21 February 2014

Army Public Health Weekly Update

U.S. Army Public Health Command

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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. These 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.
Gulf War and Health, Volume 9: Long-Term Effects of Blast Exposures

The wars in Iraq and Afghanistan are known for the enemy’s reliance on improvised explosive devices (IEDs). It’s estimated that explosive weaponry accounts for 75 percent of all US military casualties. Since 2001, more than 1,000 US soldiers in the Afghanistan war have been killed in action and nearly 10,000 wounded in action – causing a variety of injuries – because of IEDs. From March 2003 to November 2011, more than 2,000 US soldiers in the Iraq war were killed in action and close to 22,000 wounded in action due to IEDs.

The Department of Veterans Affairs asked the IOM to draw conclusions regarding the association between exposure to blast and health effects.

VETERINARY/FOOD SAFETY

- Europe: Campylobacter tops zoonotic, foodborne outbreaks
- Honeybees may be making wild cousins ill
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- Pakistan: Gunmen kidnap medical team in north-west
- Saudi Arabia reports its 60th MERS death

USEUCOM

- Greece: Tough austerity measures leave nearly a million people with no access to healthcare, leading to soaring infant mortality, HIV infection and suicide
- United Kingdom: Contaminated floodwaters could lead to norovirus spike
- United Kingdom: MPs overwhelmingly back ban on smoking in cars carrying children
- United Kingdom: Tamoxifen found in bodybuilding supplement

USNORTHCOM

- U.S., California: Health experts warn of water contamination from drought
- U.S.: Groups call for safe reduction of C-sections
- U.S.: Naloxone access urged for increasing U.S. heroin users
- U.S.: The economic burden of sixteen measles outbreaks on United States public health departments in 2011

USPACOM

- Australia: Avian influenza outbreak results in egg shortage across South Australia
- Australia: Is Australia facing an obesity crisis?
- Indonesia: Some signs of normalcy after volcano eruption
- Malaysia wages all-out war against dengue outbreak

USSOUTHCOM

- Honduras: World-leading murder rate is falling
- Virus advances through east Caribbean
The Power and Beauty of Data Visualisation in Science

Graphs, charts and other data visualisations have changed the way we see, interpret and understand the world around us.

This slideshow includes a diagram by Florence Nightingale which shows more Crimean War soldiers died from preventable epidemic diseases than from battlefield wounds and John Snow’s street-by-street look at cholera transmission.

U.S. MILITARY

7221st MSU first to join Army Wellness Center program

14 February - Soldiers of the 7221st Medical Support Unit, Newark, Del., were the first Army Reserve soldiers to undergo the battery of metabolic and fitness tests associated with the Army Wellness Center Program during an event held here at Kirk Army Medical Center, Feb. 8, 2014. Lt. Col. Bradley Nindl, the 7221st MSU commander, said the unit is the first Army Reserve unit to participate here in the active-duty program that began in Germany and now expanding in the continental United States. Nindl, a resident of Abingdon, Md., said the idea is to leverage the Army's existing wellness infrastructure to improve the health and fitness for the Army Reserve soldiers... "As the Army Public Health Command sets up new wellness centers, one piece that was missing was the Army Reserve," said [Maj. Zach T.] Solomon. "It is a real challenge to affect the lifestyles of our Reserve soldiers because of being all spread out, so this is a great opportunity for them." DVIDS

Army STARRS

10 February - Suicides in the Army fell by 19 percent last year — a welcome break that reversed a nearly 10-year rise. The Army has tried an all-hands-on-deck approach to the problem, but researchers don't fully understand the science behind suicide. Now they are finishing data collection for the largest mental health study ever attempted by the military. The project's acronym is STARRS. It's run by the Army and the National Institute of Mental Health. Dr. Michael Schoenbaum, with NIMH, and Dr. Kenneth Cox, with the Army Public Health Command, have more. (audio) FederalNewsRadio (third item)

IOM: Need more data on blast injuries

13 February - There's insufficient reporting and research on the long-term health effects on U.S. veterans from blast exposure during Gulf War combat missions, according to the Institute of Medicine (IOM). Data on "complex, multisystem injuries" associated with blast exposure has been lacking, according to the authors of the ninth installment of the IOM report "Gulf War and Health." [See left sidebar.] As a result, the report committee members "relied heavily on the literature to assess the evidence on acute effects and on its own collective medical expertise to draw conclusions regarding the plausibility of long-term consequences." "Many questions remain unanswered," said committee member Jeffrey J. Bazarian, MD, MPH, of the University of Rochester in New York. Medpage Today

Marine families in Hawaii worry soil under base housing may be toxic

16 February - Marine families who live in base housing in Hawaii worry that they have been exposed to a toxic chemical in the soil. They are organizing and gathering data on health issues they fear might have been caused by exposure to chlordane, a probable carcinogen. The concern about the health of Marines, their spouses and children at the Forest City
Army Substance Abuse Program - Synthetic Stimulant Use

The Army Center for Substance Abuse Program (ACSAP) is concerned about the use of synthetic drugs in the Army. Of primary concern are:

- Synthetic THC (Tetrahydrocannabinol) substitutes commonly sold under the names "Spice" and "K2."
- Designer cathinones commonly referred to as "bath salts."

Substance abuse is inconsistent with the high standards of performance, discipline, and readiness necessary to accomplish the Army mission. Not only are synthetic drugs dangerous, but they can cost a Soldier his or her military career.

