22 April 2016

Army Public Health Weekly Update

Army Public Health Center

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A better way to provide health care to our troops

18 April - ... DOD is lagging behind other health care systems in shifting from fee-for-service reimbursement models and benefit designs to approaches that incentivize the use of higher value care. ... In the coming year, DOD and Congress will have a rare window of opportunity to pilot fee-for-value approaches in the defense health system. TRICARE’s ... contract renewal provides an important vehicle to pilot new approaches to reimbursement and care. ... For too long, efforts to undertake much needed reforms in the DOD health care system have been derailed by focusing almost exclusively on cutting costs by decreasing provider reimbursement and increasing copays from beneficiaries. This approach has not only failed to control health care spending, it has also led to lower satisfaction for DOD beneficiaries, especially our active duty members. Politico

Army, NFL scientists team up to develop injury-reducing neck tether

20 April - Army scientists, working with officials from the National Football League, have developed a wearable device that helps reduce head and neck injuries. The Rate-Activated Tether is a flexible strap that connects a helmet to shoulder pads or body armor. ... “What happens is if that when head is exposed to adverse acceleration, this RAT strap will basically transition into a rigid device that will transmit the load to the body, and it has been proven to significantly reduce acceleration.” ... Army scientists are not sure if the device will eliminate Traumatic Brain Injury or concussions, but “we can say with some confidence that there is some benefit to reducing adverse acceleration,” Walsh said. The device could help to prevent head injuries sometimes experienced by paratroopers, Walsh said. Military.com

Army short in behavioral health care

The Army’s commitment to providing robust behavioral health support to soldiers is strong, the service’s top leaders have told Congress, but the Army is short about 300 providers. ... [Acting] Secretary of the Army Patrick Murphy and Army Chief of Staff Gen. Mark A. Milley cited a decision made four years ago to transform behavioral health care by placing providers within combat brigades as an indication of the service’s commitment to improving access to behavioral health services. ... However, the Army has only 1,789 of the 2,090 behavioral health providers needed to deliver clinical care across the force, they said.
“The Army will continue to use all available incentives and authorities to hire these high-demand professionals to ensure we provide our soldiers immediate access to the best possible care,” they said. Association of the United States Army

Pentagon misled lawmakers on military sexual assault cases

18 April - The Pentagon misled Congress by using inaccurate or vague information about sexual assault cases in an effort to blunt support for a Senate bill that would make a major change in how the military handles allegations of sexual misconduct. ... Internal government records that summarized the outcomes of dozens of cases portrayed civilian district attorneys and local police forces as less willing than senior military officers to punish sex offenders. The documents buttressed the Pentagon's position that stripping commanders of their authority to decide which crimes go to trial — as the Senate legislation proposes — will mean fewer victims will get justice because there will be fewer prosecutions. But in a number of the cases, the steps taken by civilian authorities were described incorrectly or omitted, according to AP research and interviews. Other case descriptions were too imprecise to be verified. AP

Sexual trauma in military may lead to homelessness: study

20 April - U.S. veterans have a higher risk of homelessness if they suffered sexual trauma while in the service, and the odds are worse for men than women, a new study finds. ... Since 2004, VA medical facilities have screened for it in all veterans seeking care. About one-quarter of female veterans and 1 percent of male veterans report being victims of military sexual trauma during their military service. Researchers analyzed data from more than 603,000 veterans, average age 39, who left the military between 2001 and 2011 and later used VA health services. Among more than 18,500 who screened positive for military sexual trauma, rates of homelessness were 1.6 percent within 30 days, 4.4 percent within one year and nearly 10 percent within five years. That's more than double the rates among veterans without military sexual trauma, according to the study. HealthDay

The army tells its soldiers to get some sleep

18 April - ... [The] Army is trying to change its sleep culture with a wellness campaign called the Performance Triad, which is based on three pillars: nutrition, exercise and sleep. And since more sleep was predicted to be the toughest sell among senior leadership, it has taken center stage in the campaign. Five bases around the country have been conducting a year-long pilot study to try to improve soldiers' sleep. As these trials end — all are due to wrap up by next month — the Army is figuring out how to channel its findings into recommendations for the entire military branch. Huffington Post

March 2016 - The incidence rate of heat stroke among active component members of the U.S. Army, Navy, Air Force, and Marine Corps in 2015 was higher than rates in the previous 4 years. Incidence rates of heat stroke were higher among males, those younger than 20 years of age, Asian/Pacific Islanders, Marine Corps and Army members, and service members in combat-specific occupations, compared to their respective counterparts. More service members were treated for “other heat injuries” in 2015 (n=1,933) than in either of the previous 2 years. The incidence rate of “other heat injuries” was higher among females than males and rates were highest among service members younger than 20 years of age, among Army and Marine Corps members, among recruit trainees, and among service members in combat-specific occupations. During 2011–2015, 720 diagnoses of heat injuries were documented among service members serving in Iraq/Afghanistan; 6.9% (n=50) of those diagnoses were for heat stroke. Medical Surveillance Monthly Report

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GLOBAL

Indigenous health: wealthy nations not always better than developing countries

20 April - Being indigenous in a wealthy country like Australia, the US or Canada does not necessarily lead to better health outcomes compared to indigenous people living in disadvantaged countries, a landmark study has found. The health and wellbeing of almost half of the world’s indigenous and tribal peoples has been captured in what is the most comprehensive indigenous health report ever compiled. It includes data from 23 countries and captures the health status of more than 154 million indigenous and tribal people from around the world. … While the data revealed indigenous and tribal people almost universally suffer poorer outcomes compared to other people in their country, this level of disadvantage varied greatly between countries and was not lessened in wealthier countries, the study found. The Guardian

