (including the prescription medication naloxone), the new study found that most narcotic abusers are unaware of their options...

"We found that prescription opioid [users] make a big distinction between themselves and heroin users," Frank said. "Opioid users tend to be whiter, younger and come from a higher socioeconomic background. And even though opiates and heroin are pharmacologically similar, work by the same mechanism and can both cause an overdose, even daily opioid users seem to think that simply because they're taking a doctor-prescribed medicine they're not doing a dangerous drug." WebMD

Study: 'Fat tongue' may be a factor in sleep apnea

2 October - Sleep apnea is a potential health risk for millions of Americans, and a new study points to a possible culprit behind the disorder: a "fat" tongue. "This is the first study to show that fat deposits are increased in the tongue of obese patients with obstructive sleep apnea," study senior author Dr. Richard Schwab, co-director of the Sleep Center at the University of Pennsylvania Medical Center, said in a news release from Sleep, which will publish the findings Oct. 1... The study included 90 obese adults with sleep apnea and 90 obese adults without the disorder. The participants with sleep apnea had significantly larger tongues, tongue fat and percentage of tongue fat than those without sleep apnea, the researchers found... In addition to increasing the size of the tongue, higher levels of tongue fat may prevent muscles that attach the tongue to bone from positioning the tongue away from the airway during sleep. Detroit Free Press

Study: Public feels more negative toward people with drug addiction than those with mental illness

1 October - People are significantly more likely to have negative attitudes toward those suffering from drug addiction than those with mental illness, and don't support insurance, housing, and employment policies that benefit those dependent on drugs... A report... suggests that society seems not to know whether to regard substance abuse as a treatable medical condition akin to diabetes or heart disease, or as a personal failing to be overcome... Only 22 percent of respondents said they would be willing to work closely on a job with a person with drug addiction compared to 62 percent who said they would be willing to work with someone with mental illness. Sixty-four percent said that employers should be able to deny employment to people with a drug addiction compared to 25 percent with a mental illness. Forty-three percent were opposed to giving individuals
addicted to drugs equivalent health insurance benefits to the public at-large, while only 21 percent were opposed to giving the same benefits to those with mental illness. Johns Hopkins Bloomberg School of Public Health News

top of page...

USAFRICOM

Ebola outbreak shuts down malaria-control efforts

1 October - As the Ebola death toll spirals into the thousands in West Africa, the outbreak could have a spillover effect on the region’s deadliest disease. The outbreak has virtually shut down malaria control efforts in Liberia, Guinea and Sierra Leone, raising fears that cases of the mosquito-borne illness may start rising — if they haven’t already. So far, at least 3,000 people are estimated to have died of Ebola in Guinea, Sierra Leone and Liberia in the current outbreak, although World Health Organization (WHO) staff acknowledge that official figures vastly underestimate the total. By contrast, malaria killed more than 6,300 people in those countries in 2012, most of them young children. Overall, malaria deaths have fallen by about 30% in Africa since 2000 thanks to national programmes supported by international funding agencies such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the US Agency for International Development and the WHO’s Roll Back Malaria initiative... But the Ebola outbreak has brought those efforts to a standstill in the three affected countries. “Nobody is doing a thing,” says Thomas Teuscher, acting executive director of the Roll Back Malaria Partnership, based in Geneva, Switzerland. Nature

Now hunger threat shadows Ebola in West Africa

2 October - The threat of hunger is tracking Ebola across affected West African nations as the disease kills farmers and their families, drives workers from the fields and creates food shortages. In the worst-hit states of Liberia, Sierra Leone and Guinea, Ebola is ravaging their food-producing 'breadbasket' regions, preventing planting and harvesting, and disrupting supply routes and markets... The U.N.’s World Food Programme and Food and Agriculture Organisation say border and market closures, quarantines and movement restrictions, and widespread fear of Ebola have led to food scarcity, panic buying and price increases, especially in Sierra Leone and Liberia... The World Food Programme is trying to provide food to around 1 million people in the three worst-affected countries. As of Sept. 14, it had distributed 3,300 tonnes of food to more than 180,000 people in the three nations in a race against hunger. Reuters