The Drug Enforcement Administration (DEA) emphasizes that users of synthetic drugs suffer vomiting, anxiety, seizures, hallucinations, loss of consciousness, organ damage, and even death.

Military questions test for lung damage in soldiers

10 February - A debate among doctors could determine whether tens of thousands of soldiers are diagnosed as disabled and entitled to benefits. It comes down to what kind of test is appropriate for soldiers returning from Iraq and Afghanistan with severe breathing problems. Vanderbilt Pulmonologist, Doctor Robert Miller, told NewsChannel 5 Investigates that many soldiers have permanent lung damage that is not detected on standard tests. But military doctors have openly criticized Doctor Miller’s use of an invasive test and even questioned results that show so many sick soldiers. Many of the soldiers blame their problems on exposure to open air burn pits while they were deployed. NewsChannel5

Military’s mental-health efforts are ineffective, report finds

20 February - An independent report on mental-health programs for military members and their families [Preventing Psychological Disorders in Service Members and Their Families: An Assessment of Programs (2014)] paints a bleak picture of the efforts being made to stave off depression, suicide, post-traumatic stress disorder and domestic violence among service personnel. The Institute of Medicine report, which was commissioned by the U.S. Department of Defense and issued on Thursday, reviewed data on prevention programs currently in use and found that few exhibited strong evidence they work... Nearly 1 million service personnel were diagnosed with at least one mental-health condition between 2001 and 2011. The percentage of those with at least one psychological disorder increased by 62% in those years, according to the report. The rate of active-duty military diagnosed with posttraumatic stress disorder skyrocketed 656%, while those with anxiety rose 226% during that same period. Wall Street Journal

Report of two cases of vivax malaria in U.S. soldiers and a review of malaria in the Republic of Korea

January 2013 - This report describes two cases of vivax malaria in U.S. Army soldiers who acquired their infections at a training area in the Republic of Korea during 2012, but developed symptoms and were diagnosed more than six months later, long after they had returned to the United States... The increased numbers of malaria cases among U.S. and KATUSA military personnel similarly increased as numbers of malaria cases in ROK
Vaccine Hesitancy: A Call for Papers from PLOS Currents: Outbreaks

The European Centre for Disease Prevention and Control is collaborating with PLOS Currents: Outbreaks to host a call for papers on vaccine hesitancy and contemporary vaccination coverage from a multidisciplinary perspective. We invite researchers from a wide range of disciplines to contribute original research that addresses vaccine hesitancy and barriers to vaccination. Please contact us at currents@plos.org with any questions, we look forward to expanding the conversation.

Study shows higher cancer deaths at Camp Lejeune

19 February - Marines and Navy personnel stationed at Camp Lejeune, N.C., during years when its drinking water was highly polluted with toxic chemicals died of cancer far more frequently than those who lived at a base without fouled water, a federal study said Wednesday. The federal Agency for Toxic Substances and Disease Registry's long-awaited mortality study provides persuasive evidence polluted water sickened people who lived at the North Carolina base, say members of a panel advising ATSDR. Death rates for all cancers at Camp Lejeune were 10 percent higher than at Camp Pendleton, a Marine Corps base in California whose water was never contaminated, the study said. Tampa Bay Times

1 in 14 women reports non-partner sexual assault worldwide

11 February - One in every 14 females around the world ages 15 and older has been sexually assaulted at least once in their lives by someone other than an intimate partner, claims new research released Tuesday. Recent news accounts of gang rapes and murders of women in India and South Africa have heightened global awareness of sexual violence. The new study, published in The Lancet, finds that such assaults have become “endemic” in at least three global regions: central sub-Saharan Africa, including the Democratic Republic of Congo, where 21 percent of all women 15 and older report being rape victims; southern sub-Saharan Africa, including Namibia, where the figure is 17.4 percent; and New Zealand and Australia, where it’s 16.4 percent. In North America, 13 percent of women reported being raped. The region ranked sixth highest among the 21 international regions examined. But the authors caution that women in the United States and Canada may feel more comfortable than females in other cultures about notifying authorities of sexual attacks. NBC News

Fewer HPV vaccine doses may still lower risk for condyloma

12 February - Maximum reduction in condyloma risk occurred after 3 doses of quadrivalent human papillomavirus (HPV) vaccine, but 2 doses also considerably reduced condyloma risk,
Air surveillance at Bagram first for Afghanistan

The USAPHC has participated in the multiple site particulate matter sampling conducted throughout the U.S. Central Command area of responsibility, in 2006-7 and the 2007-10; sampling at Balad, Iraq, specifically focused on air quality and burn pit emissions; and the September 2013 air surveillance mission to Bagram Air Field, Afghanistan. The latter is the most detailed air sampling done in Afghanistan to date by the U.S.

Medscape

Gut microbes respond within days to major diet changes

1 March - ...Microbiologists have known for some time that different diets produce different gut flora, but new research indicates that the changes take hold with startling quickness. Bacterial populations shift measurably in the first few days following a big shift in what we eat, according to a recent study. Researchers assigned volunteers to two diets—one based on animal products such as meat, eggs and cheese and one based on vegetables. Almost immediately the gut microbiome responded. The animal diet, for instance, curbed the numbers of microbes that break down carbohydrates from plants and boosted levels of organisms that can tolerate bile, which helps to digest fats. “What we thought might take days, weeks or years began to happen within hours,” says Eugene Chang, a professor of medicine at the University of Chicago, who did not contribute to the study.

