19 April 2013

Army Public Health Weekly Update

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

U.S. Army Public Health Command

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Comprehensive Soldier and Family Fitness
Technical Report #4

Comprehensive Soldier and Family Fitness, U.S. Army, recently completed Technical Report #4 which found that Army units leveraging their Master Resilience Trainer are more likely to have a lower rate of diagnoses for mental health problems in Soldiers.

The goal of Comprehensive Soldier and Family Fitness (CSF2) is to improve the health of members of the Army Family by giving them the tools they need to be more psychologically resilient.

The Master Resilience Trainer (MRT) component of CSF2 is the primary method of delivering resilience skills to Soldiers. Through the MRT course, non-commissioned officers (NCOs) receive classroom training in resilience-building techniques. These NCOs return to their units and provide resilience skills training to Soldiers.

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- Argentina: Intensified surveillance and insecticide-based control of the Chagas disease vector Triatoma infestans in the Argentinean Chaco
- Brazil: Dengue cases leave Patos de Minas, Minas Gerais, the state of emergency
- Haiti: Study suggests strain with Haiti cholera mutations may increase severity of disease
CDC Webinar: Focus on the Treatment of STDs in Military Populations

The webinar from 27 March on treatment of STDs in military populations is now available online.

This live webinar is for clinicians who provide care for military populations. The webinar begins with an overview of the epidemiology of STDs followed by a discussion of the critical diagnostic and management challenges for specific STD.

U.S. MILITARY

Challenges in monitoring and maintaining the health of pilots engaged in telewarfare

March 2013 - ...Drs. Otto and Webber have objectively quantified the state of RPA pilots with regard to mental health (MH) endpoints (as represented by ICD-9-CM diagnoses assigned by medical providers). Their results demonstrate that Air Force RPA pilots are receiving mental health diagnoses at rates equivalent to other Air Force pilots who have deployed and at lower rates than other Air Force personnel. The findings of this study validate several key principles of human performance... the rigorous selection process aviators undergo and the ongoing operational medical support they receive are two factors (of several) which likely impact their health and operational performance.

Medical Surveillance Monthly Report

Workout plan boosts chances to stay in Army

15 April - Much is riding on Spc. Chad Andrews meeting his 50-pound weight-loss goal. Andrews has two young kids and twins on the way. He wants to be around for their high school graduations and weddings. More immediately, he wants to put food in their stomachs and a roof over their heads. But every day that Andrews, a 250-pound intelligence soldier, is overweight by Army standards, his job is in jeopardy. Under the Army Weight Control Program, soldiers who don't meet the service's weight-for-height standards may be subject to separation. "I didn't want that to be me," said Andrews, 30. In December, Andrews saw a flier for Fort Carson's new Army Wellness Center. As part of its programs, the center offers to evaluate the body mass index and maximum oxygen consumption of soldiers, their dependents and retirees.

Military.com

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GLOBAL

Experts say polio eradication achievable by 2018

11 April - The paralyzing viral scourge of polio could be eradicated worldwide by 2018, say hundreds of international scientists, doctors and experts, and on April 11, they collectively endorsed a new strategy to achieve that goal. That strategy was outlined in the Global Polio Eradication Initiative, announced last week. Among other steps, it calls for delivering polio vaccines to more children at risk, especially in Afghanistan, Nigeria and Pakistan, where
polio is still endemic and emergency immunization campaigns are underway. The Initiative also calls for stepped up efforts aimed at protecting vaccination teams in insecure areas, strengthening routine immunization, and phasing out oral polio vaccines in favor of inactivated ones. The Initiative estimates it would cost about $5.5 billion to eradicate polio entirely over the next five years. VOA

Malaria hotspots 'need new approach'

14 April - Novel measures are needed to tackle malaria hotspots in countries with low levels of the disease, scientists say. Countries such as Malaysia and Bhutan have seen malaria levels fall - but pockets of infection remain, mainly among men living or working outdoors. Writing in the Lancet, the scientists say this means that measures, such as nets, that help in homes are ineffective. Instead, treated hammocks or clothing could be more useful. In countries where there are high levels of malaria, it is largely women and young children who are affected. But in places where there has been success in reducing overall levels, it is adult men who bear most risk. BBC News

