1 August 2014

Army Public Health Weekly Update

U.S. Army Public Health Command

Contents

U.S. MILITARY

- Compromise reached on vets' healthcare
- Dramatic decline of respiratory illness among US military recruits after the renewed use of adenovirus vaccines
- Interactive training at Fort Benning
- Sunburn among active component service members, U.S. Armed Forces, 2002–2013
- Veterans' alcohol problems linked to stress on the home front
- Women in military less likely to drink than civilian women

GLOBAL

- A blood test for suicide?
- A new brain-based marker of stress susceptibility
- Florida boy, 6, gets prosthetic arm built with 3-D printer
- Google seeks human guinea pigs for health project
- 'Pea-sized brain hub could shed light on depression'
- Resistance to key malaria drug spreading at alarming rate in Southeast Asia
- HUMAN IMMUNODEFICIENCY VIRUS
- Circumcising men cuts HIV risk among women
- Heightened HIV risk for people with disabilities
- HIV patients' heart health gets short shrift
- HIV self-testing viable in rural South Africa
- Interfering with interferon

INFLUENZA

- CDC: Weekly Influenza Surveillance Report
- Naval Health Research Center: Febrile Respiratory Illness Surveillance Update
- US flu vaccine supply expected to top 150 million doses
- WHO influenza update

VETERINARY/FOOD SAFETY

- China: Fast-food scandal revives China's food safety anxieties
- Multistate Cyclospora spike tops 200 cases
- Peanut company officials stand trial in Georgia in deadly salmonella outbreak
Waste Management: Disposal of Pharmaceutical Waste Wheel
A guidance tool for military pharmacies and healthcare facilities on pharmaceutical waste disposal is now available on the USAPHC Health Information Products eCatalog.

WELLNESS
- Athletes should fear the heat more than the heart attack
- Diet affects men’s and women’s gut microbes differently
- E-cigarettes ‘less harmful’ than cigarettes
- Fist bumps ‘cleaner than handshakes’
- Healthy lifestyle may buffer against stress-related cell aging, study says
- Lack of sleep may be linked to false memories
- New international tree nut council study looks at nuts, diabetes and metabolic syndrome
- Newly-found gut virus ‘abundant in humans’
- Probiotics may reduce blood pressure
- Running reduces risk of death regardless of duration, speed
- Study shows no benefit to more than five servings of produce
- Surgeon general issues skin cancer warning

USAFRICOM
- Nigeria: Cholera outbreak hits Biu refugee camps in Borno • 3 killed, over 100 infected
- Somalia: U.N. warns of alarming malnutrition rates in Somali capital
- EBOLA VIRUS
- Guinea: Fear of Ebola breeds a terror of physicians
- Liberia: Ebola outbreak - Liberia shuts most border points
- Liberia/Sierra Leone: Ebola cases rise to 1,323; 2 African doctors die
- Sierra Leone declares state of emergency over Ebola
- West Africa: Ebola virus disease confirmed in a traveler to Nigeria, two U.S. healthcare workers in Liberia
- West Africa: Ebola virus disease - update
- West Africa: Peace Corps pulls 340 volunteers as 2 are isolated for Ebola exposure

USCENTCOM
- Pakistan: Taliban in Pakistan derail world polio eradication

USEUCOM
- England: Blood donors pass on hepatitis E
- Ireland: Public health fears as tonnes of blood dumped in a forest

USNORTHCOM
- U.S.: Chikungunya virus spreading in New York, New Jersey – CDC
- U.S., Florida: ‘Gun gag’ angers medical societies
- U.S.: GOP lawmakers to expand investigation into CDC biosecurity lapses
- U.S.: Khosla-backed startup hopes to bring doctors to patients’ mobiles
- U.S., New York: Groups urge New York’s statewide ban of rat poisons

USPACOM
- Guam: Tropical Storm Halong hammers Guam; flooding and wind damage reported
- India: Battle against unneeded medical care finds World Bank support
- Indian: Landslide kills 10, scores feared trapped
- New Zealand: 116 confirmed measles cases in Waikato
- Philippines: Surge in dengue cases alarming
Digital Press Kit:
Chikungunya Hits Mainland

The first locally acquired case of chikungunya, a mosquito-borne disease, was reported July 17 in Florida. This newly reported case represents the first time that mosquitoes in the continental United States are thought to have spread the virus to a non-traveler. Although CDC does not expect widespread cases of chikungunya in the United States this summer, American travelers infected overseas may continue to return and bring the virus with them.

Learn more about Chikungunya in the United States.

U.S. MILITARY

Compromise reached on vets' healthcare

29 July - Congressional leaders appear to have reached a compromise on a bill to improve healthcare for military veterans, many of whom have been struggling with long waits at Veterans Affairs (VA) healthcare facilities. Under the proposed legislation, known as the "Veterans Access, Choice, and Accountability Act of 2014," veterans who wait an unusually long time for care, or live more than 40 miles from a VA facility, will be covered for care they receive from a private-practice physician. In addition, the bill gives the VA secretary the authority "to immediately remove incompetent senior executives based on poor job performance or misconduct." MedPage Today

Dramatic decline of respiratory illness among US military recruits after the renewed use of adenovirus vaccines

2 July - In late 2011, after a 12-year hiatus, oral vaccines against adenovirus types 4 (Ad4) and 7 (Ad7) were again produced and administered to US military recruits. This study examined the impact of the new adenovirus vaccines on febrile respiratory illness (FRI) and adenovirus rates and investigated if new serotypes emerged. FRI rates and their associated hospitalizations had markedly risen since vaccine production ceased in 1999... During the two years after reintroduction of the vaccines, military trainees experienced a 100-fold decline in adenovirus disease burden (from 5.8 to 0.02 cases/1000 person-weeks, p<0.0001), without evidence that vaccine pressure had increased the impact of adenovirus types other than Ad4 and Ad7. Although, the percentage of type 14 increased following re-introduction of the vaccination, the actual number of cases decreased. Clinical Infectious Diseases