Scientific American

Head injury triples stroke risk in youth

14 February - Traumatic head and neck injury tripled stroke risk for young adults compared with other types of trauma injuries, a large cohort study showed. The relative stroke risk was 2.8 in the 4 weeks after head or neck trauma versus other trauma-related emergency visits among 20- to 49-year-olds... Stroke incidence rate was 11 per 100,000 head and neck trauma patients under age 50 overall, and 48 per 100,000 in the 18 to 49 age range, the researchers reported here at the International Stroke Conference (ISC). For comparison, those 4-week rates were well above the annual rate in the general population for children (2.5 per 100,000) and for young adults (on the order of 10 per 100,000).

Medpage Today

“Misfearing” — Culture, identity, and our perceptions of health risks

13 February - ...If the next frontier in preventing cardiovascular disease among women is less about disseminating evidence than about understanding why the evidence may be hitting a wall, the critical question is why women might feel more fearful of other diseases, particularly breast cancer, despite ample evidence suggesting that heart disease poses a far greater threat. “Misfaring,” the term Cass Sunstein uses to describe the human tendency to fear instinctively rather than factually, is not unique to women’s perceived health threats. Decades of research on risk perception have revealed the many factors feeding our misfears and associated perceptions. Tornadoes. Terrorist attacks. Homicides. The big, the dramatic, and the memorable occupy far more of our worry budget than the things that kill with far greater frequency: strokes, diabetes, heart disease. But interacting with many of these fear
Fight the Enemy
Video Competition

The Military Health System put out a call for service members to fight the “enemy” – tobacco – and you answered! The video competition, Fight the Enemy, challenged service members to create videos that show how smoking degrades overall health and readiness. Installations from Montana to Japan participated, highlighting just how dangerous tobacco use can be.

Now that all the entries are in, MHS is inviting you to vote for your favorite Fight the Enemy video. A panel of judges will select the top three winners, but you have the power to select the Voters’ Pick.

Test for persistent Lyme infection using live ticks shown safe in clinical study

12 February - In a first-of-its-kind study for Lyme disease, researchers have used live, disease-free ticks to see if Lyme disease bacteria can be detected in people who continue to experience symptoms such as fatigue or arthritis after completing antibiotic therapy. The technique, called xenodiagnosis, attempts to find evidence of a disease-causing microbe indirectly, through use of the natural disease-carrier—in this case, ticks. It was well tolerated by the volunteers, but investigators could not find evidence of Lyme disease bacteria in most of the cases where enough ticks were collected to make testing possible. Larger studies are needed, the scientists say, to determine the significance of positive xenodiagnosis results in cases where Lyme disease symptoms persist following antibiotic therapy. NIH News

Telemedicine breaks down international barriers

20 February - Telemedicine has long been considered an ideal means of connecting healthcare providers with people in remote parts of the country. Now a growing number of providers are using the technology to push their expertise across the globe. Pittsburgh-based UPMC, for instance, recently announced two deals to enable video access to its physicians in Afghanistan and India. That’s on top of the health network’s ongoing telemedicine partnerships in China, Kazakhstan, Italy, Colombia, Singapore, Mexico and Ireland, and ongoing conversations with Germany, Brazil and Israel, among other countries. mHealth News

INFLUENZA

Armed Forces Health Surveillance Center: DoD Influenza Surveillance Summary

14 February:

- NORTHCOM: ILI and P&I activity decreased. The percent of outpatient encounters due to ILI and P&I remained stable in week 06. Those due to P&I were above baseline.
- PACOM: ILI and P&I activity decreased. Percent of outpatient encounters due to ILI decreased this week for service members but remained above baseline. Those due to P&I in service members increased and were above baseline.
EUCOM: ILI activity decreased among vaccinated service members and was stable among those unvaccinated. P&I activity decreased this week. The percent of outpatient encounters due to ILIs increased slightly in week 06 among service members and was above baseline.

CENTCOM: The percent of encounters that were ILI related decreased this week and was elevated above baseline. The percent of encounters that were P&I related decreased this week and remained above baseline. AFHSC DoD Influenza Surveillance Summary

CDC: Weekly Influenza Surveillance Report
During week 6 (February 2-8, 2014), influenza activity decreased, but remained high in the United States.

- Viral Surveillance: Of 7,562 specimens tested and reported during week 6, 1,268 (16.8%) were positive for influenza.
- Pneumonia and Influenza Mortality: The proportion of deaths attributed to pneumonia and influenza (P&I) was above the epidemic threshold.
- Influenza-Associated Pediatric Deaths: Ten influenza-associated pediatric deaths were reported.
- Influenza-associated Hospitalizations: A season-cumulative rate of 22.5 laboratory-confirmed influenza-associated hospitalizations per 100,000 population was reported.
- Outpatient Illness Surveillance: The proportion of outpatient visits for influenza-like illness (ILI) was 3.0%, above the national baseline of 2.0%. All 10 regions reported ILI above region-specific baseline levels. FluView

DoD Global Laboratory-Based Influenza Surveillance Program
For 26 January - 8 February 2014 (Weeks 5 - 6):