Patients who have STEMI heart attacks while hospitalized more likely to die

17 April - If you suffer a heart attack while walking down the street and are taken to the hospital quickly, your chances of survival are very good. But if you have a heart attack while already in the hospital for something else, you are 10 times more likely to die... Part of the difference is explained by the fact people who suffer a [ST elevation myocardial infarction (STEMI)] while hospitalized are, as a group, older and sicker than people who suffer a STEMI outside the hospital. But even after adjusting the statistical analysis to account for this, there were still important differences in survival, Stouffer said. Another possible explanation: Hospital emergency departments are trained to react very quickly when a patient with a suspected STEMI is brought in. For that reason, the time from a STEMI outpatient's arrival to treatment with angioplasty, referred to as "door to balloon time," averages about 45 minutes at UNC Hospitals. EurekAlert

Surgical complications and errors bring in more money for hospitals

17 April - Hospitals may make more money causing surgical errors than preventing them. A report published on April 17 in JAMA showed that surgical errors mean longer stays, additional care -- and 330 percent higher profit margin compared to a privately insured patient with no complications. Hospitals stand to make 190 percent more from procedures on Medicare patients with errors than those without. "This research provides dramatic evidence that hospitals lack financial incentives to invest in improving surgical quality," co-author Dr. Barry Rosenberg, a Chicago-based BCG partner in the firm's Health Care practice, said in a press release. “CBS
The end of sleep?

10 April - ... Since stimulants have failed to offer a biological substitute for sleep, the new watchword of sleep innovators is ‘efficiency’, which means in effect reducing the number of hours of sleep needed for full functionality. The Defense Advanced Research Projects Agency (DARPA) – the research arm of the US military – leads the way in squeezing a full night’s sleep into fewer hours, by forcing sleep the moment head meets pillow, and by concentrating that sleep into only the most restorative stages. Soldiers on active duty need to function at their cognitive and physiological best, even when they are getting only a few hours sleep in a 24-hour cycle... With military personnel in mind, ABM has developed a mask called the Somneo Sleep Trainer that exploits one- or two-hour windows for strategic naps in mobile sleeping environments. Screening out ambient noise and visual distractions, the mask carries a heating element around the eyes, based on the finding that facial warming helps send people to sleep. It also carries a blue light that gradually brightens as your set alarm time approaches, suppressing the sleep hormone melatonin for a less groggy awakening. Aeon

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INFLUENZA

Armed Forces Health Surveillance Center: DoD Influenza Surveillance Summary

4 April -

- ILI incidence rates continued to trend downward for all regions. Pneumonia and Influenza (P&I) incidence rates continue to decrease in the US, but increased slightly this week for EUCOM and PACOM. This season, there have been 298 reportable medical event (RME) influenza cases among service members (82.2% were vaccinated); an additional 318 cases were reported among other beneficiaries.

- Across the overseas DoD laboratory surveillance network, influenza activity was at low levels.

- As of 26 March 2013, vaccine coverage in the active component of the U.S. Armed Forces is 97%. AFHSC DoD Influenza Surveillance Summary

CDC: Weekly Influenza Surveillance Report

During week 14 (March 31 – April 6, 2013), influenza activity decreased in the United States.

- Viral Surveillance: Of 4,462 specimens tested and reported by collaborating laboratories, 484 (10.9%) 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: Five pediatric deaths were reported.

• Geographic Spread of Influenza: Four states reported widespread influenza activity; 7 states reported regional influenza activity. FluView

DoD Global Laboratory-Based Influenza Surveillance Program

• During Week 14, 16 specimens were tested from 11 locations. There was one influenza A(H3N2) and two influenza B viruses detected.

• To date this influenza season, 3,466 specimens have been tested from 81 locations of which 1,053 were positive for influenza A (939 A(H3N2), 101 A(H1N1)pdm09, seven co-infections, and six A/not subtyped).

• To date this influenza season, 327 specimens were positive for influenza B. Of these, there were 14 B/Yamagata, two B/Victoria, and two B & enterovirus co-infections. The lineage is pending or unknown for 309 specimens. The onset of influenza B cases compared to influenza A has been somewhat later in the season.

• There have been 229 other respiratory viruses isolated (52 adenovirus, 90 RSV, 78 parainfluenza, and nine enterovirus) cumulatively this season.

• Submit a suspected influenza A(H7N9) case the same way as a typical respiratory specimen submission but contact us immediately regarding any suspected case. We are unable to specifically test for influenza A(H7N9) at the time. Specimen testing will be conducted as normal. We will follow established operating procedures for unsubtypeable specimens identified with RT-PCR which involves further testing at CDC. USAF School of Aerospace Medicine

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

Main surveillance developments in week 14/2013 (1–7 April 2013)

• Twenty-three of 29 reporting countries indicated low-intensity transmission.