Laser pointers probably won’t damage pilots' eyes … but distraction is capable of causing disaster, experts say

20 April - Lasers aimed at airplane cockpits likely won’t damage pilots’ eyes, but could lead to disaster by distracting them, eye experts warn. Reports of handheld lasers directed at aircraft are accelerating globally. … "Obviously, if such a distraction occurs at a critical time, such as during landing, the result could be devastating." … "Fortunately, these exposures are
at irradiances that are incapable of producing irreversible retinal damage even at distances of [328 feet],” they wrote. ... Consumer laser devices such as pointers, pens and key rings can only damage eyes at a maximum distance of several meters, the study authors said. But more powerful laser pointers are available, and these devices still pose a threat as they pass through a cockpit canopy or windshield. "These [a cockpit canopy or windshield] are usually pitted or scratched and will serve to scatter the primary beam and may result in the generation of secondary and tertiary beams,” the authors wrote. HealthDay

MERS virus found in hospital air, swab samples during 2015 Korean outbreak

18 April - MERS virus was detected in hospital air samples and swabs of hard surfaces during the height of Korea’s outbreak in 2015. ... A team of Korean researchers tested air and swab samples obtained on Jul 1, 2015, during an outbreak of MERS-CoV (Middle East respiratory syndrome coronavirus) in Korea that caused four hospital clusters. All three rooms tested were used to treat severely ill patients when the samples were obtained and had been cleaned 4 to 7 hours prior to sampling. Air samples from all three rooms were positive for MERS-CoV on polymerase chain reaction tests. Four samples from two patient rooms, one patient restroom, and one hallway had viable virus. One air sample each from an air exhaust damper and an elevator also tested positive, the authors said. ... During the 2015 Korean outbreak, 82% of 186 confirmed MERS cases were related to hospital transmission, although many case-patients did not have close contact with infected people. CIDRAP News Scan (first item)

Mobile app that predicts dengue outbreaks

20 April - A Malaysian has come up with a mobile platform to give warnings of possible outbreaks two to three months in advance. Malaysian Integrated Medical Professional Association (Mimpa) president Dr Dhesi Baha Raja told Star Online that his app has an accuracy of 84-88%. It is accurate within a 400m radius. ... [There are] more than 23 variables that his app uses to determine the outbreak of dengue. ... Dhesi calls the app AIME (Artificial Intelligence in Medical Epidemiology). ... The prediction model that the app uses is being utilised in two cities in Brazil, namely Rio de Janeiro and Sao Paolo. FMT News

Speedy eye-tracking device seeks to detect concussions

20 April - A newly-approved device using infrared cameras to track eye movements promises to help detect concussions in one minute, offering a speedy insight into whether athletes have sustained the injury. Boston-based neuro-technology company SyncThink got clearance from the U.S. Food and Drug Administration in February for its first device, "Eye-Sync", the first of its kind to get the green light from the authority amid growing concerns over brain injuries in contact sports. ... The user puts on a virtual reality headset connected to a computer tablet, with a moving circle appearing in the display. As the user follows the circle, the cameras follow the eyes and the data collected is compared against a baseline of normal eye movement for diagnosis. Reuters
Study says dengue affects 58 million, costs $9 billion a year

18 April - About 58.4 million contracted symptomatic dengue in 2013 and more than 13,000 died, resulting in approximate global costs of $8.9 billion, according to a new study. ... Researchers ... estimated incidence, case fatality, and economic burden of symptomatic dengue cases in 141 countries and territories, using 2013 case estimates from the Institute for Health Metrics and Evaluation’s Global Burden of Disease Study, country demographic data, and expert opinion on medical costs. In 2013, a total of 58.4 million people (95% uncertainty interval, 24 million to 122 million) contracted dengue worldwide, 18% of whom were hospitalized, while 48% sought ambulatory care, and 34% did not receive medical treatment. The authors estimate that 13,586 people, including 5,838 children, died from the infection in 2013. CIDRAP

Surgery: The neglected stepchild of global health

20 April - Eight million people are killed or injured every year because they cannot access safe surgery. ... The global burden of surgical diseases outstrips that of HIV, malaria, and tuberculosis and surgery remains, in the words of Paul Farmer and Jim Kim, the "neglected stepchild of global health." Yet 5 billion people around the world cannot access safe, affordable and timely surgery. ... Adding insult to injury is the cost of surgical care. ... [Each] year 81 million patients around the world are driven into financial ruin as a result of getting surgery. The New York Times

UN drugs summit opens with worldwide divisions laid bare

20 April - A UN meeting on worldwide drugs policy has opened in New York in what has been billed as the most significant such conference in years. The summit will try to rethink global strategy but divisions among members have immediately been laid bare. While some countries favour decriminalisation, others still punish drug-taking with the death penalty. ... The three-day special session was requested by Colombia, Mexico and Guatemala who have seen spiralling drugs violence. Mexico’s President Enrique Pena Nieto warned that harsh penalties "create a vicious cycle of marginalisation and crime". Several delegates called for the death penalty to be abolished for drugs crimes. But Indonesia, one of the countries where capital punishment takes place for such offences, said it was a matter on which individual states should decide for themselves. BBC News
Wildfires, once confined to a season, burn earlier and longer

12 April - ... [Wildfires], once largely confined to a single season, have become a continual threat in some places, burning earlier and later in the year, in the United States and abroad. They have ignited in the West during the winter and well into the fall, have arrived earlier than ever in Canada and have burned without interruption in Australia for almost 12 months. A leading culprit is climate change. Drier winters mean less moisture on the land, and warmer springs are pulling the moisture into the air more quickly, turning shrub, brush and grass into kindling. Decades of aggressive policies that called for fires to be put out as quickly as they started have also aggravated the problem. Today’s forests are not just parched; they are overgrown. ... The 10.1 million acres that burned in the United States last year were the most on record, and the top five years for acres burned were in the past decade. The New York Times

ZIKA VIRUS

Can 'sweaty billboard' help fight Zika virus?