Interactive training at Fort Benning

22 July - In the... Squad Overmatch Study, the goal is to demonstrate how to train the Soldier to recognize and apply learned techniques to manage psychological stress experienced in a combat-realistic, controlled, repeatable, and reviewable simulated environment while exercising warrior skills... The Squad Overmatch Study team employed a study methodology using experimental learning and guided practice based on realistic cases to assess how advanced situational awareness skills, combined with stress management methods, facilitate recognition, perception, and adaptation to combat
Help Your Patients Quit Tobacco Use

Although tobacco use in the military population has declined in recent decades, the prevalence of use is still significantly higher than in the civilian population. High use rates continue today despite the damaging effects on health, the negative impact on military readiness, and the huge cost burden imposed on the federal budget.

The purpose of Help Your Patients Quit Tobacco Use: An Implementation Guide for the Armed Forces is to help military treatment facilities make tobacco cessation a routine part of care for all their beneficiaries.

Sunburn among active component service members, U.S. Armed Forces, 2002–2013

July 2014 - ...From January 2002 through December 2013, a total of 19,172 incident cases of clinically significant sunburn were diagnosed among active component service members. Most of the cases (80.2%) were first degree sunburn. The incidence rates of sunburn diagnoses were higher among females, white non-Hispanics, younger age groups, individuals in the Marine Corps or Army, and among enlisted service members. Additionally, the rate among recruits was more than 3.5 times the rate for non-recruits. Sixty-one percent of all diagnosed cases occurred from May through July. Sunburn cases occurred in all areas of the U.S., particularly near major recruit and combat training locations. Medical Surveillance Monthly Report

Veterans’ alcohol problems linked to stress on the home front

31 July – Regardless of traumatic events experienced during deployment, returning National Guard soldiers were more likely to develop a drinking problem if faced with civilian life setbacks, including job loss, legal problems, divorce, and serious financial and legal problems — all commonplace in military families... Nearly 7% of Americans abuse or are dependent on alcohol, but among reserve soldiers returning from deployment, the rate of alcohol abuse is 14%, almost double that of the civilian population... The researchers found having at least one civilian stressor or a reported incident of sexual harassment during deployment raised the odds of alcohol use disorders. The effect of the stressors was restricted to cases of new-onset alcohol use disorders, and was not seen among those with a history of problem drinking. In contrast, combat-related traumatic events were only marginally associated with alcohol problems. EurekAlert

Women in military less likely to drink than civilian women

31 July – While it is known that members of the U.S. military overall are more likely to use alcohol, a new study finds that female enlistees and female veterans are actually less likely to drink than their civilian counterparts... Researchers Jay Teachman, Carter Anderson, and Lucky Tedrow studied surveys of nearly 9,000 men and women who were currently members of the U.S. military or who were military veterans. Respondents were asked about their alcohol consumption in the previous 30 days... "We suspect that part of the reason for the negative link between military service and alcohol use for women is the threat of sexual harassment and assault that is common in the military. EurekAlert
Well-Meaning Public Health Policies That Went Terribly Wrong

Public health policies can be near-miraculous things. They destroyed polio, and gave us all clean drinking water and strong teeth. But there are occasions when public health policies, when combined with human nature, go terribly wrong. Here are nine of the biggest disasters that resulted.

A blood test for suicide?

30 July – Johns Hopkins researchers say they have discovered a chemical alteration in a single human gene linked to stress reactions that, if confirmed in larger studies, could give doctors a simple blood test to reliably predict a person’s risk of attempting suicide. The discovery, described online in The American Journal of Psychiatry, suggests that changes in a gene involved in the function of the brain’s response to stress hormones plays a significant role in turning what might otherwise be an unremarkable reaction to the strain of everyday life into suicidal thoughts and behaviors. EurekAlert

A new brain-based marker of stress susceptibility

29 July – Some people can handle stressful situations better than others, and it’s not all in their genes: Even identical twins show differences in how they respond. Researchers have identified a specific electrical pattern in the brains of genetically identical mice that predicts how well individual animals will fare in stressful situations. The findings, published July 29 in Nature Communications, may eventually help researchers prevent potential consequences of chronic stress -- such as post-traumatic stress disorder, depression and other psychiatric disorders -- in people who are prone to these problems. EurekAlert

Florida boy, 6, gets prosthetic arm built with 3-D printer

28 July – The family of a 6-year-old boy who was born without an arm had been struggling to find a way to afford a prosthetic limb for the child — until a group of Florida students built one for a fraction of the price with a 3-D printer. Alex Pring was given his new prosthetic arm — which cost just $350 to build — after Albert Manero and his team from the University of Central Florida spent seven weeks to complete a prototype and published the blueprints online... He later put the plans of the design online so that others can download them for free, hoping other engineers can advance them for improvements. “We are going to put these files up there, and we hope that people will take what we have and make it so much better,” Manero said. “I have no doubt that the international community will try to move this technology forward and lower the cost.” New York Daily News

Google seeks human guinea pigs for health project

28 July – Google’s newest project aims to create a crowd-sourced picture of human health by collecting anonymous genetic and molecular information from users. The project, called Baseline Study, will start off by collecting data from 175 people, but Google hopes to expand that sample size to thousands more, the Wall Street Journal reports. The researchers
hope the project can help move medicine towards prevention over treatment by giving scientists a more accurate picture of what a healthy body looks like, which can help them detect ailments like heart disease and cancer much quicker... But Google wants to collect a staggering amount of information about each of its anonymous human guinea pigs. They’re mapping each person’s entire genome, and their parents’, not to mention looking at how they metabolize food, and how their hearts beat, and their oxygen levels. Participants will even wear special smart contact lenses so Google can monitor their glucose levels. *Time*

