

25 January 2019

# Army Public Health Weekly Update

Army Public Health Center



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## Contents

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We're sorry for the inconvenience.

### U.S. MILITARY

- [Climate change threatens a majority of mission-critical military bases, Pentagon report says](#)
- [Incidence and prevalence of the metabolic syndrome using ICD-9 and ICD-10 diagnostic codes, Active Component, U.S. Armed Forces, 2002–2017](#)
- [Pentagon: No changes to policy on transgender troops, for now](#)
- [2 soldiers dead, several others injured in vehicle accident during training at Fort Bliss](#)
- [Supreme Court allows Trump restrictions on transgender troops in military to go into effect as legal battle continues](#)
- [Women in the military draft, or dump the system altogether? New report looks at radical options](#)

### GLOBAL

- [Climate change is a public health emergency](#)
- [CRISPR's New Breakthrough—Disarming Parasites](#)
- [Dengue immunity may be protective against symptomatic Zika, study finds](#)
- [Faulty molecular master switch may contribute to AMD](#)
- [Guinea worm wanes to 28 cases globally; Ethiopia, Mali report zero human cases](#)
- [Here's how smart toilets of the future could protect your health](#)
- [New findings reveal surprising role of the cerebellum in reward and social behaviors](#)
- [Once a last resort, this pain therapy is getting a new life amid the opioid crisis](#)
- [Secret to sepsis may lie in rare cell](#)
- [Security and public health: the interface](#)
- [UN health chief orders probe into misconduct](#)
- [Why are so many people still dying from snake bites?](#)

### INFLUENZA

- [AFHSB: DoD Seasonal Influenza Surveillance Summary](#)
- [APHC: U.S. Army Influenza Activity Report](#)
- [CDC: Flu View - Weekly U.S. Influenza Surveillance Report](#)
- [ECDC: Flu News Europe](#)
- [NHRC: Operational Infectious Diseases - Weekly Surveillance Report](#)
- [USAFSAM & DHA: DoD Global Respiratory Pathogen Surveillance Program](#)
- [WHO: Influenza Update](#)

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### VETERINARY/FOOD SAFETY

---

- [Gottlieb: FDA food inspectors reduced by more than half during shutdown](#)
- [Third case of rifampin/penicillin-resistant strain of RB51 \*Brucella\* from consuming raw milk](#)

### WELLNESS

---

- [Even modest blood pressure elevation in young adults may take a toll on the brain](#)
- [New study shows HPV vaccine highly effective, offers herd immunity](#)
- [Stair-climbing exercise 'snacks' boost health](#)
- [Yoga and veterans: a different kind of warrior](#)

### USAFRICOM

---

- [Democratic Republic of the Congo: A spot of good news in an Ebola crisis: Vaccine supplies are expected to last](#)
- [Democratic Republic of the Congo: Congo records one-day record for confirmed Ebola cases](#)
- [Madagascar: Nearly 20,000 measles cases recorded in Madagascar since October](#)
- [Zambia: Trump's cuts devastate clinics in Zambia](#)

### USCENTCOM

---

- [Iraq: Iraqi scientist says he helped ISIS make chemical weapons](#)
- [Saudi Arabia: Two new cases of MERS recorded in Saudi Arabia](#)
- [Yemen: The forgotten - living with HIV in war-ravaged Yemen](#)

### USEUCOM

---

- [Europe: Migrants and refugees at higher risk of developing ill health than host populations](#)
- [France: Toxic substances found in diapers in France - government agency](#)

### USINDOPACOM

---

- [Asia: Innovating for neglected diseases in South Asia](#)
- [South Korea: Seoul's disease control questioned amid spreading fears over measles](#)

### USNORTHCOM

---

- [U.S.: BARDA exercises option for freeze-dried smallpox vaccine](#)
- [U.S.: CDC experts say US-wide \*C diff\* prevention could net \\$25 billion in benefits](#)
- [U.S.: CDC says 2018 \*Candida auris\* cases topped 550](#)
- [U.S.: Family separation may have hit thousands more migrant children than reported](#)
- [U.S.: Lead levels too high in many U.S. schools](#)
- [U.S.: Measles outbreak leads to health emergency](#)

### USSOUTHCOM

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- [Argentina: Hantavirus pulmonary syndrome](#)
- [Latin America and the Caribbean: Contraceptive use with a focus on long-acting reversible contraceptives - prevalence and inequalities in 23 countries](#)

## U.S. MILITARY

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### Climate change threatens a majority of mission-critical military bases, Pentagon report says

19 January - More than two-thirds of the military's operationally critical installations are threatened by climate change, according to a new DoD report. The January 2019 report, "Report on Effects of a Changing Climate to the Department of Defense," was submitted to Congress Thursday. ... The Pentagon did not assess all of its hundreds of installations, instead it selected "79 mission assurance priority installations based on their operational role," the Pentagon said in its report. In its assessment of those 79 installations, which included Army, Air Force and Navy installations — and notably no Marine Corps bases — the services reported that 53 of the 79 faced current threats from flooding; 43 of the 79 face current threats from drought and 36 of the 79 faced current threats from wildfires.