20 April - A billboard that attracts and kills mosquitoes has been designed by marketing agencies in Brazil. The board releases a mixture of a lactic acid solution that mimics the smell of human sweat and carbon dioxide, which is in human breath. Its inventors have released the blueprint for free and are encouraging people around the world to make them. However, one expert warned it could attract insects to areas where there are many humans. The two companies behind the Mosquito Killer Board, Posterscope and NBS, believe it could help in the fight against the Zika virus, which is carried by mosquitoes. The insects are drawn to the aroma from the board from a distance of up to 2.5km away, the board’s inventors say. They are then trapped inside it and can be seen in the message it bears, which explains its purpose. So far, they have installed two of the Mosquito Killer Billboards in Rio de Janeiro, in Brazil. BBC News

Duke-NUS study highlights Zika virus structure and behaviour

20 April - An important breakthrough in understanding the Zika virus structure and its behaviour has been highlighted in a study by Duke-NUS Medical School (Duke-NUS) scientists. ... The high-resolution structure of the Zika virus showed that the overall virus architecture is similar to other flaviviruses such as the West Nile and dengue viruses. However, the team found that the Zika virus is more thermally stable than the dengue virus, and is also structurally stable even when incubated at 40 degrees Celsius, mimicking the body temperature of extremely feverish patients after virus infection. The structure also
revealed that the Zika virus surface proteins have tighter interactions compared to the dengue virus, therefore making it more stable than the dengue virus. This may explain its ability to survive in harsh conditions such as semen, saliva and urine. In addition to transmission by the bite of an infected mosquito, the structural stability of the virus makes it more resilient, which likely explains its special ability to transmit through sexual contact. Overall, the findings suggest that antibodies or drugs that destabilise the structure of the Zika virus may help to reduce the severity of the disease or limit the spread of the virus.

News-Medical

Health officials split over advice on pregnancy in Zika areas

14 April - As the Zika virus bears down on the United States, federal health officials are divided over a politically and ethically charged question: Should they advise American women to delay pregnancy in areas where the virus is circulating? Some infectious disease experts are arguing that avoiding conception is the only sure way to prevent the births of deformed babies. Women’s health specialists, on the other hand, counter that the government should not tell women what to do with their bodies. Indeed, federal health officials have never advised all the women in a region of the country to stop having children. Moreover, they say, most babies conceived during Zika epidemics in Latin America have been born healthy. For now, "we do not have a recommendation to not become pregnant," [Dr. Thomas R. Frieden, the director of the Centers for Disease Control and Prevention] said. "We do recommend access to contraception." The New York Times

Maps predict areas favorable for Zika spread

20 April - More than 2.17 billion people live in tropical and subtropical regions of the world that are suitable for Zika virus spread, according to new mapping estimates that researchers say could be useful for crafting public health guidelines, travel advisories, and other preparedness steps. The Zika mapping study is based on what's known about conditions in countries that have already experienced outbreaks, modeling projections that have been used for other vectorborne diseases, and other environmental factors thought to be important for Zika transmission. They emphasized that environmental suitability doesn't necessarily mean the virus will arrive or spread in a location. CIDRAP

New York, New Orleans release Zika plans amid federal funding uncertainty

19 April - Two major US cities—New York and New Orleans—released their Zika virus plans yesterday, as members of Congress pressed their colleagues to take up President Barack Obama’s $1.9 billion emergency funding request to help battle the threat. Elements of New York’s plan include expansion of mosquito surveillance and control, added capacity to test pregnant women and local mosquitoes for the virus, and a public information campaign on prevention and testing. It would add 51 new positions to tackle all the efforts and would double the number of mosquito traps in the city. Meanwhile, New Orleans city officials
said its comprehensive plan consists of a tiered response based on the threat level. ... [The] document acknowledges that the city is at high risk because of abundant Aedes mosquito populations. ... The city has already started its mosquito surveillance program, which is monitoring the two Aedes species thought to spread the virus. Along with traditional mosquito control efforts, it said spray trucks and airplane spraying will be used if needed. 

CIDRAP

Patterns in Zika virus testing and infection, by report of symptoms and pregnancy status — United States, January 3–March 5, 2016

15 April - ... During January 3–March 5, 2016, Zika virus testing was performed for 4,534 persons from the U.S. states and District of Columbia (DC), among whom 3,335 (73.6%) were pregnant women. Among 1,541 persons with one or more Zika-virus associated symptoms who received testing and reported symptoms, 182 (11.8%) had confirmed Zika virus infection. Only seven (0.3%) of 2,425 asymptomatic pregnant women who received testing had confirmed Zika virus infection. ... Approximately 99% of asymptomatic pregnant women who received testing did not have Zika virus infection. In the current U.S. setting, where most exposure is travel-associated, the likelihood of Zika virus infection among asymptomatic persons is low. Given the potential for adverse pregnancy and infant outcomes associated with Zika virus infection, health care providers should continue to offer Zika virus testing to asymptomatic pregnant women with potential exposure. Morbidity and Mortality Weekly Report

Morbidity and Mortality Weekly Report

INFLUENZA

AFHSB: DoD Seasonal Influenza Surveillance Summary

For Week 14:
- NORTHCOM: Influenza activity continued to decreased and ranged from minimal to low in most states.
- EUCOM: EUCOM influenza activity decreased to minimal with the exception of Greece which had low activity.
- PACOM: Influenza activity remained minimal throughout PACOM.
- CENTCOM and AFRICOM: Influenza activity remained minimal across CENTCOM and AFRICOM.
- SOUTHCOM: Influenza activity in Honduras was minimal based on DMSS data.