‘Pea-sized brain hub could shed light on depression’

28 July – Scientists say a part of the brain, smaller than a pea, triggers the instinctive feeling that something bad is about to happen. Writing in the journal PNAS, they suggest the habenula plays a key role in how humans predict, learn from and respond to nasty experiences. And they question whether hyperactivity in this area is responsible for the pessimism seen in depression. They are now investigating whether the structure is involved in the condition... Scientists suggests the habenula is involved in helping people learn when it is best to stay away from something and may also signal just how bad a nasty event is likely to be. *BBC*

Resistance to key malaria drug spreading at alarming rate in Southeast Asia

30 July – Resistance to artemisinin, the main drug to treat malaria, is now widespread throughout Southeast Asia, among the Plasmodium falciparum (P. falciparum) parasites that cause the disease and is likely caused by a genetic mutation in the parasites. However, a six-day course of artemisinin-based combination therapy—as opposed to a standard three-day course—has proved highly effective in treating drug-resistant malaria cases, according to findings published today in the New England Journal of Medicine. *EurekAlert*

HUMAN IMMUNODEFICIENCY VIRUS

Circumcising men cuts HIV risk among women

26 July - The HIV-preventing benefits of circumcision were not just restricted to men, researchers said. In a region of South Africa where HIV prevalence is high, women whose only sexual partners were circumcised had a significantly lower prevalence of HIV... Moreover, a mathematical model suggested that the incidence of HIV among those women was also lower than among women whose partners included uncircumcised men, Jean reported at the International AIDS Conference here... Among the 1,363 women who reported only having had circumcised partners, the HIV prevalence was 22.4%, compared with 36.6% among the remaining 3,175. *MedPage Today*
Heightened HIV risk for people with disabilities

29 July – Inaccessible health services for people with disabilities (PWD), combined with social stigma and violence, contribute to high HIV risk - a gap that must be filled if the disabled are not to remain disproportionately vulnerable to HIV/AIDS, say health experts and activists. "People with disabilities are at increased risk for exposure to HIV infection. HIV, in some cases in itself, can cause disability," said Jill Hanass-Hancock, a senior researcher at the Health Economics & HIV/AIDS Research Division (HEARD), a South African research institute. AllAfrica

HIV patients' heart health gets short shrift

27 July - Cardiovascular disease risk factors were not assessed and managed as comprehensively in HIV-positive people as they were in uninfected patients, researchers said here. In a retrospective study among HIV-positive patients matched with people without HIV, uncontrolled hypertension was equally common in both groups (17.6% for HIV-positive versus 19.1% for HIV-negative), but fewer of the HIV-infected patients were prescribed antihypertensives compared with HIV-uninfected persons ((57.75% versus 75%, P=0.001), reported Nwora Lance Okeke, MD, of Duke University in Durham, N.C., and colleagues. MedPage Today

HIV self-testing viable in rural South Africa

25 July - Individuals living in rural South Africa were able to perform HIV-screening tests and take the necessary follow-up steps if they received a positive test result, researchers said here. Nearly all of the study participants (99.1%) -- most of whom did not finish high school -- successfully completed the test, and 97.8% said they understood the next step in the process, reported Krista Dong, MD, of The Ragon Institute in Cambridge, Mass., and colleagues... "Many people said that these undereducated people could not understand how to do these tests, but they can," said Dong during a poster presentation at the International AIDS Conference. "We are myth-busters [with these study results]. Blood-based rapid tests provide earlier detection of infection and are a cost-effective alternative to oral fluid tests, and thus may be ideal for scaling up of HIV self-testing in resource-limited settings." MedPage Today

Interfering with interferon

28 July – Using the body’s natural virus killers to prevent and treat HIV infection has been problematic until now because of the strong inflammatory response these molecules can arouse as they get rid of the invaders. Now, collaborative research conducted by scientists at the Weizmann Institute and the National Institutes of Health (NIH) have demonstrated how suppressing the activity of these molecules – interferons – around the time of infection could have long-term implications for the course of the disease... [Researchers] designed an antagonist molecule that is able to block some of the activities of interferons while still allowing them to proceed to act against viruses. EurekAlert
CDC: Weekly Influenza Surveillance Report

During week 29, ending July 19, 2014, 5.5% of all deaths reported through the 122-Cities Mortality Reporting System were due to pneumonia and influenza. This percentage was below the epidemic threshold of 6.1% for week 29. FluView

Naval Health Research Center: Febrile Respiratory Illness Surveillance Update

For week 30 (through 26 July 2014):

Influenza: No new cases of NHRC laboratory-confirmed influenza among US military basic trainees.

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

US flu vaccine supply expected to top 150 million doses

29 July – Influenza vaccine producers recently began shipping the first doses of a US supply that’s expected to top 150 million doses for the coming season, with more quadrivalent (four-strain) products in the mix this year. The three biggest suppliers for the US market, Sanofi Pasteur, GSK, and Novartis, announced the start of vaccine shipments this month. Three others—MedImmune, bioCSL, and Protein Sciences—expect to start shipping their products soon. Most of the doses are given in the late summer and fall, though health officials stress that immunizations later in the season can still be beneficial. CIDRAP

WHO influenza update

28 July - Globally influenza activity remained low, but has been gradually increasing in the southern hemisphere.

- In North America and Europe, overall influenza activity remained at inter-seasonal levels.

- In eastern Asia, influenza activity reached inter-seasonal levels in most countries with influenza A(H3N2) and influenza B virus predominating. Influenza activity still increased slightly in the southern region of China however, mainly due to influenza A(H3N2) viruses.