• Decreasing or stable trends were reported by all reporting countries.

• The proportion of influenza-positive sentinel specimens (35%) has continued to decrease since the peak observed in week 5/2013 (61%), in line with the lower numbers of specimens being tested.

• Since week 40/2012, 47% of sentinel surveillance specimens testing positive for influenza virus have been type A, and 53% type B. Of the influenza A viruses subtyped, the proportion of A(H1)pdm09 viruses has been 63%.

• Thirty-nine hospitalised, laboratory-confirmed influenza cases were reported by six countries, including one fatality.
In all reporting countries, influenza activity continued to decline or had already returned to baseline levels. After more than three months of active transmission, a long period compared to other years, the 2012–13 influenza season is waning and getting closer to its end. 

**Weekly Influenza Surveillance Overview**

**Google.org: Flu Trends**

18 April – Estimates of flu activity based on certain Internet search queries indicate that the level of flu activity in the northern hemisphere ranges from minimal and low in most countries to Russia and in the southern hemisphere ranges from minimal to low. 

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

For the week ending 6 April 2013 (Week 14)

- Influenza: Two cases of NHRC laboratory-confirmed influenza (A/H3), one case of (A/H1N1), and one case of influenza (B) among US military basic trainees. Influenza activity at most basic training centers decreasing in March
- Adenovirus: Sporadic adenovirus cases at basic training centers in early 2013.
- FRI surveillance at all eight U.S. military basic training centers indicated FRI rates were at or below expected values.

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

For the week ending 6 April 2013 (Week 14)

- Army influenza-like illness (ILI) activity continues decreasing. Influenza B continues to exceed influenza A among typed specimens in both the Army and civilian populations. The World Health Organization is monitoring influenza A virus A(H7N9) in China; no human-to-human transmission has been documented.
- ILI Activity: Army incident ILI outpatient visits in week 14 were at the same level as this time last year.
- Influenza cases: Three hospitalized influenza cases were reported to USAPHC in week 14. 95 hospitalized cases have been reported during this influenza season, 83 in dependents and 12 in Active Duty.
- Acute Respiratory Disease at BCT sites: ARD rates remain low; rates did not increase significantly at any sites during week 14.
- Viral specimens: During week 14, 98 of 617 (16%) laboratory specimens tested were positive for respiratory pathogens. Influenza B accounted for 44% of positive specimens. Most of the influenza positive specimens were from ERMC and PRMC (27% each); 18% were from SRMC.
PANDEMIC AND AVIAN INFLUENZA

Additional H7N9 cases reported in China; CDC receives H7N9 virus isolate

12 April – China has now reported a total of 43 cases of human infection with the new avian influenza A (H7N9) virus; 11 of which have resulted in death. While there are no reported cases of H7N9 in the United States or anywhere else outside of China, the Centers for Disease Control and Prevention (CDC) is taking standard pandemic preparedness precautions, including beginning to develop a candidate vaccine virus to produce an H7N9 vaccine should it become necessary. On Thursday April 11, CDC received the first H7N9 virus isolate from China, which will support this process...

The first human infections with H7N9 were reported by the Chinese National Health and Family Planning Commission to WHO at the end of March. A few of the infected people in China have had mild illness, but most of illness associated with these infections has been severe so far. CDC

China: Gene swapping makes new China bird flu a moving target

15 April - A new bird flu virus that has killed 13 people in China is still evolving, making it hard for scientists to predict how dangerous it might become. Influenza experts say the H7N9 strain is probably still swapping genes with other strains, seeking to select ones that might make it fitter. If it succeeds, the world could be facing the threat of a deadly flu pandemic. But it may also fail and just fizzle out. Reuters

China: Human infection with influenza A(H7N9) virus, WHO update

17 April - As of 17 April 2013 (18:00CET), the National Health and Family Planning Commission notified WHO of an additional 19 laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus. Of the latest laboratory confirmed cases, there are nine from Zhejiang Province, seven from Shanghai Municipality and three from Jiangsu Province. Additionally, 3 patients earlier reported have died. To date, a total of 82 patients have been laboratory-confirmed with human infection with avian influenza A(H7N9) virus in China; including 17 deaths. More than a thousand close contacts of the confirmed cases are being closely monitored. Investigations into the possible sources of infection and reservoirs of the virus are ongoing. Until the source of infection has been identified, it is expected that there will be further cases of human infection with the virus in China. So far, there is no evidence of ongoing human-to-human transmission. WHO
No poultry contact in some Chinese bird flu cases: WHO