South Africa: Health and health care in South Africa — 20 years after Mandela

2 October - In the 20 years since South Africa underwent a peaceful transition from apartheid to a constitutional democracy, considerable social progress has been made
toward reversing the discriminatory practices that pervaded all aspects of life before 1994. Yet the health and well-being of most South Africans remain plagued by a relentless burden of infectious and noncommunicable diseases, persisting social disparities, and inadequate human resources to provide care for a growing population with a rising tide of refugees and economic migrants. Appropriate responses to South African health care challenges would be to address the social determinants of health (which lie outside the health system) as a national priority, strengthen the health care system, and facilitate universal coverage for health care. New England Journal of Medicine

top of page...

USCENTCOM

Pakistan: Karachi's polio vaccinators in the crosshairs

2 October - In the last 25 years worldwide polio cases have dropped by 99 percent, but the highly contagious disease, which is passed on through infected water and food contaminated with the faeces of an infected person and thrives in areas with poor sanitation and incomplete vaccination efforts, remains endemic in Pakistan, Afghanistan, and Nigeria. Of those, it is Pakistan that remains the most at risk, suffering 166 cases already this year, compared to just 10 in Afghanistan and six in Nigeria, according to the World Health Organization (WHO). It is an alarming uptick from the 93 cases reported in total last year, and the 58 cases in 2012, as Pakistan's efforts to control the disease appeared to finally be bearing fruit. While the lack of uniform hygiene standards is one reason for the disease's spread, health workers told Al Jazeera that the biggest issue in Pakistan is opposition to vaccination by parents - often with the "justification" that the vaccine is part of a conspiracy to sterilise Muslims, as advocated by the Pakistani Taliban - and subsequent attacks on polio vaccination workers. Al Jazeera

Saudi Arabia: Surgical masks, travel bans as Hajj begins

2 October - As millions of Muslims begin the annual religious pilgrimage of Hajj to Mecca, several thousand West Africans will be absent after Saudi Arabia banned travelers from three Ebola-stricken nations. Riyadh turned down visas to more than 7,000 would-be pilgrims from Guinea, Liberia, and Sierra Leone, where an outbreak of the virus has killed more than 3,000 people and infected twice as many. The ban also includes anyone who has visited those three countries recently... Despite the precautions, Malaysian pilgrim Elias Ismail remains wary. One of an estimated 2 million people in Mecca on Thursday, he wore a surgical mask at the start of the five-day Hajj. VOA
Syria: Drug in vaccine that killed Syrian children has been identified, says WHO

29 September - Fifteen children died in northern Syria due to the incorrect use of a drug in a measles vaccine, according to the World Health Organization, WHO. The children from Syria's Idlib province received the contaminated measles vaccination as part of a UN immunization campaign in September. A WHO investigation revealed that the vaccine was incorrectly reconstituted with a muscle relaxant drug. Ampoules of the drug were mistakenly added to vaccination packs prepared in a distribution centre in Idlib province. It was then supplied to four health teams on the second day of the measles campaign. WHO called the incident a "tragic event." Ghana Broadcasting Corporation

USEUCOM

Dramatic rise in gonorrhoea cases in Northern Ireland - Public Health Agency

[Unable to access article from USAPHC.] Belfast Telegraph

Macedonia: Public health self-assessment process initiated in the former Yugoslav Republic of Macedonia

[Unable to access article from USAPHC.] World Health Organization

The Netherlands: Four 'holy grail' objectives for future public health

2 October - As life expectancy continues to rise, more people are expected to suffer from age-related chronic diseases, putting pressure on healthcare systems. The Dutch National Institute for Public health and the Environment (RIVM) has mapped out future health outcomes for the Netherlands, based on four objectives:

- To keep people healthy as long as possible and to cure illness promptly.
- To support vulnerable people and enable social participation. For persons with low levels of education, life expectancy averages six years shorter than for people with high levels.
- To promote individual autonomy and freedom of choice. This will involve engaging local communities and patients in managing their own care, with support from technological and e-health resources.
To keep healthcare affordable. Quality care is relevant and cost-effective as determined by the health ministry and insurance companies. EurActiv

top of page...