- In northern Africa and western Asia, influenza activity remained low.

- In the southern hemisphere, influenza activity continued to increase in most countries. In the temperate zone of South America influenza-like illness (ILI) continued to increase but was predominantly due to respiratory syncytial virus (RSV). Influenza A(H3N2) was the most common detected influenza virus. In Australia and New Zealand, the influenza...
season seemed to have started with ILI and the number of influenza detections increasing. Influenza A(H1N1)pdm09 was the most commonly detected virus in these countries. In South Africa the influenza detection rate increased with influenza A(H3N2) the most frequently detected virus.

- Based on FluNet reporting (as of 25 July 2014, 07:15 UTC), during weeks 27 to 28 (29 June 2014 to 12 July 2014), National Influenza Centres (NICs) and other national influenza laboratories from 55 countries, areas or territories reported data. The WHO GISRS (Global Influenza Surveillance and Response System) laboratories tested more than 25,675 specimens. 3,184 were positive for influenza viruses, of which 2,844 (89.3%) were typed as influenza A and 340 (10.7%) as influenza B. Of the sub-typed influenza A viruses, 416 (17.6%) were influenza A(H1N1)pdm09 and 1,948 (82.4%) were influenza A(H3N2). Of the characterized B viruses, 89 (97.8%) belong to the B-Yamagata lineage and 2 (2.2%) to the B-Victoria lineage. WHO

---

**VETERINARY/FOOD SAFETY**

---

**China: Fast-food scandal revives China's food safety anxieties**

28 July - A U.S. company that supplies meat to some of the world’s largest fast-food chains in China has pulled all its products made by a Chinese subsidiary, after reports that it was selling expired products. The food safety scandal that erupted in China in the last week has also spread overseas, affecting chain restaurants in Japan and Hong Kong, and prompted calls for tighter food safety regulation in China. The privately held OSI is headquartered in Aurora, Ill., and claims 50 manufacturing facilities worldwide. Its Chinese subsidiary, Shanghai Husi Food Co., Ltd., sells beef patties, chicken nuggets and, according to its website, cooked frozen snail meat. Its customers in China include McDonald’s, KFC, Pizza Hut, Papa John’s and Starbucks. An expose that aired July 20 on Shanghai television used a hidden camera to show workers picking meat off the floor and returning it to the production line, and handling meat with ungloved hands. It also revealed documentation that the firm was falsifying production dates and selling expired beef and chicken to customers. NPR

**Multistate Cyclospora spike tops 200 cases**

29 July - Several states reported Cyclospora infections over the past week, pushing the total to 202, and health officials are still on the hunt for a common food source for some of the infections. The US Centers for Disease Control and Prevention (CDC) said 202 cases have been reported as of today, an increase of 77 from the past week. More than half of the cases were in Texas, which saw its total grow by 49 cases over the past week, to 110. Six
more states reported illnesses, raising the number of affected states from 13 to 19, with New York City also reporting cases... Last week the CDC said outbreak investigations were under way in Texas, Maine, and Massachusetts and that federal officials were assisting state partners in their investigations. CIDRAP

Peanut company officials stand trial in Georgia in deadly salmonella outbreak

28 July - The federal trial of three former peanut company officials charged in connection with a salmonella outbreak that killed nine people and sickened hundreds more began on Monday with jury selection in Albany, Georgia. The contamination at the Peanut Corporation of America plant in Blakely, Georgia, led to one of the largest food recalls in U.S. history and forced the company into liquidation. Former owner Stewart Parnell, and his brother, Michael Parnell, a food broker who worked on behalf of the peanut company, were charged last year in a 76-count indictment asserting they created fake certificates showing their products were uncontaminated when laboratory results showed otherwise... The investigation into the company began in 2009, when the U.S. Food and Drug Administration and the Centers for Disease Control and Prevention traced a national outbreak of salmonella earlier that year to the Blakely plant. Reuters

WELLNESS

Athletes should fear the heat more than the heart attack

29 July – ...[Physicians] at a Tel Aviv hospital noticed there were far more heatstroke victims admitted than cardiac patients. They wondered if this was an anomaly, so they analyzed local races from March 2007 to November 2013, encompassing 137,580 runners. Across those races, there were two serious cardiac events, neither of which was fatal or life threatening. But there were 21 serious heatstroke cases, including two fatalities and 12 that were life threatening... One caveat: It gets hot in Tel Aviv. It's possible that not every race site will face the same heatstroke danger, though "it's reasonable to assume that heat stroke is just as common in other countries with similar climate," Dr. Sami Viskin.. told Shots. NPR

Diet affects men’s and women’s gut microbes differently

29 July – The microbes living in the guts of males and females react differently to diet, even when the diets are identical, according to a study by scientists from The University of Texas
at Austin and six other institutions published this week in the journal Nature Communications... The researchers studied the gut microbes in two species of fish and in mice, and also conducted an in-depth analysis of data that other researchers collected on humans. They found that in fish and humans’ diet affected the microbiota of males and females differently. In some cases, different species of microbes would dominate, while in others, the diversity of bacteria would be higher in one sex than the other. These results suggest that any therapies designed to improve human health through diet should take into account whether the patient is male or female. EurekAlert

E-cigarettes 'less harmful' than cigarettes

30 July - E-cigarettes are likely to be much less harmful than conventional cigarettes, an analysis of current scientific research suggests. Scientists argue replacing conventional cigarettes with electronic ones could reduce smoking-related deaths even though long-term effects are unknown. In the journal Addiction, researchers suggest e-cigarettes should face less stringent regulations than tobacco. But experts warn encouraging their use without robust evidence is "reckless"... Scientists say risks to users and passive bystanders are far less than those posed by cigarette smoke, but caution that the effects on people with respiratory conditions are not fully understood. BBC News