[Military Times](#)

[top of page...](#)

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### Incidence and prevalence of the metabolic syndrome using ICD-9 and ICD-10 diagnostic codes, Active Component, U.S. Armed Forces, 2002–2017

December 2018 - This analysis confirmed that the incidence of metabolic syndrome (MetS) among service members steadily increases with advancing age. However, because the specific MetS ICD codes tend to be underutilized in patient records, this analysis' estimates of incidence greatly underestimate rates that have been derived using biologic thresholds for the five components of the syndrome. MetS is a medically disqualifying condition for appointment, enlistment, or induction into military service. Significant impacts on force readiness include administrative discharges for failure to meet weight standards, non-deployability due to type 2 diabetes diagnosis requiring medication, and increased potential for cardiovascular disease in deployed environments. [Medical Surveillance Monthly Report](#)

[top of page...](#)

### Pentagon: No changes to policy on transgender troops, for now

22 January - The Pentagon said it would not implement any changes to its transgender policy for now, despite a Supreme Court ruling Tuesday that upheld the Defense Department's limits on which transgender personnel may be allowed to serve. In the 5-4 decision, the justices ruled that the Trump administration may move forward with a ban on transgender service members who experience gender dysphoria, or who have transitioned

**Annual Report -  
Surveillance of  
Suicidal Behavior  
Publication (SSBP)**

The Surveillance of Suicidal Behavior Publication (SSBP), published annually by BSHOP, describes the characteristics of Active Army Soldiers who engaged in suicidal behavior within the prior calendar year, as reported through data sources in the ABHIDE, and presents observed trends and changes in risk factors over time.

During 2017, 116 Active Army Soldiers died by suicide; 459 attempted suicide; and 3,402 had suicidal ideations. Suicide surveillance data are used by key military leaders, public health practitioners, and behavioral health providers in the U.S. Army to focus prevention efforts, plan programs, allocate resources, develop policy, monitor trends, and suggest mitigating strategies.



to their preferred sex, from serving in the military. Four lower court cases continue to be heard. ... Because there is still an injunction in place in a federal case in Maryland that is challenging the ban, no changes would be made to DoD's policy for now, a defense official said. [Military Times](#)

[top of page...](#)

## **2 soldiers dead, several others injured in vehicle accident during training at Fort Bliss**

24 January - A vehicle accident during training at Fort Bliss, Texas, killed two soldiers on Tuesday, the 1st Armored Division confirmed on Wednesday. Some soldiers were also injured during the incident, 1st Armored Division spokeswoman Maj. Allie Payne told Army Times, but the exact number and their conditions were not yet available. The division is investigating the accident, according to a release. Names of the soldiers killed are being withheld until after next-of-kin are notified. [Military Times](#)

[top of page...](#)

## **Supreme Court allows Trump restrictions on transgender troops in military to go into effect as legal battle continues**

22 January - The Supreme Court on Tuesday allowed President Trump's broad restrictions on transgender people serving in the military to go into effect while the legal battle continues in lower courts. The justices lifted nationwide injunctions that had kept the administration's policy from being implemented. It reversed an Obama-administration rule that would have opened the military to transgender men and women, and instead barred those who identify with a gender different from the one assigned at birth and who are seeking to transition. [The Washington Post](#)

[top of page...](#)

## **Women in the military draft, or dump the system altogether? New report looks at radical options**

24 January- WASHINGTON — The Selective Service System could start including women in its lists for possible future military drafts in the next few years. Or it could also start using those lists to help fine-tune military recruitment by identifying highly-skilled high schoolers interested in public service. Or it could disband altogether, abandoning any procedure for involuntary military service in the future. Members of the National Commission on Military, National and Public Service charged with recommending potentially radical changes to the

**Surveillance of  
Suicide Cases  
(National Guard  
and Reserve) -  
January - December  
2016**

This paper presents characteristics of activated and non-activated U.S. Army National Guard and Reserve Soldiers who died by suicide during 2016. This includes suicides identified by the Armed Forces Medical Examiner System (AFMES) and Army G-1.

During 2016, 149 NG and AR Soldiers died by suicide (n = 108, NG and n = 41, AR). Crude suicide rates were 31 per 100,000 NG Soldiers and 21 per 100,000 AR Soldiers. Most cases were male, aged 17–34 years, non-Hispanic white, single, and were not on activated status (n=135) at the time of the event.