USNORTHCOM

U.S.: Child dies from Enterovirus D68 complications; neurologic symptoms increasingly reported

2 October - A 10-year-old Rhode Island child died last week from Staphylococcus aureus sepsis associated with enterovirus-D68 infection, the state’s department of health confirmed on Wednesday. It’s the first reported death associated with EV-D68 since the outbreak began in August. The state department of health notes that the combination of enterovirus 68 and S. aureus is dangerous but rare. “Many of us will have EV-D68,” said the department’s director. “Most of us will have very mild symptoms and all but very few will recover quickly and completely.” Separately, the New York Times reported that cases of limb weakness or paralysis potentially associated with EV-D68 are increasing, with the most recent reports in Michigan, Missouri, and Massachusetts. As of September 30, EV-D68 infection had been confirmed in 472 people across 41 states and Washington, D.C., the CDC reports. NEJM Journal Watch

U.S.: Chikungunya cases reach 1,200

2 October - As of Sep 30, 86 new cases of chikungunya were brought into the United States by travelers, most of them visiting or coming from the Caribbean, according to this week’s update from the Centers for Disease Control and Prevention (CDC). This brings the total case count of imported cases to 1,200. Additionally, Florida has reported 11 locally acquired cases, a number that held steady since last week. Cases reported from US territories number 496, 4 more than last week. Most of those cases have been locally acquired—421 in Puerto Rico and 45 in the US Virgin Islands. CIDRAP News Scan (first item)

U.S.: DEA makes Vicodin, some other pain meds harder to get

26 September - Patients who use drugs containing hydrocodone as a pain reliever or cough suppressant are going to have to jump through more hoops to get them starting next month. The Drug Enforcement Administration is reclassifying so-called "hydrocodone combination products" from Schedule III to Schedule II under the Controlled Substances Act, which will more tightly restrict access. Vicodin, for example, is an HCP because it has hydrocodone and acetaminophen. The final regulation, which takes effect Oct. 6, will mean that patients generally must present a written prescription to receive the drug, and doctors...
will no longer be able to call in a prescription to the pharmacy in most instances. The regulation is a response to the widespread misuse of prescription pain killers. In an emergency, doctors will still be able to call in a prescription, according to the new rule. And although prescription refills are prohibited, a doctor can, at his discretion, issue multiple prescriptions that would provide up to a 90-day supply. MedPage Today

**U.S.: Five babies in Texas test positive for TB after possible mass exposure**

27 September - Five babies have tested positive for tuberculosis infection in El Paso after being at a hospital where hundreds of newborns may have been exposed to TB by a diseased worker at the facility, health officials said on Saturday. The El Paso Department of Public Health also increased the number of people who may have been exposed to 858. It had said earlier this month that 706 babies and 43 employees were possibly exposed to the infected worker between September 2013 and August 2014. "It is important to point out that they (the babies) are not considered to have active TB disease," it said of the five who tested positive for the potentially deadly respiratory disease. Reuters

**U.S.: HHS releases 13th report on carcinogens**

2 October - Four substances have been added in the U.S. Department of Health and Human Services 13th Report on Carcinogens, a science-based document that identifies chemical, biological, and physical agents that are considered cancer hazards for people living in the United States. The new report includes 243 listings. Ortho-toluidine, used to make rubber chemicals, pesticides, and dyes, has been reevaluated and is now listed as a known human carcinogen. Three substances have been added as reasonably anticipated to be human carcinogens. These include 1-bromopropane, used as a cleaning solvent and spray adhesive; cumene, used to make phenol and acetone, and also found in fuel products and tobacco smoke; and the wood preservative mixture pentachlorophenol. NIH