- During Weeks 5 & 6, 296 specimens were collected and received from 49 locations. Results were finalized for 65 specimens from 28 locations. For specimens collected during Week 5, there were 43 influenza A(H1N1)pdm09, three influenza A(H3N2), six influenza A/not subtyped, one influenza B, and one influenza B & parainfluenza identified. For specimens collected during Week 6, four influenza A(H1N1)pdm09, and one influenza A/not subtyped were identified.
- Cumulative results were finalized for 1,940 specimens from 76 locations. There were 746 specimens positive for influenza A (695 A(H1N1)pdm09, 22 A(H3N2), four A(H1N1)pdm09 & parainfluenza, one A(H1N1)pdm09 & RSV, two A(H1N1)pdm09 & rhinovirus/enterovirus, and 22 A/not subtyped). There were 14 specimens positive for influenza B (eight B/unknown lineage, four B/Yamagata, and two B & parainfluenza). Other respiratory pathogens identified were 38 adenovirus, 21 Chlamydia pneumoniae, 62 coronavirus, 29 human metapneumovirus, 38 Mycoplasma pneumoniae, 58 parainfluenza, 101 RSV, and 220 rhinovirus/enterovirus. To date, 76 non-influenza co-infections have been identified. USAF School of Aerospace Medicine
European Centre for Disease Prevention and Control: Weekly Influenza Surveillance Overview

For week 6/2014:

- Of the 27 countries providing clinical data, Greece reported high-intensity influenza activity, eight reported medium intensity and 19 countries reported low-intensity influenza activity.

- Of the 1,495 sentinel specimens tested across 27 countries, 495 (33%) were positive for influenza virus. Since week 40/2013, six countries have reported 1,941 hospitalised, laboratory-confirmed influenza cases, 1,920 (99%) of which were caused by influenza virus type A infection.

For the second consecutive week, the proportion of sentinel specimens testing positive for influenza virus has decreased and influenza activity appears to be declining in some countries. Influenza A(H1)pdm09 and A(H3) viruses are co-circulating in outpatient settings; however, A(H1)pdm09 is predominant in hospitalised cases. Weekly Influenza Surveillance Overview

Google.org: Flu Trends

19 February – Estimates of flu activity based on certain Internet search queries indicate that the level of flu activity in the northern hemisphere ranges from low in some parts of Europe to intense in Japan. Levels are high in Mexico, France, Austria, Hungary, Sweden, Norway and Russia. In the southern hemisphere, levels range from minimal to low. Google.org Flu Trends

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

18 February - On 14, 15 and 16 February 2014, the National Health and Family Planning Commission (NHFPC) of China notified WHO of nine additional laboratory-confirmed cases of human infection with avian influenza A(H7N9) virus, including one death. Six of the nine cases are male. The age range is 4 to 84 years. Cases were reported from Anhui (2), Guangdong (5), Hunan (1), and Jiangsu (1). 2 cases are in a critical condition, 3 cases are in a severe condition and the condition of 3 cases are unknown at this point in time. Three cases are reported to have had a history of exposure to live poultry. Investigations are ongoing...

The overall risk assessment has not changed. WHO


21 February - This report uses data from 2,319 children and adults enrolled in the U.S. Influenza Vaccine Effectiveness (Flu VE) Network during December 2, 2013–January 23, 2014, to estimate an interim adjusted effectiveness of seasonal influenza vaccine for preventing laboratory-confirmed influenza virus infection associated with medically
attended ARI. During this period, overall vaccine effectiveness (VE) (adjusted for study site, age, sex, race/ethnicity, self-rated health, and days from illness onset to enrollment) against influenza A and B virus infection associated with medically attended ARI was 61%. The influenza A (H1N1)pdm09 (pH1N1) virus that emerged to cause a pandemic in 2009 accounted for 98% of influenza viruses detected. VE was estimated to be 62% against pH1N1 virus infections and was similar across age groups. *Morbidity and Mortality Weekly Report*

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

For week 6 (through 8 February 2014):

**Influenza**

- Nine cases of NHRC laboratory-confirmed influenza (one A/H3 and eight A/H1N1) among US military basic trainees.
- Elevated influenza activity in late January at several basic training centers and in southern California civilians.
- Increased influenza B activity among civilians in California near US-Mexico border.
- NHRC has capability to test for the novel H7N9 influenza virus and the MERS coronavirus.

**FRI surveillance** at all eight U.S. military basic training centers indicated moderately elevated FRI rate at MCRD Parris Island. *NHRC Febrile Respiratory Illness Surveillance Update*

**Spanish study finds current flu vaccine gives limited protection**

14 February - A mid-season study from Spain suggests that this year's influenza vaccine provides only 24% protection, which contrasts with a recent Canadian study that showed the vaccine provided better than 70% protection. In a study involving patients in Navarre, Spain, researchers found that the vaccine provided 40% protection against 2009 H1N1 viruses and 13% protection against H3N2 viruses, yielding an overall vaccine effectiveness (VE) of 24%. They couldn't estimate VE against influenza B because no cases were detected. *CIDRAP*

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

For the week ending 8 February 2014 (Week 6):

The number of specimens testing positive for Influenza A continued to decline in week six. All regions, except PRMC, have shown declining trends from peaks earlier in the season. PRMC, on the other hand, continues to see a rise in positive influenza samples since week one.