Fist bumps 'cleaner than handshakes'

27 July - Scientists at Aberystwyth University in Wales have shown that a shake transfers more bacteria than other forms of hand-on-hand action. They are calling for the widespread adoption of the fist bump instead, especially during flu outbreaks. Public Health England whimsically suggested a Victorian-age bow or curtsy would be even safer. The researchers took a pair of sterile rubber gloves and dipped one into a bacterial-broth so the outside was completely coated in E. coli. They then performed a range of hand manoeuvres including handshakes of varying intensities, fist bumps and high-fives. The findings, published in the American Journal of Infection Control, showed a handshake transferred 10 times as many bacteria as a meeting of fists, while a palm-to-palm high-five was somewhere in-between. BBC News

Healthy lifestyle may buffer against stress-related cell aging, study says

29 July – A new study from UC San Francisco is the first to show that while the impact of life's stressors accumulate overtime and accelerate cellular aging, these negative effects may be reduced by maintaining a healthy diet, exercising and sleeping well. “The study participants who exercised, slept well and ate well had less telomere shortening than the ones who didn’t maintain healthy lifestyles, even when they had similar levels of stress,” said lead author Eli Puterman, PhD, assistant professor in the department of psychiatry at UCSF.
"It's very important that we promote healthy living, especially under circumstances of typical experiences of life stressors like death, caregiving and job loss." EurekAlert

Lack of sleep may be linked to false memories

28 July - ...Researchers from the University of California-Irvine and Michigan State University found that sleep-deprived people are likely to create false memories - "a phenomenon in which people absorb incorrect information after an event and end up misremembering the incident," the Huffington Post reported... For the study, researchers recruited more than 100 college-age participants and assigned them to one of four groups. Two groups were presented with a series of photos depicting a crime being committed as soon as they arrived to the lab - one group was then allowed to go to sleep, while the other group had to stay awake all night in the lab... In the second part of the experiment, the participants read narratives containing statements that contradicted what the photographs actually showed. They found that people who viewed photographs of a crime being committed and then read false information about the photos were more likely to report remembering the false details in the photos than were those who got a full night's sleep. University Herald

New international tree nut council study looks at nuts, diabetes and metabolic syndrome

31 July – Two new meta-analyses involving tree nuts (almonds, Brazil nuts, cashews, hazelnuts, macadamias, pecans, pine nuts, pistachios and walnuts) were recently published in the online publications, British Medical Journal Open (BMJ Open) and PLOS ONE. The BMJ Open article looked at the effects of tree nuts on metabolic syndrome (MetS) criteria and showed that tree nut consumption resulted in a significant decrease in triglycerides and fasting blood glucose. The PLOS ONE article focused on the effect of tree nuts on glycemic control in diabetes and showed significant decreases in HbA1c and fasting blood glucose levels. EurekAlert

Newly-found gut virus ‘abundant in humans’

25 July – Exploring genetic material found in intestinal samples, the international team uncovered the CrAssphage virus. They say the virus could influence the behavior of some of the most common bacteria in our gut. Experts say these types of viruses, called bacteriophages, have been shown to play a role in chronic diseases... [Scientists found] a piece of DNA, some 100,000 letters long, present in more than half of all samples from the gut. And while cross-checking its identity in global directories they realized it had never been described before. Prof Robert Edwards, lead author, said: "It is not unusual to go looking for a novel virus and find one. "But it's very unusual to find one that so many people have in common. "The fact it has flown under the radar for so long is very strange.” BBC
Probiotics may reduce blood pressure

28 July - Consuming probiotics has a small but significant effect in lowering blood pressure, a large review of studies has found. Researchers reviewed nine randomized trials with a total of 543 participants. All included adults older than 18 who used probiotic products with live bacteria. The studies tested various probiotics in varying amounts, mostly strains of Lactobacillus consumed in dairy products. Eight of the nine studies found reductions in blood pressure. Over all, compared with control groups, the use of probiotics reduced systolic blood pressure (the top number) by an average of 3.56 millimeters of mercury and diastolic pressure by 2.38. New York Times

Running reduces risk of death regardless of duration, speed

28 July – Running for only a few minutes a day or at slow speeds may significantly reduce a person’s risk of death from cardiovascular disease compared to someone who does not run, according to a study published today in the Journal of the American College of Cardiology. Exercise is well-established as way to prevent heart disease and it is component of an overall healthy life, but it is unclear whether there are health benefits below the level of 75 minutes per week of vigorous-intensity activity, such as running, recommended by the U.S. government and World Health Organization. Researchers studied 55,137 adults between the ages of 18 and 100 over a 15-year period to determine whether there is a relationship between running and longevity... Compared with non-runners, the runners had a 30 percent lower risk of death from all causes and a 45 percent lower risk of death from heart disease or stroke. Runners on average lived three years longer compared to non-runners. EurekAlert

Study shows no benefit to more than five servings of produce

29 July - The U.S. government recommends that American adults eat 5 to 13 servings of fruits and vegetables depending on your age, gender, and activity level, but a new Harvard School of Public Health study suggests we don’t get additional health benefits if we eat more than five servings a day. After analyzing 16 studies involving 833,000 participants who filled out dietary surveys, the researchers from Harvard and China discovered that each daily serving of produce was associated with a five percent lower risk of dying from heart disease or cancer during the studies, which lasted up to 25 years. Eating five servings a day, for example, lowered the risk of dying by 25 percent — but so did eating six or seven servings, according to the results published Tuesday in the British Medical Journal. The reduction in mortality plateaued at five [servings] a day, and five a day is a good target to achieve maximum health benefits in reducing mortality,” said study coauthor Frank Hu. Boston Globe
Surgeon general issues skin cancer warning