DHA - Armed Forces Health Surveillance Branch
APHC: U.S. Army Influenza Activity Report

For the week ending 9 April 2016 (Week 14), RHC-Europe demonstrated a decline in influenza activity. Influenza continues to decrease in the other regions.

- **ILI Activity:** Army incident ILI outpatient visits in week 14 decreased from week 13. ILI visits were 6% higher than the same week last year.
- **Influenza cases:** Three hospitalized influenza cases were reported to APHC (Prov) through DRSi in week 14; one AD SM and two non-AD beneficiaries. The non-AD cases were unvaccinated and had underlying conditions.
- **Viral specimens:** During week 14, 261 of 1049 (25%) laboratory specimens tested positive for respiratory pathogens. RHC-A reported 52 influenza A-positive specimens, RHC-C reported 35, RHC-P reported 21, RHC-E reported 14, and CENTCOM reported 1.

APHC

CDC: Flu View - Weekly U.S. Influenza Surveillance Report

During week 14 (April 3-9, 2016), influenza activity decreased, but remained elevated in the United States.

- **Viral Surveillance:** The most frequently identified influenza virus type reported by public health laboratories during week 14 was influenza A, with influenza A (H1N1)pdm09 viruses predominating. The percentage of respiratory specimens testing positive for influenza in clinical laboratories decreased.
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the NCHS Mortality Surveillance System and above the system-specific epidemic threshold in the 122 Cities Mortality Reporting System.
- **Influenza-associated Pediatric Deaths:** Ten influenza-associated pediatric deaths were reported. CDC

ECDC: Flu News Europe

Week 14/2016 (4-10 April 2016)

- **Influenza activity continued to decrease in the WHO European Region.** Most countries (86%) reported decreasing trends, with associated lower numbers of specimens being collected and fewer testing positive for influenza (34%) than in the previous week (43%).
- **As is often seen late in the northern hemisphere's influenza season, a shift towards circulation of type B influenza virus has occurred.** The proportion increased from those for previous weeks: type B accounted for 72% of influenza virus detections in sentinel sources and 36–39% among hospitalized severe cases.
- **Fewer cases of severe disease were reported than in previous weeks, although numbers varied between countries.** Cases occurred mainly in people under the age of 65, and the great majority of those testing positive for influenza virus were infected by A(H1N1)pdm09. European Center for Disease Prevention and Control/WHO
NHRC: Febrile Respiratory Illness Surveillance Update

For 2016 Week 15 (through 16 April 2016):
- Influenza: Three cases of NHRC laboratory-confirmed influenza, 2 (A/H3) and 1 (A/H1N1) among US military basic trainees at MRCD San Diego.
- FRI surveillance at all eight U.S. military basic training centers indicated FRI rates were elevated at MCRD San Diego and Fort Leonard Wood. Naval Health Research Center

NIH study finds factors that may influence influenza vaccine effectiveness

19 April - The long-held approach to predicting seasonal influenza vaccine effectiveness may need to be revisited, new research suggests. Currently, seasonal flu vaccines are designed to induce high levels of protective antibodies against hemagglutinin (HA), a protein found on the surface of the influenza virus that enables the virus to enter a human cell and initiate infection. New research conducted by scientists at the National Institute of Allergy and Infectious Diseases ... found that higher levels of antibody against a different flu surface protein -- neuraminidase (NA) -- were the better predictor of protection against flu infection and its unpleasant side effects. Neuraminidase, which is not currently the main target antigen in traditional flu vaccines, enables newly formed flu viruses to exit the host cell and cause further viral replication in the body. NIH

Study: Flu vaccine efficacy can wane over single season

20 April - Inactivated influenza vaccine (IIV) efficacy waned in younger adults yet remained fairly high over a flu season, while live attenuated influenza vaccine (LAIV) efficacy did not wane. ... Researchers ... studied flu vaccine efficacy over the 2007-08 flu season in 1,952 healthy adults age 49 and younger, with an average age of 23. ... The efficacy of IIV was 70% ... overall and 73% against H3N2, the season’s predominant strain. Efficacy was much lower for LAIV, at 38% ... overall and at 30% against H3N2. ... Vaccine efficacy for IIV significantly waned, yet still offered protection during 12 of the flu season’s 16 weeks. It was below 50% by April 2008. ... LAIV efficacy rapidly decreased over the first months of the flu season, followed by a rapid increase, yet offered protection only during 7 weeks. Overall its efficacy did not wane over the course of the season. CIDRAP

USAFSAM: DoD Global, Laboratory-Based, Influenza Surveillance Program

During 3 - 16 April 2016 (Surveillance Weeks 14 & 15), a total of 226 specimens were collected and received from 42 locations. Results were finalized for 168 specimens from 37 locations. During Week 14, 18 influenza A(H1N1)pdm09, six A(H3N2), one A(H1N1)pdm09 & coronavirus, and 23 influenza B viruses were identified. Sixteen influenza A(H1N1)pdm09, four A(H3N2), and 10 influenza B viruses were identified during Week 15. Approximately 36% of specimens tested positive for influenza during Week 14. Week 15 is showing a marginal decline with approximately 34% positive among those tested. The influenza
percent positive for the season is currently at 27%