17 April - The World Health Organization said on Wednesday that a number of people who have tested positive for a new strain of bird flu in China appear to have had no contact with poultry, adding to the mystery about a virus that has killed 17 people to date. Chinese authorities have slaughtered thousands of birds and closed some live poultry markets to try to slow the rate of human infection, but many questions remain unsolved, including whether the H7N9 strain is being transmitted between people. WHO spokesman Gregory Hartl confirmed that “there are people who have no history of contact with poultry”, after a top Chinese scientist was quoted as saying this applied to about 40 percent of those infected. Reuters

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VETERINARY/FOOD SAFETY

France tops EU DNA tests for horsemeat in beef

16 April - France found more cases of illegal horsemeat in beef products than any other European Union country, early results of DNA tests ordered in the wake of the scandal showed, with more than 1 in every 8 samples testing positive. The European Commission is due to announce the full results of the tests later on Tuesday, but it said in a statement that for the EU as a whole, about 5 percent of all beef products tested had come back positive for horse DNA. But EU sources said a Commission progress report dated April 9 showed that of 353 tests carried out in France, 47 tested positive for horse DNA, a rate of more than 13 percent. Reuters

Incidence and trends of infection with pathogens transmitted commonly through food — foodborne diseases active surveillance network, 10 U.S. Sites, 1996–2012

19 April - ...The Foodborne Diseases Active Surveillance Network* (FoodNet) conducts surveillance in 10 U.S. sites for all laboratory-confirmed infections caused by selected pathogens transmitted commonly through food to quantify them and monitor their incidence. This report summarizes 2012 preliminary surveillance data and describes trends since 1996. A total of 19,531 infections, 4,563 hospitalizations, and 68 deaths associated with foodborne diseases were reported in 2012. For most infections, incidence was highest among children aged <5 years; the percentage of persons hospitalized and the percentage who died were highest among persons aged ≥65 years. In 2012, compared with the 2006–2008 period, the overall incidence of infections† was unchanged, and the estimated incidence of infections caused by Campylobacter and Vibrio increased. Morbidity and Mortality Weekly Report
Outbreak of hepatitis A virus infection in four Nordic countries

15 April - Between 1 October 2012 and 8 April 2013, 16 confirmed cases of hepatitis A virus (HAV) infections with subgenotype IB and identical RNA sequence were reported in four Nordic countries. As none of the cases have a travel history outside the EU within their period of potential exposure, this represents a multicountry outbreak, with exposure currently taking place in the EU. The descriptive epidemiology indicates foodborne transmission originating from a persistent common source in the EU with possibly multiple vehicles of infection that are contaminated with viruses sharing an identical sequence. Epidemiological investigations in affected countries strongly point towards frozen berries as the vehicle of infection. Eurosurveillance

Too many labs still keep dangerous cattle plague: OIE chief

16 April - Too many laboratories still have samples of the devastating cattle disease rinderpest two years after it was eradicated, only the second disease after smallpox to be wiped out, the World Organisation for Animal Health said. Member countries of the organisation, known as the OIE, committed to destroy their samples or pass them on to a handful of approved high-security laboratories when the world was declared free of rinderpest in 2011. But two years later, 25 laboratories still have samples, OIE Director General Bernard Vallat told Reuters. He declined to give details about where. Rinderpest, or cattle plague, did not affect humans directly but decimated hundreds of millions of cattle across Asia, Europe and Africa. Reuters

WELLNESS

Ask Well: Do ball chairs offer benefits?

Q: I know sitting at a desk all day is really bad for me. Is sitting on an exercise ball any better? ...

A: Unfortunately, the answer seems to be no... Although you might expect that sitting on the ball would demand extra exertion to keep you upright and stable, when Dr. Callaghan and his colleagues had healthy young volunteers sit alternately on a ball, an office chair and a backless stool while machines measured muscle activity in their abdomens and lower backs, they found no meaningful differences in the seating options; sitting on a ball did not provide a mini-workout for the midsection. Ball chairs do not improve posture, either. Research by Dr. Callaghan and others have shown that people generally slump just as much on a ball as in a normal chair and that back pain is not reduced. New York Times
Drugs can cut breast cancer risk for some, task force finds

16 April - The drugs tamoxifen and raloxifene (Evista) could reduce the risk of breast cancer among women who are at high risk of developing the disease, a new report confirms. Along with the report, the U.S. Preventive Services Task Force... recommendations state that doctors should talk about the potential benefits and harms of taking drugs to prevent breast cancer, a strategy known as chemoprevention, with patients who are at high risk of developing breast cancer. That guideline is consistent with that of the American College of Obstetricians and Gynecologists and the American Cancer Society, and reflects current clinical practice, the task force said. Medical Xpress