30 July - Skin cancer is on the rise, according to the American Cancer Society, with more cases diagnosed annually than breast, prostate, lung and colon cancer cases combined. On Tuesday, the United States surgeon general issued a call to action to prevent the disease, calling it a major public health problem that requires immediate action. Nearly 5 million people are treated for skin cancer each year. The U.S. Department of Health and Human Services has set five goals for communities to decrease the risk of skin cancer, such as providing shade at parks, schools and other public spaces, and reducing indoor tanning. CNN

USAFRICOM

Nigeria: Cholera outbreak hits Biu refugee camps in Borno • 3 killed, over 100 infected

30 July - The two camps in Biu, where victims of attacks from Damboa Local Government Area were kept; following the attack by the Boko Haram insurgents has been reported to record outbreak of Cholera. Three people were confirmed dead, while over 100 people were said to have been infected by the cholera outbreak in Internally Displace Person (IDP) camp in Biu. Nigerian Tribune

Somalia: U.N. warns of alarming malnutrition rates in Somali capital

27 July – The United Nations has reported alarming rates of malnutrition in the Somali capital where aid agencies cannot meet the needs of 350,000 people due to insufficient funds, drought and conflict. The U.N. Office for the Coordination of Humanitarian Affairs (OCHA) said the Somali government had compared the situation to the run-up to a 2011 famine that killed 260,000 people. The United Nations has sought to improve its early warning mechanisms after its failure to spot indications of crisis in 2010 was blamed for the scale of the famine that followed in a nation torn apart by years of conflict. Reuters.
EBOLA VIRUS

Guinea: Fear of Ebola breeds a terror of physicians

27 July – ...Health workers here say they are now battling two enemies: the unprecedented Ebola epidemic, which has killed more than 660 people in four countries since it was first detected in March, and fear, which has produced growing hostility toward outside help. On Friday alone, health authorities in Guinea confirmed 14 new cases of the disease. Workers and officials, blamed by panicked populations for spreading the virus, have been threatened with knives, stones and machetes, their vehicles sometimes surrounded by hostile mobs. Log barriers across narrow dirt roads block medical teams from reaching villages where the virus is suspected. Sick and dead villagers, cut off from help, are infecting others. New York Times

Liberia: Ebola outbreak - Liberia shuts most border points

28 July – Most border crossings in Liberia have been closed and communities hit by an Ebola outbreak face quarantine to try to halt the spread of the virus. Screening centres are also being set up at the few major entry points that will remain open, such as the main airport. Meanwhile, Nigeria's largest airline, Arik Air, has suspended all flights to Liberia and Sierra Leone after a man with Ebola flew to Nigeria last week. The virus has killed at least 660 people in West Africa since February. The outbreak began in southern Guinea and spread to Liberia and Sierra Leone. It is the world's deadliest so far. BBC

Liberia/Sierra Leone: Ebola cases rise to 1,323; 2 African doctors die

30 July – In West Africa's quickly evolving Ebola virus disease (EVD) outbreak, the illness continues to exact a heavy toll on healthcare providers and disrupt aid work, with reports of more cases and deaths and news that two top doctors in Sierra Leone and Liberia have died from their infections, according to official sources and media reports. The outbreak in West Africa, the world's biggest and deadliest, has been an enormous challenge for affected countries and threatens other African nations. CIDRAP

Sierra Leone declares state of emergency over Ebola

31 July – Sierra Leone declared a state of emergency and called in troops to quarantine epicentres of Ebola on Thursday, joining Liberia in imposing tough controls to curb the worst ever outbreak of the virus amid fears it could spread beyond West Africa. Ebola has been blamed for 672 deaths in Liberia, Guinea and Sierra Leone, according to the World Health Organization. It has also reached Nigeria's biggest city Lagos, where authorities said on Friday a man had died of the virus. In a measure of rising international concern, Britain on Wednesday held a government meeting on Ebola, which it said was a threat it needed to respond to. Reuters
**West Africa: Ebola virus disease confirmed in a traveler to Nigeria, two U.S. healthcare workers in Liberia**

28 July - Nigerian health authorities have confirmed a diagnosis of Ebola Virus Disease (EVD) in a patient who died on Friday in a hospital in Lagos, Nigeria, after traveling from Liberia on July 20, 2014. The report marks the first Ebola case in Nigeria linked to the current outbreak in the West African countries of Guinea, Sierra Leone, and Liberia. Health authorities also reported this weekend that two U.S. citizens working in a hospital in Monrovia, Liberia, have confirmed Ebola virus infection. These recent cases, together with the continued increase in the number of Ebola cases in West Africa, underscore the potential for travel-associated spread of the disease and the risks of EVD to healthcare workers. While the possibility of infected persons entering the U.S. remains low, the Centers for Disease Control and Prevention (CDC) advises that healthcare providers in the U.S. should consider EVD in the differential diagnosis of febrile illness, with compatible symptoms, in any person with recent (within 21 days) travel history in the affected countries and consider isolation of those patients meeting these criteria, pending diagnostic testing.  

**West Africa: Ebola virus disease - update**

31 July - Between 24 and 27 July 2014, a total of 122 new cases of Ebola virus disease (EVD; laboratory-confirmed, probable, and suspect cases) as well as 57 deaths were reported from Guinea, Liberia, Nigeria, and Sierra Leone. The Ebola epidemic trend in Guinea, Liberia, and Sierra Leone remains precarious with ongoing community and health-facility transmissions of infection. The surge in the number of new EVD cases calls for concentrated efforts by all to address the identified problems, such as health facility transmission and effective contact tracing.