US Air Force School of Aerospace Medicine

The DoD Global, Laboratory-based, Influenza Surveillance Program: Summary for the 2013–2014 influenza season

March 2016 - ... Sentinel sites submitted 3,903 specimens for clinical diagnostic testing and 1,163 (29.8%) were positive for influenza virus. The predominant influenza subtype was influenza A(H1N1)pdm09, identified in 79.2% of all influenza-positive specimens. The other most common subtypes were influenza A(H3N2) (10.5%) and influenza B (10.1%). In August 2014, a human case of influenza A(H3N2) variant was identified in a patient with a history of exposure to swine. Adjusted vaccine effectiveness (VE) was calculated among 1,016 military dependents and retirees in the U.S. and was found to be 44.8% for all vaccine types. Medical Surveillance Monthly Report

WHO: Influenza Update

- 18 April - In the Northern Hemisphere influenza activity was decreasing, while still elevated in some areas, due in part to an increase of influenza B activity. In the Southern Hemisphere influenza activity was reported to be slightly increasing. ...
- The WHO GISRS laboratories tested more than 101187 specimens [from 21 March 2016 to 03 April 2016]. ... 24302 were positive for influenza viruses, of which 13251 (54.5%) were typed as influenza A and 11051 (45.5%) as influenza B. Of the sub-typed influenza A viruses, 4895 (85.8%) were influenza A(H1N1)pdm09 and 811 (14.2%) were influenza A(H3N2). Of the characterized B viruses, 473 (19.6%) belonged to the B-Yamagata lineage and 1936 (80.4%) to the B-Victoria lineage. WHO

VETERINARY/FOOD SAFETY

Costco to provide free Hep A vaccination clinics after frozen berry recall

18 April - Costco Canada is offering free vaccines to anyone who consumed frozen fruit — sold at the store — which is now the subject of a recall. The Canadian Food Inspection Agency issued a recall for Nature's Touch Organic Berry Cherry Blend on Friday. It's a mix sold exclusively at Costco. The recall was issued because of a possible hepatitis A contamination. The Public Health Agency of Canada says Costco Canada is trying to contact all their members who bought the recalled frozen fruit product to tell them about the clinics. CBC News
Addressing health in America to build wealth

18 April - ... Today, more than half of all Americans have at least one chronic condition, and many have two or more. In fact, nearly one in two working-age adults aged 45-64 have more than one chronic condition. Even among younger adults, nearly one in five 18-44 year olds have more than one chronic condition. The first onset of a chronic condition among working-age adults occurs on average at age 44, during prime working years. ... [One] analysis found that onset of a chronic condition has a substantial and robust negative impact on individual earnings. In fact, earnings dropped by 12 percent at the time of onset. This negative effect on income not only persisted over time, but also increased to 18 percent in the long run. ... On average, people with one chronic condition incur more than double the amount of annual medical spending and out-of-pocket costs compared to peers with no chronic conditions. Health Affairs Blog

Greenness around homes linked to lower mortality

15 April - Women live longer in areas with more green vegetation, according to new research. ... Women with the highest levels of vegetation, or greenness, near their homes had a 12 percent lower death rate compared to women with the lowest levels of vegetation near their homes. ... The researchers found the biggest differences in death rates from kidney disease, respiratory disease, and cancer. ... They showed that improved mental health and social engagement are the strongest factors, while increased physical activity and reduced air pollution also contribute. ... When researchers compared women in the areas with highest greenness to women in the lowest, they found a 41 percent lower death rate for kidney disease, 34 percent lower death rate for respiratory disease, and 13 percent lower death rate for cancer in the greenest areas. NIH

Hope for reversing Type 2 diabetes

18 April - ... Recently, a small clinical trial in England studied the effects of a strict liquid diet on 30 people who had lived with Type 2 diabetes for up to 23 years. Nearly half of those studied had a remission that lasted six months after the diet was over. While the study was small, the finding offers hope to millions who have been told they must live with the intractable disease. ... [The] new study ... proved the reversal after diet can persist for at least half a year as long as patients keep weight off, and can occur in people who have had the disease for many years. The researchers followed the participants after they had completed an eight-week low-calorie-milkshake diet and returned to normal eating. Six months later, those who had gone into remission immediately after the diet were still diabetes-free. The New York Times
How the World Health Organization's cancer agency confuses consumers

18 April - ... Over four decades, a WHO research agency has assessed 989 substances and activities, ranging from arsenic to hairdressing, and found only one was “probably not” likely to cause cancer in humans. It was an ingredient in nylon used in stretchy yoga pants and toothbrush bristles. All the other 988 substances, however, pose some level of risk or need further research, according to the International Agency for Research on Cancer (IARC), which is an arm of the WHO. ... IARC has enormous influence and commands much respect, even among its critics. Yet experts from academia, industry and public health say IARC confuses the public and policymakers. Some critics say the way IARC considers and communicates whether substances are carcinogenic is flawed and needs reform. Even the WHO, which oversees IARC, was caught off guard by the agency’s announcement that red and processed meat should be classified respectively as probable and known carcinogens.