- **ILI Activity:** Army incident ILI outpatient visits in week six were 31% lower than for the same week last year.
WHO keeps same strains for next season's flu vaccine

20 February - The World Health Organization (WHO) today recommended keeping the same strains for the Northern Hemisphere’s 2014-15 flu season, based on its advisory group’s in-depth analysis of the most recent circulating strains and patterns. The advisors met in Geneva this week, and their recommendation today involves the same strains recommended for the Southern Hemisphere’s upcoming flu season, which typically runs from May through October. Also, the WHO recommended an additional strain similar to influenza B/Brisbane/60/2008, of the Victoria lineage, for quadrivalent (four-strain) vaccines, which contain two influenza B viruses. That is also the same as last year’s second B strain choice. CIDRAP

Europe: Campylobacter tops zoonotic, foodborne outbreaks

19 February - *Campylobacter* is the leading culprit by far in zoonotic and foodborne outbreaks in Europe, but it is declining slightly, the European Centre for Disease Prevention and Control (ECDC) said in a report today. The agency also noted that *Salmonella* infections are also down slightly, while listeriosis is up. Europe saw 214,268 confirmed cases of *Campylobacter* in 2012, the ECDC said in the annual report on such diseases, which was co-authored by the European Food Safety Authority (EFSA). *Salmonella* was a distant second, at 91,034, and verocytotoxigenic *Escherichia coli* was third, with 5,671 cases. The most common food vehicle for disease was eggs and egg products, the report said. CIDRAP News Scan (third item)

Honeybees may be making wild cousins ill

19 February - Domesticated honeybees, reeling from disease, are probably infecting wild bumblebees whose pollination is vital for farmers around the world, a study said Wednesday. Bee populations, both wild and captive, are in decline in Europe, the Americas
and Asia for reasons scientists are struggling to understand. Reporting in the journal Nature, European researchers said they had found evidence to back a theory that bumblebees are being hit by viruses or parasites from honeybees in hives. AFP

**Raw milk risk higher than realized: 17 percent suffer illnesses**

February 2014 - Consuming raw milk is unsafe, and illnesses from the product are more common than previously realized, a new study finds. The study, published in the January issue of *Emerging Infectious Diseases*, looked at people in Minnesota, finding that over a 10-year period, 17 percent of people who consumed raw milk might have become ill... Even though outbreaks associated with raw milk are frequent, the number of reported cases is probably much smaller than the actual number of illnesses. “Illnesses associated with raw milk consumption generally are under-reported as typically only outbreak-related cases are reported,” Robinson said. *Nation's Health*

**Sexually transmitted food poisoning? A fish toxin could be to blame**

14 February - ...With fish now imported to the U.S. from all over the world, the [ciguatera] toxin has since appeared outside its endemic tropical regions — in Vermont, North Carolina and New York. Some researchers are now worrying that warming seas could make the poison even more common. The toxin causes the strange foodborne illness, known as ciguatera fish poisoning. The molecules open little holes in nerves, triggering an array of crazy symptoms: reversal of how you experience temperature, vertigo and the sensation that your teeth are falling out... And then there's dyspareunia, otherwise known as painful sex... The toxin can also cause hallucinations or "giddiness," Friedman says, if the fish came from the Pacific or Indian Oceans. *NPR*

**Subway won't put chemical used in shoe soles in its bread anymore**

6 February - Subway has announced it will phase out a bleaching agent used in its bread in the U.S., a chemical which is also commonly used to make yoga mats, synthetic leather, and shoe soles. Food blogger Vani Hari’s petition to urge Subway to drop the chemical azodicarbonamide went viral Tuesday, and 24 hours, over 50,000 signatures, and a deluge of outrage on Subway’s Facebook page later, the sandwich chain announced it was dropping the additive from its bread production. "This is not eating fresh!" Hari’s petition said. Azodicarbonamide is used to make bread whiter and to improve elasticity of the dough. The FDA permits azodicarbonamide as an additive in food. But azodicarbonamide has already been banned in Europe, and in Singapore, its use is reportedly punishable by up to 15 years imprisonment and a fine of $450,000. *Newsweek*
**WELLNESS**

Digital health devices running on questions

13 February - Is that FitBit or FuelBand actually doing your patient or you any good? The first studies are gearing up to find out. Such wirelessly-networked body sensor devices that connect via Bluetooth to a smartphone or tablet have seen an explosion in popularity such that the number manufactured is expected to well exceed the U.S. population within the year, based on data from the U.S. Census Bureau and market research firm ABI Research. The idea is that the tracking and feedback motivates healthy behaviors and thus outcomes. Some devices are also billed as giving clinicians another tool to inform clinical management. "There are a lot of good reasons to think mobile health devices will improve outcomes but the hard evidence to support that is for the most part lacking," explained Steven Steinhubl, MD, who studies mobile health devices and apps as director of the digital medicine program at Scripps Health in La Jolla, Calif.

Medpage Today

First biomarker could help boys at risk of major depression

17 February - British brain scientists have identified the first biomarker, or biological signpost, for clinical depression and say it could help find boys in particular who are at risk of developing the debilitating mental illness. In a study in the Proceedings of the National Academies of Science (PNAS) journal, the team found that teenage boys who have a combination of depressive symptoms and raised levels of the stress hormone cortisol are up to 14 times more likely to develop major depression than those who show neither trait. The findings suggest teenagers could in future be screened for such signals, and those at highest risk could be helped to develop the kind of coping strategies and "brain fitness" to help them avoid becoming depressive.