On 29 July 2014, the National IHR Focal Point for Nigeria confirmed that the probable EVD case notified to WHO on 27 July 2014 was symptomatic at the time of arrival in Nigeria and that 59 contacts (15 from among the airport staff and 44 from the hospital) have been identified so far. The report also confirms that the patient travelled by air and arrived in Lagos, Nigeria, on 20 July via Lomé, Togo, and Accra, Ghana. The sample from this case is yet to be sent to the WHO Collaborating Centre at the Institute Pasteur in Dakar, Senegal, due to refusal by courier companies to transport this sample. Though only one probable case has been detected so far in Nigeria, Ebola virus infection in this country represents a significant development in the course of this outbreak... As of 27 July 2014, the cumulative number of cases attributed to EVD in the four countries stands at 1,323 including 729 deaths.  

**West Africa: Peace Corps pulls 340 volunteers as 2 are isolated for Ebola exposure**

30 July - The Peace Corps said Wednesday that it was temporarily withdrawing 340 volunteers from Guinea, Liberia and Sierra Leone, and that two volunteers had been isolated...
and were under observation after being exposed to a person who later died of the Ebola virus. A spokeswoman said the two volunteers, who were not identified, were not symptomatic and would return to the United States after they were cleared to travel. Liberia, meanwhile, moved to close schools nationwide and put nonessential government workers on 30-day compulsory leave in a bid to halt the outbreak, which is the worst on record. New York Times

Pakistan: Taliban in Pakistan derail world polio eradication

28 July - ...More than 60 polio workers... have been killed since the Pakistani Taliban banned polio immunization in 2012. Today the militant group continues to threaten to kill not only vaccinators but also parents who get their children immunized. That threat has had a chilling effect on anti-polio efforts nationwide. And it completely halted vaccination drives in some Taliban-controlled areas. It's in these places that the crippling virus has come roaring back — and threatened to stymie global efforts to wipe out polio... At its peak in the 1950s, polio paralyzed about 350,000 people a year around the world. This year, so far, there have been only 128 cases recorded. Ninety-nine of them have been in Pakistan. And the South Asian nation is the only country in the world where the number of polio cases is rising significantly. NPR

England: Blood donors pass on hepatitis E

28 July - Blood donors with hepatitis E can pass on the virus when they donate blood, according to new research. Around 1,200 people each year have the hepatitis E virus, or HEV, passed on to them through donated blood in England, according to Public Health England experts. Donor blood isn't yet screened for hepatitis E, but that is likely to be reviewed in the light of this new research... The research found that around 1 in 3,000 donors in England carry hepatitis E in their blood plasma. Of the donations tested, 79 had the type of hepatitis E that can be spread. Their donated blood and blood products was used in 62 transfusions. Following-up 43 blood recipients who'd been exposed, researchers found that hepatitis E transmission occurred in 18 patients. WebMD
Ireland: Public health fears as tonnes of blood dumped in a forest

29 July - Tonnes of animal blood were dumped in a remote forest during the hottest weeks of the year. Under strict environmental regulations, blood and abattoir wash-off products must be disposed of in a regulated manner given their potential public health implications. Blood cannot be sprayed on to land and must be injected to avoid public health and environmental issues such as insect and rodent infestations. ... Under strict environmental regulations, blood and abattoir wash-off products must be disposed of in a regulated manner given their potential public health implications. Blood cannot be sprayed on to land and must be injected to avoid public health and environmental issues such as insect and rodent infestations. Irish Independent

USNORTHCOM

U.S.: Chikungunya virus spreading in New York, New Jersey – CDC

30 July - Cases of chikungunya virus, a painful, mosquito-borne disease that has spread rapidly through the Caribbean in recent months, spiked higher in New York and New Jersey in the past week, according to new federal data. The number of cases in New Jersey more than doubled to 25, while New York has recorded 44 cases, the highest number outside Florida, where the disease first established a toehold in the United States, according to data released late Tuesday by the Centers for Disease Control and Prevention. Officials in New Jersey and New York do not believe any of the cases originated in their state. Baltimore Sun

U.S., Florida: 'Gun gag' angers medical societies

29 July - Medical societies condemned the federal court decision allowing Florida to forbid physicians from asking patients if they keep firearms at home, with severe penalties for violators. "The FAFP does not believe anything should interfere with the patient/physician relationship. This includes the ability to ask a patient questions which address an individual’s, or their child’s, safety," Jay W. Millson, executive vice president of the Florida Academy of Family Physicians, told MedPage Today in an email. Late last week, the 11th Circuit Court of Appeals upheld a law in Florida banning healthcare providers from speaking to their patients about firearm ownership. In 2012, a lower court had overturned the original legislation, which was passed in 2011. MedPage Today
U.S.: GOP lawmakers to expand investigation into CDC biosecurity lapses

28 July - US lawmakers on Monday said they were expanding their investigation of federal biosecurity lapses including problems at the Centers for Disease Control and Prevention that led to the mishandling of anthrax and bird flu pathogens. Republicans from the House Energy and Commerce Committee said they sent a letter on Monday to the CDC director, Dr Thomas Frieden, asking him to explain why the leading US public health agency was unable to detect systemic problems involving the handling of deadly agents dating back to 2010. "Since part of CDC's epidemiology work is detecting or recognizing patterns of disease outbreaks, how could CDC not recognize the pattern of select agent incidents?" five Republican lawmakers led by committee chairman Fred Upton of Michigan asked Frieden in the letter. The lawmakers, who held a hearing with Frieden on 16 July, also sent letters to the Food and Drug Administration (FDA), the National Institutes of Health (NIH) and the US Department of Health and Human Services Office of Inspector General. Guardian