Selective Service System released their interim report on Wednesday, outlining a host of potentially dramatic overhauls they may recommend in coming years. [Military Times](#)  
[top of page...](#)

**GLOBAL**

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## Climate change is a public health emergency

23 January - ... [M]ounting scientific evidence has led experts to conclude that climate change presents “the biggest global health threat of the 21st century”. A recent study demonstrated that there are 467 different pathways by which human health, water, food, economy, infrastructure and security have already been impacted by climate hazards. Here are 8 major ways that climate change harms our health today and threatens it tomorrow:

1. The frequency, intensity, and duration of heatwaves, droughts, wildfires, floods and storms are increasing due to climate change.
2. As average temperatures continue to rise, so will heat-related disorders.
3. Climate change can exacerbate air pollution.
4. Elevated carbon dioxide (CO<sub>2</sub>) concentrations are associated with decreased human cognitive performance.
5. Climate change influences the transmission of vector-, food-, and water-borne diseases.
6. Climate change threatens food and nutrition security.
7. Climate change will cause mass migration and most likely increase collective violence.
8. Climate change poses threats to our mental health and well-being. [Scientific American](#)

[top of page...](#)

## CRISPR’s New Breakthrough—Disarming Parasites

17 January- George Washington School of Medicine researchers have successfully used CRISPR/Cas9 in animal models to reduce harm caused by the parasites behind schistosomiasis and liver fluke infections. The worms, which enter the body by burrowing into the skin (schistosomiasis) or via undercooked fish (liver fluke), release proteins causing extensive liver, kidney and other organ damage. Using CRISPR/Cas9 to locate and “knock out” these proteins halts the injury the infections cause—another example of the technology’s potential. [Global Health Now](#)

[top of page...](#)

## Dengue immunity may be protective against symptomatic Zika, study finds

22 January - Children with a history of prior dengue virus infection had a significantly lower

## 2016 Behavioral Health Risk Assessment Data Report (BH-RADR)

The proportion of Soldiers screening positive on the Primary Care–Post-Traumatic Stress Disorder tool significantly differed across the deployment-related health assessments: 3% positive on the Pre-Deployment Health Assessments, 6% positive on the Post-Deployment Health Assessments, and 9% on the Post-Deployment Health Re-Assessments. These findings are consistent with a previous study that observed the highest proportion of Soldiers reporting PTSD symptoms at PDHRA. The PHA had comparable results with 8% of Soldiers screening positive on the PC-PTSD.



risk of being symptomatic when infected by Zika virus, according to a study in Nicaragua of more than 3,000 children aged 2 to 14 years. Experts have worried that prior dengue virus infection could exacerbate severe Zika disease. However, the new findings, published in PLOS Medicine, indicate that prior dengue immunity in children may in fact be protective against symptomatic Zika disease. [NIH](#)

[top of page...](#)

## Faulty molecular master switch may contribute to AMD

22 January - A signaling pathway controlled by transforming growth factor beta (TGFb) could be involved in the progression of age-related macular degeneration (AMD). Researchers ... have found that interrupting TGFb signals to immune cells called microglia causes the cells to enter an activated, inflammatory state. These activated microglia damage the retina, the light-sensitive tissue at the back of the eye. This damage is similar to cellular effects observed in AMD, a common cause of vision loss among older Americans. [NIH](#)

[top of page...](#)

## Guinea worm wanes to 28 cases globally; Ethiopia, Mali report zero human cases

17 January - Just 28 human cases of Guinea worm disease were reported in 2018, down slightly from 30 cases reported in 2017. When The Carter Center assumed leadership of the Guinea Worm Eradication Program in 1986, there were an estimated 3.5 million human cases annually in 21 countries in Africa and Asia. ... During 2018, 17 human cases of Guinea worm disease were reported in Chad, 10 in South Sudan, and one in Angola. None were reported in Ethiopia, where there had been 15 cases in 2017; nor were any human cases reported in Mali, where none have been reported since 2015. [The Carter Center](#)

[top of page...](#)

## Here's how smart toilets of the future could protect your health

23 January - ... [S]everal smart toilets are in the works that would [offer] a window into the health of the people who use them. At least one Japanese firm already makes a smart toilet for use in hospitals; Toto's "Flowsky" toilet looks like an ordinary toilet but is designed to check for abnormalities in urine flow that might signal bladder or prostate problems. [Sameer] Berry envisions smart toilets for use in private residences. His dream is an internet-connected toilet that safeguards health by using discreetly placed sensors and artificial intelligence to analyze waste. Such a toilet could detect early signs of disease and help

## 2017 Zoonotic Disease Summary

In this issue: Army tick and mosquito testing, rabies animal testing, and human zoonotic disease cases diagnosed at Army and Joint Base (JB) military treatment facilities (MTFs), or their designated catchment areas.



people manage chronic conditions such as diabetes. ... Smart toilets could even yield insights into public health. [T]he Toilet Board Coalition ... [wants] to collect data from smart toilets in public bathrooms, as well as landscape and weather information from satellites. The goal is to give health officials evidence of a disease before it becomes a full-blown disaster, such as the West Africa Ebola epidemic in 2014. "Scientists that we're working with tell us we could have predicted that type of outbreak if we'd been monitoring what goes into our toilets," says Cheryl Hicks, the organization's executive director. [NBC News](#)

[top of page...](#)