**U.S.: HIV treatment, awareness lacking among U.S. gay, bisexual men**

2 October - More than half of gay and bisexual men in the U.S. are not personally concerned about being infected with the human immunodeficiency virus and less than half of men with the virus are being properly treated, according to two new reports. The data show that significant barriers still exist in the fight against the still-growing epidemic of human immunodeficiency virus (HIV), the virus that causes AIDS, among gay and bisexual men, experts say... The Centers for Disease Control and Prevention (CDC) estimates that some 1.1 million people in the U.S. are living with HIV. About one case in six is undiagnosed. Reuters
U.S.: Limb frailty in children is studied for link to virus

30 September - Driven by a handful of reports of poliolike symptoms in children, federal health officials have asked the nation’s physicians to report cases of children with limb weakness or paralysis along with specific spinal-cord abnormalities on a magnetic resonance imaging test. As a respiratory illness known as enterovirus 68 is sickening thousands of children from coast to coast, officials are trying to figure out if the weakness could be linked to the virus. The emergence of several cases of limb weakness among children in Colorado put doctors on alert in recent months... The C.D.C. is investigating the cases of 10 children hospitalized at Children’s Hospital Colorado with unexplained arm or leg weakness since Aug. 9. Some of the children, who range in age from 1 to 18, also developed symptoms like facial drooping, double vision, or difficulty swallowing or talking. Four of them tested positive for enterovirus 68. New York Times [CDC Health Advisory]

U.S.: OIG - FEMA's system for distributing emergency supplies not up to the task

1 October - The Federal Emergency Management Agency's (FEMA’s) system for quickly delivering supplies such as food, water, blankets, and generators to people after a catastrophic disaster, is, according to a notice today from the Department of Homeland Security’s (DHS’s) Office of Inspector General (OIG), somewhat of a debacle itself. FEMA’s high-tech logistics system was developed over 9 years at a cost of more than $247 million, but so far it can’t interface properly with its partners' and suppliers' systems, according to the notice, so tracking and locating emergency supplies is difficult. Besides that problem, OIG found in its audit of FEMA that there are not enough trained employees at FEMA to operate the system. CIDRAP News Scan (third item)

U.S.: Study - C diff rose 82% in US hospitals in 10 years

30 September - Clostridium difficile infections in US hospitals rose 82% from 2001 to 2010, according to a study today in the American Journal of Infection Control. University of Texas researchers analyzed data on adult hospitalized patients from US National Hospital Discharge Surveys (NHDS) representing 2.2 million discharges for C difficile infection (CDI). From 2001 to 2010, CDI rates rose from 4.5 to 8.2 discharges per 1,000 total hospital discharges. The rate peaked in 2008, then tapered slightly, according to a press release from Elsevier, publisher of the journal. Meanwhile, in-hospital mortality increased only slightly over the study period, from 6.6% in 2001 to 7.2% in 2010. The overall in-hospital mortality rate was 7.1%. CIDRAP News Scan (second item)
Japan: Why deadly Japan volcano erupted without warning

30 September - The death toll at Japan’s Mount Ontake volcano climbed to 36 on Monday, with rescue crews still searching for missing people. The eruption caught the hikers by surprise this weekend. More than 250 people were exploring shrines and resorts at the 10,062-foot-high peak, the country’s second-tallest volcano... Japan has a similar high-tech network for watching its volcanoes. But Saturday’s killer outburst was likely a phreatic eruption, a shallow steam explosion that is nearly impossible to predict, experts told Live Science... About 200 people are thought to have survived Saturday's deadly blast by scrambling down the mountain through the choking ash clouds or sheltering in huts and lodges. Their harrowing tales include eerie darkness, rocks raining from the sky and struggling to breathe in the thick ash. A phreatic explosion tends to produce very fine ash particles, Ruprecht said. The ash covered 2 miles (3 km) of the mountain’s south slope. CBS News