Reuters

Guidelines for stroke prevention in women issued

9 February - The American Heart Association American Heart Association (AHA) and the American Stroke Association (ASA) have issued stroke prevention guidelines which focus on women’s unique risks. This is the first time guidelines have been issued which focus on stroke prevention in women.... Because stroke is the firth leading cause of death in men, but the third leading cause for women, additional public health efforts and attention are necessary to reduce the risk factors which predispose women to a higher risk of stroke. The risk for developing a stroke increases with age, and women live longer than men... It also turns out that specific risk factors for stroke are also more common in women: migraine with aura, an irregular heartbeat called atrial fibrillation, obesity, along with metabolic syndrome.

Forbes
Mammography: Study finds no lives saved

11 February - Annual mammography failed to reduce breast cancer mortality in women, ages 40 to 59, compared with physical examination or routine care, according to 25-year follow-up data from a Canadian screening program. Women screened annually by mammography for 5 years had a breast cancer mortality hazard of 1.05 compared with the control group during the screening period. During follow-up for a mean of 22 years, the mammography group had a breast cancer mortality hazard of 0.99 versus the control group. Neither value was statistically significant. After 15 years of follow-up, the mammography group had an excess of 106 breast cancers attributable to overdiagnosis, as reported in BMJ Open. "Although the difference in survival after a diagnosis of breast cancer was significant between those cancers diagnosed by mammography alone and those diagnosed by physical examination screening, this is due to lead time, length of time bias, and overdiagnosis," Anthony B. Miller, MD, of the University of Toronto School of Public Health, and colleagues said of their findings.

Miscarriage risk 'reduced by lifestyle changes'

18 February - More than a quarter of first-time miscarriages could be prevented by making a combination of lifestyle changes, research in Denmark suggests. Researchers said lifting more than 20kg (44lbs) each day during pregnancy and being obese or underweight increased the risk of miscarriage. Women beyond their early 30s, who drank alcohol and worked night shifts during pregnancy were also more likely to miscarry, they said. The study analysed 91,427 women.

Restless sleep linked to widespread pain in older adults

13 February - Waking up and not feeling rested isn't just annoying. Researchers say that "non-restorative sleep" is the biggest risk factor for the development of widespread pain in older adults. Widespread pain that affects different parts of the body -- the main characteristic of fibromyalgia -- affects 15 percent of women and 10 percent of men over age 50, according to previous studies. To identify the triggers of such widespread pain, British researchers compiled demographic data as well as information on the pain and physical and mental health of more than 4,300 adults older than 50. About 2,700 had some pain at the study's start, but none had widespread pain. The results, published Feb. 13 in Arthritis & Rheumatology, show that restless sleep as well as anxiety, memory problems and poor health play a role in the development of this type of pain. Three years after the study began, 19 percent of the participants had new widespread pain, the researchers found.

Sitting tied to disability among older Americans: study

19 February - Regardless of how much time older Americans spend being active, those who sit for more hours each day are more likely to be disabled, according to a new study. Researchers found that every hour people 60 years old and older spent sitting daily was tied
to a 46 percent increased risk of being disabled - even if they also exercised regularly...
Among older Americans disability is also a major concern because it has been linked to
increased medical spending and a higher risk of going into a nursing home or other care facility... The study can’t say whether a sedentary lifestyle leads to disability or if having a disability leads to a sedentary lifestyle, however. Reuters

USAFRICOM

Burundi’s avoidable flood deaths

18 February - Building and planning code violations were largely to blame for the deaths - amid torrential rain earlier this month - of dozens of people in Burundi’s capital, and the destruction there of 3,500 homes, according to a leading urban planning expert who noted that numerous reports had warned of just such an eventuality. Children accounted for most of the 68 deaths on 10 February in a city that is surrounded by very steep hills. Some 15,000 people have been left homeless and are now staying in five centres around the city where the government and Red Cross are providing food and other essentials. IRIN

Cameroon: As health crisis looms, Cameroon cracks down on illegal clinics

19 February - ...Cameroon is tackling a health care crisis. The country’s 22 million people face high rates of HIV, malaria and tuberculosis. And the country has one of the highest infant mortality rates in the world. But public health care is too expensive, or simply not available, for many families. So they’ve have turned to unauthorized clinics for care. One such clinic is the Family Health Medical Center in Cameroon’s largest city of Douala. Elian says she goes to this facility because the doctor is understanding, and the treatment is affordable. “They put patients before money, and take good care of them,” she says... The clinic often receives patients from nearby government hospitals when people run out of money for treatment there, says Sylvestre Mebam, who operates the Family Health Medical Center. NPR

Cameroon: Churches closed over polio beliefs

18 February - Cameroon’s government is shuttering Pentecostal churches after its health ministry said that some church leaders were partly responsible for recent polio cases, Voice of America (VOA) reported yesterday. From September through November last year, the country’s West Region reported four polio cases 25 years after it eradicated the disease. The first case was in a 7-year-old unvaccinated girl whose grandfather is a Pentecostal church official who opposes immunization efforts. Dr. Marie Ekobela, coordinator of national immunization in Cameroon’s Ministry of Health, said the girl was the source of the outbreak.
Ekobela and other public health experts said that hardline Pentecostal dogma against immunization aided the polio resurgence. CIDRAP News Scan (second item)

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**USCENTCOM**

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**Pakistan: Gunmen kidnap medical team in north-west**