## New findings reveal surprising role of the cerebellum in reward and social behaviors

17 January - A new study in rodents has shown that the brain's cerebellum -- known to play a role in motor coordination -- also helps control the brain's reward circuitry. Researchers found a direct neural connection from the cerebellum to the ventral tegmental area (VTA) of the brain, which is an area long known to been involved in reward processing and encoding. These findings ... demonstrate for the first time that the brain's cerebellum plays a role in controlling reward and social preference behavior, and sheds new light on the brain circuits critical to the affective and social dysfunction seen across multiple psychiatric disorders. [NIH](#)

[top of page...](#)

## Once a last resort, this pain therapy is getting a new life amid the opioid crisis

23 January - Spurred by the opioid crisis, a once marginalized therapy that relies on electrical stimulation to treat chronic pain is undergoing a renaissance as device makers race to upgrade their products for a wider population of patients. The companies believe the therapy, known as neuromodulation, can reduce reliance on opioid painkillers. ... Over the past four years, device makers have introduced products that deliver stimulation at different frequencies and levels of intensity, expanding the number and type of patients that may be candidates for neuromodulation. The therapy involves the surgical implantation of a spinal cord stimulator that, when turned on, delivers mild electric pulses to nerve fibers in the spinal cord. The electricity interrupts the pain signals that are carried to the brain, providing relief to patients. [STAT](#)

[top of page...](#)

## Secret to sepsis may lie in rare cell

21 January - In a paper published in *Nature Immunology*, scientists from Seattle Children's Research Institute reveal how a rare group of white blood cells called basophils play an

## Workshop: Long-Term Health Monitoring

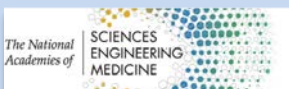
The National Academies of Sciences, Engineering, and Medicine invites you to attend the upcoming workshop, Challenges in Initiating and Conducting Long-Term Health Monitoring of Populations Following Nuclear and Radiological Emergencies in the United States.

This workshop aims to discuss challenges and considerations for setting up a registry for long-term health monitoring of populations following nuclear or radiological emergencies in the United States.

**Date:** March 12-13, 2019

**Location:** Washington, DC & via Webcast

[Register](#)



important role in the immune response to a bacterial infection, preventing the development of sepsis. Researchers say their findings could lead to better ways to prevent the dangerous immune response that strikes more than 30 million people worldwide every year. ... Their studies showed that basophils were one of the first types of immune cell to appear at the infection site. The presence of basophils not only enhanced inflammation at the early stages of an immune response to infection and improved survival in mice, but did this in part by releasing a protein known as tumor necrosis factor (TNF). ... TNF sends the signal to other cells causing them to switch into high gear and generate the inflammatory response that is vital to protecting and healing damaged tissue. [Seattle Children's](#)

[top of page...](#)

## Security and public health: the interface

17 January - Security and health sectors are often interconnected in their attempt to resolve public or global health issues; however, military involvement can have contrasting effects. Security or military involvement reinforce public health efforts (such as assisting in the response to the 2014 Ebola virus disease and the 2015 Zika virus outbreak) but can also have negative effects on health, such as targeting humanitarian and health-care workers in conflict settings. With countries becoming increasingly willing to involve the military in health matters, collaborative efforts between these two sectors need to be defined to support health priorities. [The Lancet](#)

[top of page...](#)

## UN health chief orders probe into misconduct

17 January - The head of the World Health Organization has ordered an internal investigation into allegations the U.N. health agency is rife with racism, sexism and corruption, after a series of anonymous emails with the explosive charges were sent to top managers last year. Three emails addressed to WHO directors — and obtained by the Associated Press — complained about “systematic racial discrimination” against African staffers and alleged other instances of wrongdoing, including claims that some of the money intended to fight Ebola in Congo was misspent. ... [C]ritics doubt that WHO can effectively investigate itself and have called for the probe to be made public. [AP](#)

[top of page...](#)



### The Surgeon General Weekly Read Book

The Surgeon General Weekly Read Book is available with articles classified up to the **SECRET** level on the APHC SIPRNet site:

<https://intelshare.intelink.sgov.gov/sites/medcom-g2/SitePages/Home.aspx>

To access this version, you will need a **SECRET** clearance and a SIPRNet account.