Fast resting pulse death risk link

16 April - Having a fast resting pulse rate, even if you are physically fit, increases death risk, according to a study. Researchers found men with a "high end of normal" resting heart rate of 90 beats per minute had treble the death risk of others with much slower pulses. The investigation, in the journal Heart, looked at nearly 3,000 middle-aged men from Denmark over a period of 16 years. Experts say much more work is needed to confirm and understand the link... They say it is difficult to draw firm conclusions because the study authors did not track the men's fitness - instead they relied on medical records taken years before the research began. BBC News

How social networks influence parents’ decision to vaccinate

15 April - With so much confusing and even misleading information about vaccine safety available on the Internet, it’s no surprise that parents are influenced by their friends’ attitudes when it comes to immunizing their kids. At her son’s preschool near Seattle, Robin Haight is a foot soldier in the vaccine wars. She arranged for a pediatrician to speak about vaccines at the home of a school parent. She put up posters — she calls them “gentle propaganda” — that touted the importance of immunization in stopping the spread of disease. Her husband helped create a spreadsheet to track which children at the school are missing which vaccinations…”I’m just trying to let people know that if you don’t vaccinate your children, it might affect other children’s health,” says Haight. “It directly affects a community of young children. How do we not talk about this?” TIME

Prostate cancer: Call to test men in their 40s

16 April - Men should be offered a screening test for prostate cancer in their late 40s, researchers say. The idea is controversial as prostate specific antigen (PSA) testing can be unreliable, throwing up false positive results that can cause undue worry and even treatment over something benign. But the Swedish team say checking every man aged 45-
49 would predict nearly half of all prostate cancer deaths. Their findings, in The BMJ, come from a study of more than 21,000 men. BBC

Supplement maker agrees to remove DMAA from products

17 April - USPlabs, makers of the dietary supplements OxyElite Pro and Jack3d, have agreed to remove a controversial ingredient, 1,3-dimethylamylamine, or DMAA, from their best-selling products. In an apparent course change in an ongoing battle with the Food and Drug Administration over the stimulant, the company emailed a statement to marketers April 16 saying it will tweak the products’ formulas and remove DMAA. Marine Corps Times

Supplements involved in half of drug recalls

15 April - Dietary supplements that contain unapproved ingredients accounted for just over half of all major drug recalls in the U.S., researchers found. Analysis of FDA data showed 51% of Class I recalls over a 9-year period involved adulterated dietary supplements instead of a pharmaceutical product, Ziv Harel, MD, of St. Michael's Hospital in Toronto, and colleagues reported in a Research Letter published online in JAMA Internal Medicine. Most of those supplements were either sexual-enhancement, body-building, or weight-loss aids, they reported. Harel and colleagues called for increased efforts "to regulate this industry through more stringent enforcement and a standard of regulation similar to that for pharmaceuticals." MedPage Today

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USAFRICOM

Africa: Make polio history - experts unite for declaration

15 April - Hundreds of scientists, doctors and other experts from around the world launched the Scientific Declaration on Polio Eradication last week, declaring that an end to the paralysing disease is achievable, and endorsing a comprehensive new strategy to secure a lasting polio-free world by 2018. The declaration's launch coincides with the 58th anniversary of the announcement of Jonas Salk’s revolutionary vaccine. allAfrica

Nigeria: Public health - polio's moving target

17 April - ...The barriers to polio eradication in Nigeria are complex and numerous. The country does not have a working public health-care system, and some local government officials are less than committed to the cause. In urban centres in the north, widespread distrust of the government leads many parents to refuse vaccination for their children. What is more, in February several polio
workers were murdered — for unknown reasons — at health clinics in Kano, northern Nigeria’s largest city. But epidemiologists have identified one barrier that might be overcome cheaply and safely: locating and counting remote populations, including the nomadic livestock herders who drift through the region with the changing seasons. Records of their numbers and movements are incomplete, but the population is thought to include hundreds of thousands of young children, many of whom have received none or only some of the multiple oral polio vaccine doses required to achieve full protection. Nature

Togo is moving toward becoming the first sub-Saharan African nation to eliminate lymphatic filariasis