U.S.: Khosla-backed startup hopes to bring doctors to patients’ mobiles

30 July – HealthTap Chief Executive Officer Ron Gutman believes paying the doctor a visit is expensive and time-consuming. So why not bring the doctor to the patient - digitally? On Wednesday, the Palo Alto-based startup, which is backed by investor Vinod Khosla, introduced a virtual-consult service called HealthTap Prime. Consumers can opt to pay $99 a month to text or video conference with a physician, online or via a smartphone. It remains to be seen whether patients will be willing to pay out-of-pocket for HealthTap’s service, which is not covered by the largest insurers. Reuters

U.S., New York: Groups urge New York's statewide ban of rat poisons

28 July - Six wildlife and conservation groups have filed a petition seeking a statewide ban on the use of rat poisons in New York. The groups presented necropsy reports from a study conducted by the State Department of Environmental Conservation stating that wildlife including birds, foxes, dogs, and cats had died after eating poisoned rats, the New York Times reported. The filing also cited 225 human victims since the 1980s. The petition aims to ban the over-the-counter sales of second-generation anticoagulants. HNGN


1 August - The prevalence of a history of CHD/stroke among all adults aged <55 years was estimated to be 2.8%, including 2.0% for coronary heart disease and 1.0% for stroke. The
prevalence among employed adults was 1.9%. The prevalence was higher among both unemployed adults (2.5%) and adults not in the labor force (6.3%). Among adults who were employed, men and current and former smokers were significantly more likely than women and those who had never smoked to report a history of CHD/stroke. The prevalence of CHD/stroke among workers increased in each higher age group, and workers with a college degree were less likely than workers with less education to report a history of CHD/stroke.

Mortality and Morbidity Weekly Report

USPACOM

Guam: Tropical Storm Halong hammers Guam; flooding and wind damage reported

31 July - Heavy rain associated with Halong wrapped into Guam, Rota and the northern Mariana Islands Wednesday. Through Thursday morning local time, Andersen AFB, Guam had picked up 16.69 inches of rain from the tropical storm. Low-lying areas of Guam reported flooding, including the tourist hub of Tumon on Guam’s west coast Wednesday.

Weather Channel

India: Battle against unneeded medical care finds World Bank support

31 July – India needs to curtail excessive medical care that leads to patient overspending as more people get health insurance, the World Bank said on Thursday, adding voice to a growing chorus against overtreatment in the country. Practices such as “defensive medicine” and aggressive marketing by hospitals, which cost the United States an estimated $250 billion to $300 billion annually, are emerging as a serious problem in India, the Washington-based institution warned. The comments come as India’s new government has vowed to crack down on unethical practices that plague India’s $74 billion healthcare industry, where doctors say getting kickbacks for referring patients or passing inflated hospital bills to insurers is widespread. Reuters

Indian: Landslide kills 10, scores feared trapped

30 July - Heavy rain triggered a landslide in rural western India that killed at least ten people and trapped up to 150 more after thick mud came crashing down on thatch huts and brick houses on Wednesday, a national disaster official said. Rescue teams and local residents pulled people out of the deep mud and put them on stretchers, television images showed. Seven teams of 42 rescue workers each arrived at the disaster site, a village 60 km (37 miles) from the city of Pune, but rain, mud and poor communications hampered efforts, Sandeep
Rai Rathore, inspector general of the national disaster force, told Reuters. Only two residents had been rescued by Wednesday evening, he said. Scientific American

New Zealand: 116 confirmed measles cases in Waikato

30 July - Waikato District Health Board’s public health unit Population Health has to date (30 July 2014) been notified of 116 confirmed measles cases, up two on last week. Almost half of the confirmed cases are household contacts of a confirmed case and were already placed in quarantine before they were unwell, medical officer of health Dr Anita Bell said. Approximately 80 per cent of cases are aged between 10 to 20 years. Of the others, 15 per cent are aged under 10 years and five per cent over 30 years and are mostly close contacts of confirmed cases in quarantine as they were not vaccinated. Nine cases have been hospitalised but are now well. Of the 116 cases, the vast majority are unimmunised; only four are fully immunised. Voxy

Philippines: Surge in dengue cases alarming

31 July - Dengue in Northern Mindanao has reached an alarming level after it recorded a total of 4,150 cases. The Regional Epidemiology, Surveillance and Disaster Response Unit (Resdru) of the Department of Health in the region (DOH-10) reported that dengue incidents surged at 35 percent higher as of July 26, 2014 compared to the same period last year. In 2013 of the same period saw 3,066 cases of dengue in the region, DOH-10 noted. Deaths by dengue virus recorded as of July 26 this year reached 15 compared to last year’s 10 of the same month. The victims were aged one to 14 years old. SunStar

Caribbean chikungunya cases up 7%

28 July – Suspected and confirmed chikungunya cases in the Americas increased about 7.4% last week, reaching 474,880, with the Dominican Republic accounting for most of the rise, according to the latest update from the Pan American Health Organization/World Health Organization (PAHO/WHO). The total as of Jul 25 included 469,620 suspected and 5,260 confirmed cases, PAHO reported that day. The total was 32,570 more than the 442,310 cases a week earlier... There were no new deaths last week, leaving the toll at 26, PAHO reported. CIDRAP

Venezuela registers 32,168 events of dengue fever

29 July - Dengue fever continues on the rise in Venezuela. As many as 32,168 events have been reported, according to the Epidemiology Report #29 issued by the Ministry of Health and covering the week from July 13 to 20. The report stresses that there is an alert in the
country regarding this condition. The situation is worrisome, compared with 26,457 events last year over the same period. The states hit by the viral disease include western Zulia state (4,491 events); north central Aragua state (2,830); western Mérida state (2,183) southwestern Táchira state (2,151); north central Carabobo state (1,540); northern Nueva Esparta state (1,493); and southern Amazonas state (1,107). El Universal

top of page...