## Why are so many people still dying from snake bites?



21 January - Tens of thousands of people die from snake bites worldwide every year. Lack of treatment and even the wrong medicine mean many of these deaths are preventable. Snake bites may not strike you as being a major public health problem. But in some parts of the world they are a daily risk, and can be lethal or life-

changing. Victims often do not get the treatment they need in time, if at all. In other cases, they are given medicine to treat an injury caused by a different snake. About 11,000 people a month are thought to die from venomous snakebites. ... A further 450,000 people a year are thought to suffer life-changing injuries such as amputation and permanent disability. the scale of the problem means snake bites are now classed as a priority neglected tropical disease. [BBC News](#)

[top of page...](#)

### INFLUENZA

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## AFHSB: DoD Seasonal Influenza Surveillance Summary

For Week 2:

- NORTHCOM: Influenza activity decreased in several states, but continued to remain moderate to high in many states.
- EUCOM: Influenza activity fluctuated across EUCOM; activity decreased in Germany, Italy, and Greece, while activity increase to high in Turkey.
- PACOM: Influenza activity remained low in the Republic of Korea and Japan, but was minimal in Hawaii and Guam.
- CENTCOM: Influenza activity was minimal in CENTCOM locations with available data, with the exception of Afghanistan, which had high activity.
- AFRICOM: In Djibouti, influenza activity remained minimal and the percentage of outpatient visits due to ILI increased to 9.8%.
- SOUTHCOM: Influenza activity remained minimal in Honduras and Cuba during week 02. [DHA -Armed Forces Health Surveillance Branch](#)

[top of page...](#)

## APHC: U.S. Army Influenza Activity Report

For the week ending 12 January 2019 (week 2)

3349 specimens were tested in week 2 with 8% (298) returning positive. Of the positives, Influenza A accounted for 74% (221) of the cases followed by RSV with 20% (60), and

## Links

[A-Z Index](#)

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Monthly Report](#)

[Medical Threat Briefings  
\(AKO\)](#)

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Influenza B 3% (9). Adenovirus and parainfluenza accounted for 1% (4) of the cases each. The percentage of influenza-like illness visits in the Active Duty population increased by 23% when compared to the previous week. Three influenza-related hospitalizations were reported in DRSI during week 2 (2 Non-AD & 1 AD). Leadership should continue to encourage proper hand hygiene and respiratory etiquette in addition to urging troops to seek medical attention for influenza-like symptoms. [APHC](#)

[top of page...](#)

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

2018-2019 Influenza Season Week 2 ending January 12, 2019

- **Viral Surveillance:** The percentage of respiratory specimens testing positive for influenza viruses in clinical laboratories decreased slightly. Influenza A viruses have predominated in the United States since the beginning of October. Influenza A(H1N1)pdm09 viruses have predominated in most areas of the country, however influenza A(H3) viruses have predominated in the southeastern United States (HHS Region 4).
- **Pneumonia and Influenza Mortality:** The proportion of deaths attributed to pneumonia and influenza (P&I) was below the system-specific epidemic threshold in the National Center for Health Statistics (NCHS) Mortality Surveillance System. [CDC](#)

[top of page...](#)

## ECDC: Flu News Europe

Week 2/2019 (7–13 January 2019)

- Influenza activity continued to increase in the European Region. Samples collected from individuals presenting with ILI or ARI to sentinel primary health care sites yielded an influenza-positivity rate of 42.2%.
- Influenza type A virus detections dominated with A(H1N1)pdm09 viruses being slightly more prevalent than A(H3N2). Very few influenza B viruses were detected.
- Data from the 23 Member States and areas reporting to the EuroMOMO project indicated that all-cause mortality was at expected levels for this time of year, but with a few countries starting to observe some excess mortality in elderly populations. [European Center for Disease Prevention and Control/WHO](#)

[top of page...](#)

## NHRC: Operational Infectious Diseases - Weekly Surveillance Report

17 January - For Epi Week 1, 2019, febrile respiratory illness surveillance data among military recruit, DoD beneficiary, and U.S.-Mexico border (CDC-BIDS) populations indicated 124 positive samples out of 166 received.

- Military Recruits – 42 received
  - DoD Beneficiaries – 25 received
  - CDC Border Infectious Disease Surveillance – 99 received
- [Naval Health Research Center](#)

[top of page...](#)

## USAFSAM & DHA: DoD Global Respiratory Pathogen Surveillance Program

During 30 December 2018 - 12 January 2019 (Surveillance Weeks 01 & 02), a total of 554 specimens were collected and received from 63 locations with influenza-like illness (ILI). Results were finalized for 542 specimens from 63 locations. The influenza percent positive for Weeks 01 and 02 were approximately 25% and 19%, respectively. The influenza percent positive for the season is approximately 8.6%.

[U.S. Air Force School of Aerospace Medicine & Defense Health Agency](#)

[top of page...](#)

## WHO: Influenza Update

21 January - In the temperate zone of the northern hemisphere influenza activity continued to increase slowly.

- In North America influenza activity remained elevated overall with influenza A(H1N1)pdm09 predominating.
- In Europe, influenza activity continued to increase, with both A viruses circulating.
- In North Africa, influenza A(H3N2) detections continued to be reported in Egypt.
- In Western Asia, influenza activity continued to increase in some countries and appeared to decrease across countries of the Arabian Peninsula.
- In East Asia, influenza activity continued to increase, with influenza A(H1N1)pdm09 most frequently detected.
- In Southern Asia, influenza detections remained elevated overall. Influenza activity continued to increase in Iran (Islamic Republic of) with influenza A(H3N2) the predominant circulating virus.
- In the temperate zones of the southern hemisphere, influenza activity returned to inter-seasonal levels with exception of some parts in Australia.
- Worldwide, seasonal influenza A viruses accounted for the majority of detections.