Reuters

New HPV vaccine could curb cervical cancers and health costs if adopted widely

18 April - A Yale-led study finds that a new vaccine for human papillomavirus (HPV) would significantly reduce both cervical cancer incidence and healthcare costs if states coordinated policies to improve coverage. ... A new vaccine available since 2015, Gardasil 9, provides protection against nine different HPV types, including five cancer-causing types that were not included in older vaccines. A team of researchers at Yale School of Public Health and the University of Waterloo developed a transmission model to determine the potential impact of the vaccine on cervical cancer incidence and healthcare costs. ... The researchers found that switching to Gardasil 9 would result in greater health benefits at the same or lower cost. Specifically, the new vaccine would decrease cervical cancer incidence by 73%, compared to 63% with the older vaccines, and reduce mortality by 49% versus 43%. Yale News

Why you don’t sleep well in a strange bed

21 April - ... A new study suggests that one half of the brain remains on high alert during the first night of sleep in a new space. Over the course of three experiments on 35 young, healthy volunteers, researchers measured brain activity during two consecutive nights of slumber. They consistently found that part of the left side of the brain remained more active than the right side only on the first night, specifically during a deep sleep phase known as slow-wave sleep. ... On the second night, there wasn’t any difference in reactions to tests between the left and right hemispheres, even during deep sleep. Reuters
Somalia: Child malnutrition soars in northern Somalia due to severe drought

18 April - Child malnutrition rates are soaring in northern Somalia, where the harshest drought in decades has ravaged crops and livestock, and aid workers fear hunger will worsen with further poor rains predicted. Parts of the region are reeling from three years of failed rains which have left many families short of food. ... Hospital admissions of children with life-threatening severe acute malnutrition almost doubled in two months, with 33 in March up from 18 in January in Borama Hospital, Hassan said. Reuters

Afghanistan: Children increasingly struggle to access health care and education, UN reports

18 April - Conflict-related violence in Afghanistan has harmed health and education personnel, reduced the availability of health care and limited children’s access to essential health and education services, the United Nations said in a new report released today. ... In 2015, UNAMA and UNICEF documented 125 incidents affecting access to health care, compared with 59 in 2014, including 20 health workers killed, 43 injured and 66 abducted. ... “In 2015 children increasingly struggled to access health and education services in Afghanistan due to insecurity and conflict-related violence, further exacerbated by high levels of chronic poverty throughout the country,” said Akhil Iyer, UNICEF Representative in Afghanistan. UN News Centre

Pakistan: Seven killed in anti-vaccination attack

20 April - Seven Pakistani policemen, three of whom were guarding polio workers, have been killed in Karachi, officials say. Eight gunmen on motorcycles fired at a group of three police guards and later at a van containing four officers, officials told the Pakistan Tribune. Islamist militants oppose vaccination, saying it is a Western conspiracy to sterilise Pakistani children. In January, 15 people were killed in a bomb attack on a vaccination centre in the south-western city of Quetta. Polio workers called off the vaccination drive in Karachi following the attack, despite the home minister's order to continue, the Tribune reported. BBC News
500 migrants may have died in sinking of boat in Mediterranean, U.N. says

20 April - The United Nations refugee agency said on Wednesday that 500 people may have died in the choppy waters of the Mediterranean last week, when a large boat packed with migrants from Africa and the Middle East capsized in an unknown location between Libya and Italy. If confirmed, it would be the worst humanitarian calamity in Europe’s migrant crisis since more than 800 people died last April near Libyan shores as they tried to reach Italy. The agency based its findings on interviews with 41 survivors of the shipwreck, although it was not able to verify the episode independently. The migrants — 23 Somalis, 11 Ethiopians, six Egyptians and a Sudanese — were picked up by a merchant ship near Greece on April 16 after days of drifting at sea. They were transferred to a migrant camp in Kalamata, a city on the Greek mainland. The New York Times

Europe becomes first WHO region to interrupt malaria transmission

20 April - Locally acquired malaria cases in Europe have decreased from more than 90,000 to 0 over the past 20 years, making the WHO European Region the first to interrupt malaria transmission, according to a WHO press release today. Europe reported 90,712 malaria cases in 1995, and 2015 was the first year in which no country reported a locally acquired case. The achievement is partly a result of strong political commitment to instituting surveillance and strengthening healthcare systems in eastern and central Europe where Plasmodium species infect local Anopheles mosquito populations, the WHO said. CIDRAP

New Scan (second item)

Greece: Migrant camp near Athens poses public health risk - Greek mayors

20 April - Five mayors of Athens’ coastal suburbs warned Wednesday of the "enormous" health risks posed by a nearby camp housing over 4,000 migrants and refugees. "The conditions are out of control and present enormous risks to the public health," the mayors complained in a letter to Prime Minister Alexis Tsipras, in reference to the camp at Hellinikon, the site of Athens’ old airport. ... "The number of people is much higher than the capacity of the place and there are serious hygiene problems," local mayor Dionyssis Hatzidakis told AFP. He and his four fellow mayors from the area cited a document from Greece’s disease prevention centre KEELPNO warning of the "the danger of disease contagion due to unacceptable housing conditions" at the site which they say has no more than 40 chemical toilets. France 24
United Kingdom: Doctors fear spread of 'super-gonorrhoea' across Britain

17 April - A highly drug-resistant type of "super-gonorrhoea" is spreading across the country, with senior medics warning it may become untreatable. A powerful strain of the sexually transmitted superbug first seen in the north of England has been found in the West Midlands and the south-east, Public Health England (PHE) said. The strain is highly resistant to the antibiotic azithromycin, which means medics are relying on a second drug, ceftriaxone, to treat it. But there are no other effective drugs to tackle the strain, raising the prospect of it becoming untreatable if it builds further resistance. ... PHE said on Sunday there had been 34 confirmed cases since November 2014. Since September 2015, 11 cases have been confirmed in the West Midlands and in the south of England, five of them in London. The Guardian