Malaysia: Dengue cases expected to increase from end of November — Minister

2 October - Dengue cases are expected to increase following the change in weather conditions from the end of this November. Health Minister Datuk Seri Dr S. Subramaniam said the weather, alternating between wet (rainy) and dry, was conducive for Aedes mosquitoes to breed based on experience in previous years, hence dengue cases might possibly increase... He said until Sept 27, this year, the number of reported deaths nationwide from dengue had reached 146 compared to 48 over the same period last year. He added that over that period this year, the number of reported dengue cases nationwide totalled 76,616 cases, an increase of 239 per cent over the 22,602 cases reported the previous year. Malaysian Digest

Philippines: Dengue cases in Northern Mindanao continue to rise

1 October - Dengue cases in the Northern Mindanao region have been surging lately. The alarming increase of dengue cases has been noted by the regional office of the Department of Health (DOH-10) from January 1 up to September 27, 2014 compared to the same date bracket last year. Data released by the DOH-10 showed 83.73 percent increase with July and August having registered the most number of dengue cases. Ages of those with dengue range from three days old to 88 years, composing of 51 percent males with 33 deaths recorded during the same period... Dengue, which used to be a seasonal disease that increases during rainy days, had been declared by the DOH to be a disease occurring regardless of the season. Sun.Star
Typhoid fever surveillance and vaccine use — South-East Asia and Western Pacific Regions, 2009–2013

3 October - ...Despite the substantial and recognized disease burden, progress in typhoid disease surveillance and use of typhoid vaccine in [South-East Asia Regions (SEAR)] and [Western Pacific Regions (WPR)] has been limited during the 5 years since revision of the WHO recommendations for typhoid vaccines in 2008. Most countries had passive reporting systems, primarily through existing surveillance programs established before 2008, and culture-based surveillance was conducted in fewer than half of countries. Similarly, despite the establishment of typhoid vaccination programs in some countries in SEAR and WPR before 2008, only two instances of large-scale typhoid vaccination were noted since 2008.

Morbidity and Mortality Weekly Report

top of page...

USSOUTHCOM

Brazil releases 'good' mosquitoes to fight dengue fever

30 September - Brazilian researchers in Rio de Janeiro have released thousands of mosquitoes infected with bacteria that suppress dengue fever. The hope is they will multiply, breed and become the majority of mosquitoes, thus reducing cases of the disease. The initiative is part of a programme also taking place in Australia, Vietnam and Indonesia. The intracellular bacteria, Wolbachia, being introduced cannot be transmitted to humans. The programme started in 2012 says Luciano Moreira of the Brazilian research institute Fiocruz, who is leading the project in Brazil. "Our teams performed weekly visits to the four neighbourhoods in Rio being targeted. Mosquitoes were analysed after collection in special traps." ... Ten thousand mosquitoes will be released each month for four months with the first release in Tubiacanga, in the north of Rio. Ghana Broadcasting Corporation

Caribbean chikungunya cases approach 750,000

29 September - The number of chikungunya cases in the Caribbean and surrounding areas continues to grow, with 9,006 new cases bringing the outbreak total to 747,721, the Pan American Health Organization (PAHO) reported late last week. Colombia reported the largest increase, with 3,347 new cases (from 1,350 to 4,697), followed by Martinique, with 2,390 new cases; Puerto Rico, with 1,166; and Guadeloupe, 880. The Dominican Republic, which has led in outbreak cases for many recent weeks, did not report any new data for the most recent week, so the actual growth might be much more dramatic. So far that country has accounted for 486,390 chikungunya infections, or almost two thirds of all cases in the outbreak... In related news, the European Centre for Disease Prevention and Control (ECDC)
said in a Sep 26 report that Bermuda has reported its first case of locally transmitted chikungunya, a fact not yet noted by PAHO. CIDRAP News Scan (first item)

top of page...