[top of page...](#)

**VETERINARY/FOOD SAFETY**

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## **Gottlieb: FDA food inspectors reduced by more than half during shutdown**

23 January - According to a series of tweets made by Food and Drug Administration (FDA) Commissioner Scott Gottlieb, MD, the agency is trying its best to handle food safety inspections and other critical work during what has become the nation's longest government shutdown. ... Gottlieb said a number of food safety operations are still under way. They include high-risk domestic food surveillance inspections, foodborne illness surveillance and outbreak investigations, execution of high-risk food recalls, inspection of foreign food facilities, and sampling of imported food samples—including sampling for antibiotic residue contamination and decomposition analysis. According to Food Safety News, the US Department of Agriculture's Food Safety and Inspection Service (FSIS) continues to deploy most of its workforce of nearly 10,000 during the shutdown. FSIS inspectors must check all meat and poultry sold to US consumers.

[CIDRAP News Scan](#) (first item)

[top of page...](#)

## **Third case of rifampin/penicillin-resistant strain of RB51 *Brucella* from consuming raw milk**

23 January - The New York State Department of Health and Pennsylvania Department of Health are investigating *Brucella* RB51 exposures that may be connected to consuming raw (unpasteurized) milk from Miller's Biodiversity Farm in Quarryville, Pennsylvania. Symptoms of brucellosis can include fever, sweats, malaise, anorexia, headache, fatigue, muscle and joint pain, and potentially more serious complications (e.g., endocarditis, hepatomegaly, splenomegaly, and neurologic symptoms). In pregnant patients, *Brucella* infections can be associated with miscarriage. Symptom onset can occur anywhere from five days to six months following exposure. As of January 22, 2019, exposures have been identified in 19 states. [CDC](#)

[top of page...](#)

## WELLNESS

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### Even modest blood pressure elevation in young adults may take a toll on the brain

23 January - Elevated blood pressure in people under 40 is associated with reduced brain volume, a new study has found. The effect was apparent even in people with blood pressure readings in the range generally considered normal. The analysis ... included 423 adults between 19 and 40 who had their blood pressure measured and underwent M.R.I. examinations of the brain. ... They found that higher blood pressure readings were directly correlated with lower gray matter volume in several parts of the brain. Even in the groups with pressure within a range widely considered normal — between 120 and 140 systolic (the top number) — brain volumes were smaller compared with those with readings under 120.

[The New York Times](#)

[top of page...](#)

### New study shows HPV vaccine highly effective, offers herd immunity

22 January - A study today in Pediatrics shows that both the quadrivalent (four-strain) and nine-valent human papillomavirus (HPV) vaccines are highly effective and provide herd immunity for women in the United States. The study was based on four cohorts of vaccine recipients (aged 13 to 26 years) tracked from 2006 to 2017 at two US clinic sites, with the early cohorts receiving the quadrivalent vaccine and the later cohort receiving the nine-valent vaccine. A total of 1,580 women at high risk for HPV infection were included in the study. Vaccine effectiveness in each wave of recipients was high, from 80.1% to 90.6%. Overall, women vaccinated with the quadrivalent vaccine saw an 80.9% decline in HPV infections. The study authors also provided evidence of herd immunity. The prevalence of HPV-6, HPV-11, HPV-16, and HPV-18, the four strains of HPV included in the quadrivalent vaccine, dropped among unvaccinated women from 32.4% to 19.4% during the study period. [CIDRAP News Scan](#) (fourth item)

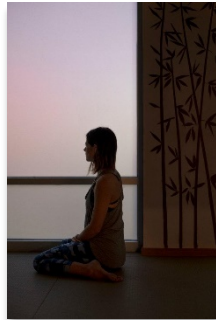
[top of page...](#)

### Stair-climbing exercise 'snacks' boost health

21 January - ... [N]ew research finds that even a few minutes of stair climbing at intervals every day is enough to improve cardiovascular and overall health. New research finds that even brief bouts of stair climbing can bring unexpected health benefits. ... [I]ntervals of stair climbing that last a few minutes, with recovery periods between, can improve "Vigorously climbing a few flights of stairs on your coffee or bathroom break during the day seems to

be enough to boost fitness in people who are otherwise sedentary.” [Medical News Today](#)  
[top of page...](#)

## Yoga and veterans: a different kind of warrior



19 January – ... [T]he intersection of yogi and veteran is natural if unexpected, beginning with the five classic yoga poses known as warriors. While veterans make up a small percentage of yoga instructors, their ranks are growing. Many members of the military now often include yoga — sometimes taught by veterans — as an element of their workout routine, and veterans turn to the practice for therapeutic applications. The Department of Veterans Affairs has successfully used yoga to help treat opioid addiction and post-traumatic stress. ... Veterans, long schooled in discipline and concentration, also make excellent yoga teachers, both to other veterans, whose experiences they understand, and to active-duty military members, whose trust they often gain. They are becoming a welcome addition in civilian yoga studios, where students are usually attracted to their compassionate yet frequently no-nonsense approach. [The New York Times](#)