11 April - ...Togo is one of the 34 African countries endemic for lymphatic filariasis and is surrounded by the endemic countries of Benin, Ghana, and Burkina Faso. The National Program to Eliminate Lymphatic Filariasis (NPELF) was founded in 2000 and is one of the few LF programs that address the dual goals of the global elimination program on a national scale. Togo is the first sub-Saharan country to achieve probable interruption of transmission and to move to the post-MDA surveillance phase as defined by the WHO...[T]he success of the National Program to Eliminate Lymphatic Filariasis in Togo was facilitated by charismatic, innovative, and trustworthy program managers able to i) timely identify issues and solutions, ii) ensure visibility at the highest levels of the MoH, iii) adopt an opportunistic approach using existing health interventions and a decentralized health system to integrate LF activities, and most importantly, iv) develop a variety of partnerships and pioneering approaches to mobilize resources for a synchronized implementation of the twin-pillar strategies. PLOS

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USCENTCOM

Egypt: Hundreds more mumps, chickenpox cases in Alexandria schools

11 April - Alexandria schools have seen 249 cases of mumps and chickenpox this month alone, according to Mohsen George, the Alexandria Education Department’s general director of executive affairs. This brings the total number of infections this year to 489. Egypt Independent

Pakistan: Measles kills 12 children in one week

18 April - Measles has killed 12 children and affected dozens in Lahore in past one week, FP News desk reported. During last 24 hours, 23 children were admitted in Mayo Hospital and 22 in children Hospital, of them three, hailing from Lahore, succumbed to fatal disease. In district Jhang, 10 children have died of measles in past three months, while in Multan 195 have been affected. Lahore is badly affected by the disease, however, measles cases have also been reported in other cities of the province. Frontier Post
Syria’s forgotten casualties: The chronically ill

18 April - Syrians suffering from chronic illnesses such as cancers, heart disease and diabetes are among the forgotten victims of the two-year conflict, says Médecins Sans Frontières (MSF) Canada executive director Stephen Cornish, who returned from Syria recently. “People are slowly dying of cancer because they can't get their oncology treatment; there are no dialysis or oncology wards,” Mr. Cornish said of the situation in northern Syria. According to the World Health Organization, there are 168 medicines that will be “urgently needed” over the next 12 months, including 92 essential drugs and 33 cancer treatments. Insulin, oxygen, anesthetics, serums and intravenous fluids are no longer available in many parts of the country. Globe and Mail

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USEUCOM

Netherlands: First case of *Echinococcus vogeli* infection imported to the Netherlands, January 2013

11 April - In January 2013 in the Netherlands, a man in his 50s from Suriname underwent hemihepatectomy because of a cystic liver mass, assumed to be a cystadenoma. Pathology revealed an echinococcal infection. PCR analysis of cyst material identified *Echinococcus vogeli*, causing polycystic hydatid disease. This echinococcus species is rarely diagnosed outside South America. The patient received adequate treatment, but this case emphasises the importance of awareness of this infection when treating patients with cystic tumours from endemic areas. Eurosurveillance

Reports highlight novel NDM-7 enzyme in Germany, France

15 April - Two recent studies reported identification of a novel drug-resistant New Delhi metallo-beta-lactamase (NDM) enzyme—named NDM-7—in Germany and France. In the first report, in the Journal of Antimicrobial Chemotherapy, scientists describe a multidrug-resistant Escherichia coli strain isolated from the wounds, throat, and rectum of a Yemeni patient at the Frankfurt University Hospital... The authors termed the new variant NDM-7 and said that, given the history of other NDM strains, the variant will likely spread efficiently worldwide... In the second study, which appeared in PLoS One last week, French researchers reported a similarly multidrug-resistant E coli strain in the urine sample of a patient who had traveled to Mumbai. Analysis revealed the NDM-7 enzyme, which they said differs from NDM-4 by a single amino acid substitution. They said the isolate was resistant to all antibiotics except amikacin, tigecycline, fosfomycin, and chloramphenicol. They also said that controlling the spread of NDM-7 will be difficult. CIDRAP News Scan
United Kingdom: Measles outbreak sees 'missing generation' queuing for MMR jab

17 April - ...5,000 children and young adults in the Swansea area still regarded at risk of catching the highly infectious disease in the worst outbreak in the UK for years. Latest figures suggest 765 people have had it or are still suffering. Of those, 77 have needed hospital treatment. Ten- to 18-year-olds are most at risk, part of a "missing generation" who did not have the inoculation amid the controversy that surrounded the now disgraced Andrew Wakefield's floating of a link between MMR and autism. A row that started in late 1998 and continued well into the new century is now having its consequences... There were 2,030 cases last year, nearly twice the figure in 2011. In 1998, the year of Wakefield's first appearance on the national stage, there were 56. Guardian