17 February - Masked gunmen have kidnapped a six-member polio vaccination team - a doctor, two local employees of the World Health Organisation and three guards - in north-west Pakistan, an official said. Local administration official Niamat Ullah Khan said the team was seized on Monday about 300 kilometres south-west of Peshawar, in Ping village at the border of South Waziristan. A local official of the health organisation in Peshawar confirmed the incident. The kidnapping is the latest setback to efforts to eradicate the disease in Pakistan, and followed a bombing on Sunday targeting a polio vaccination team in Peshawar which killed a policeman. Pakistan is one of only three countries in the world where the crippling virus is still endemic, along with Afghanistan and Nigeria. Sydney Morning Herald

**Saudi Arabia reports its 60th MERS death**

17 February - Saudi Arabian health officials on Feb 15 announced the death of a young adult cancer patient from the Middle East respiratory syndrome coronavirus (MERS-CoV), bringing the number of fatal MERS cases in that country to 60. The 22-year-old man is from Eastern province, the Saudi Ministry of Health (MOH) said. The nation has reported 145 MERS-CoV cases. The World Health Organization (WHO) has confirmed 182 cases of MERS-CoV infection worldwide, including 79 deaths, according to a Feb 7 WHO update. That count, however, does not include this recent Saudi case or another reported by the MOH on Feb 2. CIDRAP News Scan (first item)

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**Greece: Tough austerity measures leave nearly a million people with no access to healthcare, leading to soaring infant mortality, HIV infection and suicide**

21 February - Austerity measures imposed by the Greek government since the economic crisis have inflicted "shocking" harm on the health of the population, leaving nearly a million...
people without access to healthcare, experts have said. In a damning report on the impact of spending cuts on the Greek health system, academics found evidence of rising infant mortality rates, soaring levels of HIV infection among drug users, the return of malaria, and a spike in the suicide count. Greece’s public hospital budget was cut by 25 per cent between 2009 and 2011 and public spending on pharmaceuticals has more than halved, leading to some medicine becoming unobtainable, experts from Oxford, Cambridge and the London School of Hygiene and Tropical Medicine (LSHTM) said. Independent

United Kingdom: Contaminated floodwaters could lead to norovirus spike

19 February - Public health chiefs are braced for a surge in cases of diarrhoea, vomiting and stomach pain caused by bugs in floodwater as sewage spills out of overflowing drains. One expert predicted "a big spike in diarrhoea" in the coming days but said the outbreak of illness would be “unpleasant but not deadly”. Floodwater could contain E. coli, salmonella and campylobacter bacteria as animal waste becomes mixed with storm waters, while human sewage could spread the winter vomiting bug norovirus. Independent

United Kingdom: MPs overwhelmingly back ban on smoking in cars carrying children

10 February - Smoking in cars carrying children is set to be banned after MPs overwhelmingly backed the plan in a free vote. The House of Commons supported the plan, first put forward by Labour, despite the misgivings of some cabinet members, including Nick Clegg, over whether it will be too difficult to police. Under the proposal the government will now have powers to introduce a new offence of exposing children to smoke in vehicles, with breaches of the law likely to incur a small fine. David Cameron, who missed the vote, gave his personal backing to the idea, despite the government saying last week there was no need for the legislation. Guardian

United Kingdom: Tamoxifen found in bodybuilding supplement

14 February - British researchers have found tamoxifen in supplements used by bodybuilders -- an active ingredient that isn’t clearly labeled on the bottle. Three out of four bottles of Estro Suppress supplements, purchased at four different times in 2011 and 2012, contained various doses of the estrogen-blocking breast cancer drug. Tamoxifen was found at doses of 3.8 mg, 3 mg, and 0.9 mg, Michael Evans-Brown, PhD, of the European Monitoring Center for Drugs and Addiction, and colleagues reported online in BMJ. At the label’s suggested dose of two capsules per day, the highest dose would have delivered 7.6 mg of tamoxifen. The usual clinical dose for gynecomastia is 10 to 20 mg. And there were no references to tamoxifen on the bottle, which prevents users from knowing exactly what
they're taking, the researchers said. Only tamoxifen's obscure chemical name...was included in the label information... Bodybuilders have been using tamoxifen for more than 30 years to treat gynecomastia, a side effect of taking too much testosterone. Excess estrogen is produced as a byproduct of having too much testosterone. Medpage Today

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USNORTHCOM

U.S., California: Health experts warn of water contamination from drought

18 February - California’s drought has put 10 communities at acute risk of running out of drinking water in 60 days, and worsened numerous other health and safety problems, public health officials in the most populous U.S. state said on Tuesday. Rural communities where residents rely on wells are at particular risk, as contaminants in the groundwater become more concentrated with less water available to dilute them, top state health officials said at a legislative hearing on the drought... The contamination warning comes days after President Barack Obama announced nearly $200 million in aid for the parched state, including $60 million for food banks to help people thrown out of work in agriculture-related industries as farmers leave fields unplanted and ranchers sell cattle early because the animals have no grass for grazing. Reuters

U.S.: Groups call for safe reduction of C-sections

20 February - In a bid to reduce rates of cesarean sections that have climbed more than 60% in the past 15 years, two major medical societies issued guidelines today that urge women and doctors to have more patience during labor, allowing nature to take its course rather than rushing to surgery. The growing use of C-sections, accounting for one-third of all deliveries in the USA, has raised concerns on a number of fronts. Although the surgeries are performed out of caution for newborns, they sharply increase the risk of complications and death for women. USA Today