United Kingdom: Skype and diabetes - doctors embrace tele-health hubs

19 April - For Mark Norman of London, an increasingly busy life meant that he had to find alternative means to manage his diabetes. As part of a new healthcare trend gaining popularity around the world, Norman has been using Skype to talk to his doctor for the past three years as part of a pilot programme that has been running in Newham, East London, since 2011. ... The student is not the only diabetic who has benefited from the programme, which ... has now expanded to provide access to all age groups. Since then, patient no-shows (called DNAs - or Did Not Attend) and appointment cancellations dropped to 16 percent from up to 50 percent previously. ... [The] overall success of the Newham clinics has prompted the National Health Service (NHS) of England to update its advice to local healthcare commissioners encouraging the use of Skype and other social media to help keep young people engaged in their diabetes treatments as they transition from child to adult services. Al Jazeera

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USNORTHCOM

Canada: B.C. declares public health emergency as overdoses surge again

14 April - British Columbia has declared a public health emergency after another surge in drug-related overdoses and deaths, making it the first province in the country to take such a step as others, including Ontario and Alberta, work to combat the effects of fentanyl. ... Fentanyl was developed as a prescription painkiller, but gained popularity as a street drug.
after OxyContin was removed from the market in 2012. B.C. had 76 illicit drug overdose deaths in January, the highest total in a single month since at least 2007. At its current rate, the province could have 600 to 800 overdose deaths this year, Dr. Kendall said. ... Of the 201 overdose deaths in B.C. so far this year, 64 were associated with fentanyl. Globe and Mail


22 April - ... CDC compared the prevalence of hearing impairment within nine U.S. industry sectors using 1,413,789 noise-exposed worker audiograms from CDC’s National Institute for Occupational Safety and Health (NIOSH) Occupational Hearing Loss Surveillance Project. CDC estimated the prevalence at six hearing impairment levels, measured in the better ear, and the impact on quality of life expressed as annual disability-adjusted life years (DALYs), as defined by the 2013 Global Burden of Disease (GBD) Study. The mining sector had the highest prevalence of workers with any hearing impairment, and with moderate or worse impairment, followed by the construction and manufacturing sectors. Morbidity and Mortality Weekly Report

U.S., Illinois: Illinois says five more people with bacterial infection have died

20 April - The Illinois Department of Public Health said on Wednesday that five more people had died after being infected with Elizabethkingia, a disease linked to the deaths of 15 people in neighboring Wisconsin. The cause of death was not identified as Elizabethkingia because many of those people had underlying health conditions, the department said. Ten Illinois residents have been diagnosed with Elizabethkingia, and six have died. Reuters

U.S.: GAO renews its call for strategic oversight of US biodefense efforts

15 April - In a report released yesterday, the US Government Accountability Office (GAO) reiterated its previous appeals to designate one person or group and frame an integrated strategy to coordinate the US government’s many programs and efforts dedicated to protecting the nation against biological threats. “The biodefense enterprise is fragmented and does not have strategic oversight to promote efficiency and accountability,” the GAO said. CIDRAP News Scan (third item)

U.S.: Life expectancy drops for white women, increases for black men

20 April - White women are dying at a slightly younger age than in the past. That’s according to a report released Wednesday by the Centers for Disease Control and Prevention’s National Center for Health Statistics. The life expectancy for non-Hispanic white women in the United States declined by one month — from 81.2 years to 81.1 years — from 2013 to 2014. Though one month may not seem like much, demographers worry — it’s the
first time since the government began keeping records that white women's life expectancy has declined, according to the report. ... "For [white people in] the age group 25 to 54, suicide went up," she says. "Unintentional poisonings,' which is mainly alcohol and drug poisoning, and chronic liver disease — those went up by quite a bit." ... The average life expectancy for non-Hispanic black men increased by about a half-year — from 71.8 years to 72.2 in that same time period. Arias says that improvement seems linked to declines in cancer deaths, homicides and heart disease. NPR

U.S.: Report - More than half of Americans living with unhealthy levels of air pollution

20 April - More than half of Americans are living with unhealthy levels of air pollution, a new American Lung Association report found. Despite steady improvements in air quality across the county, about 166 million Americans are at risk of some type of negative health effects from living with unhealthy air, the American Lung Association announced in their annual State of the Air report. The report noted about 52.1 percent of people in the United States will have shorter lives and suffer serious health effects such as lung cancer, asthma, cardiovascular damage, and developmental and reproductive damage due to air pollution. UPI

U.S., Texas: After Texas flooding, health hazards emerge as water recedes

20 April - The floodwaters that have devastated thousands in Texas are now receding, but even in the aftermath, there can be a host of health hazards left behind. Standing water can contain harsh chemicals picked up as waters washed over roads and other industrial areas, bacteria can infect open wounds, causing dangerous infections, and a host of infectious diseases including E.coli, norovirus and tetanus can be spread easily in areas with flood damage. ... Mold or debris left behind due to muddy water can exacerbate asthma or breathing problems. ... As mud dries, it can turn into dust that affects the lungs. ... In addition to short-term problems, ..."All this floodwater is going to leave puddles and pockets of water that will be great breeding grounds of mosquitoes." ABC News

U.S.: Utah declares porn a public health hazard

20 April - On Tuesday, the state of Utah officially declared a new public health crisis: pornography. Gov. Gary Herbert signed a resolution stating that pornography is a "public health hazard" that harms both individuals and society. The nonbinding resolution calls for research, education and policy changes "to address the pornography epidemic that is harming the citizens of Utah and the nation."... The resolution identifies a number of "individual and public health impacts and societal harms" it attributes to pornography, including:

- Low self-esteem and body image in adolescents, who, according to the resolution, are exposed to porn at an average age of 11-12
- The hypersexualization of teens "and even prepubescent children"
- The normalization of violence, abuse and rape
- An increase in the demand for sex trafficking, prostitution and child pornography
- The objectification of women, which "teaches girls they are to be used and teaches boys to be users." NPR

USPACOM

China: Vaccine scandal threatens public faith in immunizations

18 April - First the news rippled across China that millions of compromised vaccines had been given to children around the country. Then came grim rumors and angry complaints from parents that the government had kept them in the dark about the risks since last year. Now, the country’s immunization program faces a backlash of public distrust that critics say has been magnified by the government’s ingrained secrecy. ... The faulty vaccines have become the latest lightning rod for widespread, often visceral distrust of China’s medical system. ... The World Health Organization has said that outdated or poorly stored vaccines rarely if ever trigger illness or toxic reactions. Chinese government investigators said last week that they had not found any cases of adverse reactions or spikes in infections linked to ineffective vaccines. The New York Times

India: More than 100 feared dead in India heat wave

21 April - More than 100 people are feared dead in India in an early-summer heat wave which forced schools to close and halted outdoor work like construction, government officials said on Thursday. Neighboring Pakistan, which suffered its hottest spell in decades last year, plans to open 500 response centers to provide shelter and cold water to people if a heat-wave warning is issued, a government official said. No heat deaths have yet been reported. India’s hottest months are May and June, but some states have already registered temperatures in excess of 40 degrees Celsius (104 degrees Fahrenheit), forcing authorities to take emergency steps. Reuters

Japan: Aftershocks bring misery for Japan quake survivors as toll reaches 48

20 April - Aftershocks rattled survivors of deadly Japanese earthquakes on Wednesday, nearly a week after the first one struck, as the area braced for heavy rain and the possibility of more landslides. Rescuers using backhoes and shovels to dig through crumpled houses swept away in a landslide found a woman's body, one of several people still missing. Another death was confirmed later in the day, taking the toll to 48. Hundreds of people in
the Kumamoto area of southwestern Japan spent another night in their cars, afraid to return
to damaged houses. Medical experts warned of the danger of potentially fatal blood clots
from sitting too long in cramped conditions after a 51-year-old woman died and at least 12
people were hospitalized. Eleven people appear to have died of illnesses related to their
prolonged stay in evacuation centers, NHK national television said. The first quake hit late
last Thursday and the largest, at magnitude 7.3, some 27 hours later. Reuters

Nepal: Virtually no gov't rebuilding 1 year after Nepal quake

21 April - The violence of the 7.8-magnitude earthquake left countless towns and villages
across central Nepal in shambles. Almost one year later, in shambles they remain. The
country has made almost no progress in rebuilding hundreds of thousands of homes,
schools and government buildings, as well as some 600 historical structures. ... The
government's reconstruction agency has so far approved zero projects. Some citizens have
started rebuilding on their own, but most are still waiting — either because they are afraid
of running afoul of new, promised building regulations, or because they still hope to receive
government grants. ... The lack of progress isn't for want of money. Nepal, facing an
estimated $6.6 billion reconstruction bill, has received $4.1 billion in pledged donations so
far. The problem, officials and aid workers say, is tangled bureaucracy and government
malaise. AP

Philippines: Dengue vaccine update - 150,000 Filipino children vaccinated to date

19 April - The Philippines is the first and only country to begin vaccinating children for
dengue fever with the recently approved vaccine, Dengvaxia. On April 4, 2016, the
Department of Health (DOH) started the administration of dengue vaccines to Grade 4
pupils aged 9 years old and above in Regions III, IV-A, and National Capital Region (NCR). ... 
As of April 17, 2016, a total of 148,431 (72%) pupils were vaccinated out of 206,673 pupils
with parents’ consent. ... Last week, The Strategic Advisory Group of Experts (SAGE) on
immunization ... recommended countries consider introduction of CYD-TDV (Dengvaxia)
only in geographic settings (national or subnational) with high endemicity, as indicated by
seroprevalence of approximately 70% or greater in the age group targeted for vaccination
or other suitable epidemiologic markers. ... Dengue is highly endemic in the Philippines. ... 
As of April 2, 2016, a total of 33,748 suspected dengue cases were reported nationwide. 
Outbreak News Today
Ecuador earthquake: Aid pours in as rescuers rush to find more victims

18 April - Thousands of Ecuadorians awoke Monday from a second night sleeping outside or in temporary shelters following a weekend earthquake that killed at least 272 people and collapsed overpasses and buildings. ... With the death toll expected to rise -- at least 2,527 people were hurt and others are missing -- Ecuadorian rescuers searched for more victims of Saturday’s quake, which struck 27 kilometers (16.8 miles) southeast of the coastal town of Muisne, according to the U.S. Geological Survey. ... Ecuador deployed 10,000 soldiers and 4,600 police officers to the affected areas. Troops set up mobile hospitals and temporary shelters. The military also brought in search dogs to help find survivors and bodies. Fox 40

Haiti: AIDS treatment in Haiti promising for developing nations

18 April - One of the first groups of H.I.V. patients in a poor country to get free AIDS drugs has about the same survival rate as their closest counterparts in the United States, according to scientists. ... Ten years after a free treatment program was introduced in Haiti’s capital, Port-au-Prince, two-thirds of the first 910 patients enrolled were still alive, the researchers said in a brief report. ... That is roughly the same 10-year mortality rate found among gay men in this country who started antiretroviral triple therapy when it was first started in the late 1990s. ... The clinic ... achieved this success despite Haiti’s political instability and grinding poverty. The New York Times

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