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USNORTHCOM

U.S.: Elvis impersonator arrested in case of suspected ricin letters

18 April – A Mississippi man was arrested yesterday in connection with letters suspected to contain the poison ricin that were sent to President Obama and Sen. Roger Wicker, R-Miss., according to the FBI and media reports. Paul Kevin Curtis, 45, was arrested about 5:15 p.m. at his home in Corinth, Miss., about 100 miles east of Memphis, the FBI said in a statement. Curtis is “the individual believed to be responsible for the mailings of the three letters sent through the U.S. Postal Service which contained a granular substance that preliminarily tested positive for ricin,” the agency said. It said the third letter was addressed to "a Mississippi justice official." Confirmatory test results were still being awaited on the letters sent to Obama and Wicker. CIDRAP

U.S.: FDA chief defends budget, says agency is taxpayer 'bargain'

18 April - The head of the U.S. Food and Drug Administration asked Congress for more money on Thursday to improve food safety, police imports and develop countermeasures against chemical and biological threats. FDA Commissioner Margaret Hamburg told a Senate appropriations subcommittee that the agency is doing its best to tighten its belt by cutting back on travel and training. She said mandatory federal spending cuts known as sequestration will cut funds to the agency by $209 million. The FDA gets part of its funding from taxpayers, but most comes from user fees agreed to and paid by drug companies to speed the review and potential approval of new products. Reuters
U.S. infant mortality rate declines

17 April - The rate dropped 12% from 2005 to 2011, with improvements among all major racial and ethnic groups, a government report says. Infant mortality in the U.S. has declined 12% since 2005 after holding steady for many years, according to data released Wednesday by the Centers for Disease Control and Prevention. The infant mortality rate in 2011 was 6.05 deaths per every 1,000 live births, down from 6.87 in 2005, according to the report from the National Center for Health Statistics. Some of the biggest gains were seen in Southern states, though the region still has the highest infant mortality rates overall. The highest rates are in Mississippi and Alabama. Infant mortality also declined for all major racial and ethnic groups, but dropped the most among African Americans, who continue to have double the infant death rate of whites. Los Angeles Times

U.S.: Lessons from military surgeries informed treatment of Boston victims

17 April - ... It turns out to be an art — and a delicate balancing act — to treat people with blast injuries that can pulverize muscle and rip blood vessels, that can drive pieces of metal into soft flesh and shatter bones. Trauma surgeons call it damage control, and say the military experience showed how important it is. The idea is not to try to solve all of a patient’s medical problems at once, but instead to deal with the urgent and life-threatening ones immediately. Patients often have to return to the operating room again and again as their injuries are successively repaired... A big advance, Dr. Weaver said, whose value was proved by the military, is taking tissue from smaller areas to close a large open wound. Surgeons used to take big chunks of muscle along with blood vessels from a person’s abdomen or back and move it to the wound to repair the injury. New York Times

U.S.: Lyme disease rate increasing in the northern United States

17 April - Lyme disease incidence increased about 80% in the United States between 1993 and 2007, and the increase correlated with latitude and with population density... Lyme disease incidence increased in the northern-most states while remaining stable or declining in the southern states. Medscape

U.S.: Surgeons saved lives, if not legs, after Boston blasts

16 April - ... The widespread leg trauma was a result of bombs that seemed to deliver their most vicious blows within two feet of the ground. In an instant, doctors at hospitals throughout the city who had been preparing for ordinary marathon troubles — dehydration or hypothermia — now faced profound, life-changing decisions for runners and spectators of all ages... Some of the attendant medical professionals, said Julie Dunbar, a chaplain at Beth Israel, were faced with “more trauma than most ever see in a lifetime, more sadness, more loss.”...
There were only three fatalities, which doctors say was because the blast, low to the ground, mostly injured people’s legs and feet instead of their abdomens, chests or heads. And tourniquets stopped what could have been fatal bleeding in many... Borrowing a tactic used by the military in Iraq, doctors at Beth Israel used felt markers to write patients’ vital signs and injuries on their chests — safely away from the leg wounds — so that if a patient’s chart was misplaced during a transfer to surgery or intensive care, for example, there would be no question about what was found in the emergency room. New York Times