[top of page...](#)

### USAFRICOM

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## Democratic Republic of the Congo: A spot of good news in an Ebola crisis: Vaccine supplies are expected to last

22 January - ... The World Health Organization now predicts there are adequate supplies of an experimental Ebola vaccine to control the outbreak in the Democratic Republic of the Congo. ... And while an ongoing clinical trial of the vaccine may not be complete for some time, preliminary analyses suggest it is working. ... [Dr. Peter] Salama said the evidence the WHO has been gathering in North Kivu — where nearly 64,000 doses have been administered — point to the vaccine being “highly, highly efficacious.” That conclusion, he said, is based on how the vaccine has performed in the people who have received it, on three modeling studies, and on an earlier study of the vaccine conducted in West Africa.

[STAT](#)

[top of page...](#)

## Democratic Republic of the Congo: Congo records one-day record for confirmed Ebola cases

23 January - Democratic Republic of Congo on Wednesday confirmed 14 new cases of Ebola virus in its eastern borderlands, the largest one-day increase since the current outbreak was declared in August. The outbreak of the haemorrhagic fever in the eastern provinces of North Kivu and Ituri is already the second-largest in history with 713 confirmed and probable cases and 439 deaths. ... The health ministry said in a daily bulletin that nine of the new cases were in the health zone of Katwa, just outside Butembo, a city of several hundred thousand people near the Ugandan border that has emerged as the outbreak's new epicenter. One other case was in Butembo. [Reuters](#)

[top of page...](#)

## Madagascar: Nearly 20,000 measles cases recorded in Madagascar since October

18 January - Yesterday the World Health Organization (WHO) described an unusually large measles outbreak in Madagascar, which has resulted in 19,539 cases and 39 deaths since Oct 4, 2018. ... Cases have been reported in all 22 regions of Madagascar, including densely populated cities such as Toamasina, Mahajanga, Antsirabe, Toliara, and the capital city, Antananarivo. Children ages 1 to 14 years account for 64% of cases, and 51% of patients have not been vaccinated against the disease, or have unknown vaccination status. According to the WHO, the estimated measles immunization coverage in Madagascar was 58% in 2017. [CIDRAP News Scan](#) (fifth item)

[top of page...](#)

## Zambia: Trump's cuts devastate clinics in Zambia



21 January - It is under-fives week at Zambia's Nyangwena health centre and, outside in the morning sunshine, women are taking turns to weigh their babies. ... Reaching families in the surrounding rural communities is a major challenge for staff at the centre, and, after outreach services were stripped back, things are getting worse. It is one year since devastating cuts to family planning services, imposed by Donald Trump, took effect. Already, Esther Zulu, clinical officer at Nyangwena, worries staff are seeing more young mothers. The number of teenage pregnancies recorded at the centre has doubled, from eight in 2017 to 16 in 2018. Meanwhile, the number of people taking tests for sexually transmitted infections and HIV has slumped. ... Until November 2017, a project run by Planned Parenthood Association of Zambia (PPAZ) would offer HIV testing in homes, distribute condoms in the community, and give family planning information to teenagers in schools. Such work was

halted by the Mexico City policy, or "global gag rule." [The Guardian](#)

[top of page...](#)

## USCENTCOM

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### **Iraq: Iraqi scientist says he helped ISIS make chemical weapons**

21 January - In the weeks after his city fell to the Islamic State, Iraqi scientist Suleiman al-Afari sat in his deserted government office and waited for the day when the terrorists would show up. ... [T]hey offered him a new [job]: Help us make chemical weapons. ... Afari knew little about the subject, but he accepted the assignment. And so began his 15-month stint supervising the manufacture of lethal toxins for the world's deadliest terrorist group. ... He described in matter-of-fact detail the terrorist group's successful attempts to make sulfur mustard — a first-generation chemical weapon that inflicted tens of thousands of casualties during World War I — as part of an ambitious, little-understood effort to create novel weapons and delivery systems to defend the Islamic State's territory and terrorize its opponents. [The Washington Post](#)

[top of page...](#)

### **Saudi Arabia: Two new cases of MERS recorded in Saudi Arabia**

22 January - The Saudi Arabian Ministry of Health (MOH) recorded two new cases of MERS in recent days, one each in epidemiologic weeks 3 and 4. In week 3, the MOH said a 40-year-old man from Riyadh was hospitalized for his MERS-CoV (Middle East respiratory syndrome coronavirus) infection. In the week 4 update, the MOH said a 66-year-old man from Riyadh was also hospitalized with MERS. Neither man had camel contact, and both sources of infection are listed as "primary, community acquired." The new cases likely lifts on the global total since 2012 to 2,288 cases, at least 806 of them fatal.