U.S.: Naloxone access urged for increasing U.S. heroin users

11 February - Relatives of heroin addicts should be allowed to keep an overdose antidote available as use of the illegal drug surges in the U.S., prompted by increased abuse of prescription painkillers, federal drug officials said. As the street values of medicine-cabinet pills rise because of federal limits on their access, abusers have turned to drugs such as heroin that cost less, said Gil Kerlikowske, director of the Office of National Drug Control Policy. It’s a “growing national crisis” that must be addressed with a new national focus on prevention and treatment, he said. Heroin use increased 79 percent in the five years ended in 2012. Bloomberg
U.S.: The economic burden of sixteen measles outbreaks on United States public health departments in 2011

5 March - ...[T]he United States (US) experienced a marked increase in imported cases and outbreaks of measles in 2011. Due to the high infectiousness and potential severity of measles, these outbreaks require a vigorous response from public health institutions. The effort and resources required to respond to these outbreaks are likely to impose a significant economic burden on these institutions... From the perspective of local and state public health institutions, we estimated personnel time and resources allocated to measles outbreak response... and estimated the corresponding costs associated with these outbreaks in the US in 2011... In 2011, the US experienced 16 outbreaks with 107 confirmed cases. The average duration of an outbreak was 22 days (range: 5–68). The total estimated number of identified contacts to measles cases ranged from 8936 to 17,450, requiring from 42,635 to 83,133 personnel hours. Overall, the total economic burden on local and state public health institutions that dealt with measles outbreaks during 2011 ranged from an estimated $2.7 million to $5.3 million US dollars. Vaccine

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Australia: Avian influenza outbreak results in egg shortage across South Australia

17 February - An avian influenza outbreak in New South Wales late last year has resulted in an expected 12 month shortage of chicken eggs for South Australian consumers. Managing director of Solar Eggs, Jonathan Attard, told 891 Breakfast shortages could be expected to last until the end of the year whilst laying stock is returned to normal levels. "At the end of last year we had an avian influenza outbreak in New South Wales, which affected over half a million birds which all had to be euthanised," Mr Attard said. Several Adelaide supermarkets have begun to display signs apologising for the shortages in specific brands due to 'unexpected events in the industry'. "The on-flow affect is the shortage of eggs throughout the whole country." ABC Adelaide

Australia: Is Australia facing an obesity crisis?

16 February - ...Around the world, Australia projects the image of a sporty, outdoorsy place full of fit people and open spaces. But experts say unprecedented affluence along with a culture of convenience, growing portion sizes and an increasingly sedentary lifestyle have made one in two Australians overweight and turned the country into one of the fattest in the world. While studies show that obesity rates in other developed countries like the US have begun to level off, Australia’s are still on the rise. Late last year, it climbed to fourth in
the OECD’s ranking of advanced nations with the largest proportion of obese citizens (28.3%), behind the US, Mexico and New Zealand. And a study by the State of Victoria Department of Human Services predicted in 2008 that without effective intervention, 83% of men and 75% of women would be overweight or obese by 2025. BBC News

Indonesia: Some signs of normalcy after volcano eruption

15 February - Some things returned to normal in Indonesia on Saturday after a volcano erupted two days before, but tens of thousands of evacuees were yet to return to their homes. The eruption of Mount Kelud shot hot ash into the sky, killing four people... Of those who died, two perished from smoke inhalation, while the third was hit by a collapsing wall. A fourth person died when ash caused a roof to collapse. Indonesia’s disaster mitigation agency said all the victims lived within a 7-kilometer (4-mile) radius of the volcano. Their villages were covered in nearly 8 inches of ash and were hit by large rocks, officials said. CNN

Malaysia wages all-out war against dengue outbreak

18 February - Malaysia is waging an all-out war against an ongoing dengue outbreak that has claimed 25 lives this year. This is the deadliest outbreak of dengue fever in Malaysia since the 2010. More than 12,000 people have been infected so far this year, representing a four-fold increase compared to the same period last year. The worst may not be over. The country’s health minister warns that it may take at least four weeks before the situation stabilises... Despite fumigation by local councils - including the use of the biological agent called BTI for the first time - to curb the spread, the death toll continues to rise and government hospitals are inundated by dengue patients. Channel NewsAsia

Honduras: World-leading murder rate is falling

18 February - The murder rate in Honduras, which is the highest in the world and more than eight times the international average, has gone down, according to the country’s Observatory of Violence. The murder rate was 79 per 100,000 residents in 2013, down from 85.5 per 100,000 residents in 2012, marking the second straight year the rate has decreased. A total of 6,757 homicides were reported in 2013 – an average of 18.5 murders a day in a
country of only 7.6 million residents... The Central American country is fighting gangs involved in extortion, theft, and weapons and drug trafficking. InfoSurHoy

Virus advances through east Caribbean

8 February - A painful mosquito-borne virus common in Africa and Asia has advanced quickly throughout the eastern Caribbean in the past two months, raising the prospect that a once-distant illness will become entrenched throughout the region, public health experts say. Chikungunya fever, a viral disease similar to dengue, was first spotted in December on the French side of St. Martin and has now spread to seven other countries, the authorities said. About 3,700 people are confirmed or suspected of having contracted it. It was the first time the malady was locally acquired in the Western Hemisphere. Experts say conditions are ripe for the illness to spread to Central and South America, but they say it is unlikely to affect the United States. New York Times

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