U.S.: Stimulant potentially dangerous to health, FDA warns

11 April - The Food and Drug Administration (FDA) is using all available tools at its disposal to ensure that dietary supplements containing a stimulant called dimethylamylamine (DMAA) are no longer distributed and available for sale to consumers in the marketplace. The ingredient, DMAA, is most commonly used in supplements promising weight loss, muscle building and performance enhancement; it can elevate blood pressure and could lead to cardiovascular problems, including heart attack, shortness of breath and tightening of the chest. Given the known biological activity of DMAA, the ingredient may be particularly dangerous when used with caffeine. FDA

U.S.: Texas fertilizer plant explosion sends 180 to hospitals, levels homes, 5 to 15 feared dead

18 April - A fire and chemical explosion at a Texas fertilizer plant in a small town north of Waco sent at least 180 people to hospitals, flattened buildings, prompted widespread evacuations and left as many as five to 15 people feared dead. The initial blast at the West Fertilizer Plant in West, Texas, occurred just before 8 p.m. Wednesday, but officials still were struggling to tally the dead and injured early this morning and searching door-to-door amid the rubble for survivors, Sgt. William Patrick Swanton of the Waco Police Department said. ABC

Cambodia records 1,500 dengue fever cases, kills 8 children in Q1

11 April -At least 1,500 dengue fever cases were reported in Cambodia in the first three months of this year, a 10 percent rise from 1,365 cases in the same period last year, a health official said Thursday. Of the figures, the disease killed 8 children during the January-March period this year -- the same number of deaths at the same period last year, Dr. Ngan
Chantha, director of the Health Ministry’s national dengue control program, said. Most patients are children, aged between 5 and 14 years old. Xinhua

China: Hundreds of pigs, dogs die in Chinese city—officials

18 April - Chinese health officials and police were Wednesday probing the mysterious deaths of hundreds of pigs and dogs whose carcasses were discovered in a central Chinese city, authorities said. A total of 410 pigs and 122 dogs died Monday in a village within the city of Yanshi, according to a statement on the city’s website. The deaths came after the discovery of more than 16,000 dead pigs last month in Shanghai’s main river sparked public health concerns. The statement said that livestock experts have eliminated an animal epidemic or the H7N9 strain of bird flu as the cause of the deaths of the pigs and dogs. But all chemical plants in the area near to where the dead animals were found have been ordered to suspend operations, their power supplies have been cut off and managers are not allowed to leave as part of a police probe, the statement said. The state-run Xinhua news agency reported that some village residents blamed the deaths on gas emissions from a local chemical plant, saying there had been an “extremely strong odor” on Monday morning. Inquirer News

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Argentina: Intensified surveillance and insecticide-based control of the Chagas disease vector *Triatoma infestans* in the Argentinean Chaco

11 April - The elimination of *Triatoma infestans*, the main Chagas disease vector in the Gran Chaco region, remains elusive. We implemented an intensified control strategy based on full-coverage pyrethroid spraying, followed by frequent vector surveillance and immediate selective insecticide treatment of detected foci... Current vector control procedures have limited effectiveness in the Gran Chaco. Selective insecticide sprays must include all sites within the infested house compound. The suppression of *T. infestans* in rural areas with moderate pyrethroid resistance requires increased efforts and appropriate management actions. In addition to careful, systematic insecticide applications, housing improvement and development policies that improve material conditions of rural villagers and reduce habitat suitability for bugs will contribute substantially to sustainable vector and disease control in the Gran Chaco. PLOS

Brazil: Dengue cases leave Patos de Minas, Minas Gerais, the state of emergency

15 April - The city of Patos de Minas, in Alto Parnaiba, joined the list of cities that declared a state of emergency because of the number of dengue cases... According to data from the
Municipal Health hitherto been recorded 1,325 suspected dengue cases. 340 and 883 were confirmed awaiting results. "Usually the person looking for the hospital, does the rapid test and has outpatient clinic. We had no patient admitted for complications or dengue hemorrhagic fever," said the director of Surveillance and Health, Mariah Fiqueiredo.

Triangulo Mineiro

Haiti: Study suggests strain with Haiti cholera mutations may increase severity of disease

17 April - The cholera strain that transferred to Haiti in 2010 has multiple toxin gene mutations that may account for the severity of disease and is evolving to be more like an 1800s version of cholera, reports a new Northwestern Medicine study. The strain, "altered El Tor," which emerged around 2000, is known to be more virulent and to cause more severe diarrhea and dehydration than earlier strains that had been circulating since the 1960s. This study reports the altered El Tor strain has acquired two additional signature mutations during the past decade that may further increase virulence. In addition, these newly discovered signature mutations documented in the study further link the Haitian cholera epidemic to the strain from Nepal. News-Medical.Net

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