[CIDRAP News Scan](#) (third item)

[top of page...](#)

### **Yemen: The forgotten - living with HIV in war-ravaged Yemen**

21 January - ... The United Nations has repeatedly described Yemen's humanitarian situation as "catastrophic" and, on Wednesday, Mark Lowcock, the under-secretary-general for Humanitarian Affairs, said the situation had worsened in the past year with "more than 24



million people now needing humanitarian assistance". Taha al-Mutawakel, the minister of health in the Houthi-run administration, told Al Jazeera that the war had crippled the health system with "zero funds allocated for HIV and AIDS". "We're currently operating with a grant of \$800,000 provided by the Global Fund to Fight AIDS, Tuberculosis and Malaria," he said. "Medicines are readily available and offered free of charge and distributed to each of the governorates ... but the siege has had a major impact on patients seeking treatment."

[Al Jazeera](#)

[top of page...](#)

## **USEUCOM**

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### **Europe: Migrants and refugees at higher risk of developing ill health than host populations**

21 January - Migrants and refugees are likely to have good general health, but they can be at risk of falling sick in transition or while staying in receiving countries due to poor living conditions or adjustments in their lifestyle. This is the main conclusion of the first "Report on the health of refugees and migrants in the WHO European Region", released by the WHO Regional Office for Europe today. ... Refugees and migrants appear to be less affected than their host populations by many noncommunicable diseases on arrival; however, if they are in conditions of poverty, the duration of their stay in host countries increases their risk for cardiovascular diseases, stroke or cancer. As migrants and refugees are likely to change their lifestyle to engage in less physical activity and consume less healthy food, they are also more prone to risk factors for chronic diseases. The displacement processes itself can make refugees and migrants more vulnerable to infectious diseases. Yet the report underlines that, for instance, the proportion of refugees and migrants among a host country's tuberculosis (TB) cases varies broadly depending on the TB prevalence in the host population; and that a significant proportion of migrants and refugees who are HIV positive acquired the infection after they arrived in Europe. Despite the widespread assumption to the contrary, there is only a very low risk of refugees and migrants transmitting communicable diseases to their host population. [WHO](#)

[top of page...](#)

### **France: Toxic substances found in diapers in France - government agency**

23 January - A variety of potentially toxic substances, including the widely-used weed-killer glyphosate, has been found in babies' diapers in France, according to a study on Wednesday by the French environment agency ANSES. The study said research had found substances including butylphenyl methylpropional used in beauty products and certain

aromatic hydrocarbons as well as glyphosate. All of them pose potential risks. The French government said manufacturers and retailers should ensure that the substances are removed from diapers. The agency said health risks could not be excluded, although French Health Minister Agnes Buzyn said the current situation regarding how diapers were made did not pose dangers to the health of babies. [Reuters](#)

[top of page...](#)

## **USINDOPACOM**

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### **Asia: Innovating for neglected diseases in South Asia**

22 January - The sustainable development goals set a target to end epidemics of neglected tropical diseases by the year 2030. Neglected tropical diseases mainly comprise infectious diseases seen in subtropical and tropical regions. Over one billion people are affected worldwide, many of whom are living in poverty. South Asia has a unique role to play in combating these diseases, given the high disease burden and regional expertise in end-to-end solutions, from drug discovery and clinical studies through to regulation, manufacture and distribution. This collection of articles highlights successes of public health programmes for these and other neglected diseases in South Asia and explores outstanding issues requiring supportive policy and research. Fostering continual innovation in diagnostics, treatment, and prevention is critical to meet the changing demands of disease elimination programmes. [The BMJ](#)

[top of page...](#)

### **South Korea: Seoul's disease control questioned amid spreading fears over measles**

22 January - Experts are raising concerns that the Korean government's epidemic prevention system might have been ineffective, as fears over the measles outbreak are spreading across the country. The Korea Centers for Disease Control and Prevention (KCDC) is not disclosing epidemiological investigation data, making it more difficult to identify the exact cause of the outbreak, they said. KCDC said the measles virus is believed to have come from abroad and the contagious disease appeared sporadically. ... According to the KCDC, 30 people have been infected with measles as of Monday 10 a.m., since the first case was reported in Daegu in December. Measles was reported in five cities or provinces. Of the 30 cases, 27 broke in a group, and the rest three, individually. ... By age, 15 patients are under four years old, nine are in their 20s, and six are in their 30s. The patients of the three individual cases who had overseas travel are all in their 30s. [Korea Biomedical Review](#)

[top of page...](#)

## U.S.: BARDA exercises option for freeze-dried smallpox vaccine

18 January - The US Biomedical Advanced Research and Development Authority (BARDA) has exercised a contract option worth \$44 million with Bavarian Nordic to support production of its freeze-dried MVA-BN smallpox vaccine, the company announced today. The funding will cover qualification of Bavarian Nordic's new fill-and-finish facility at its Denmark headquarters and transfer and validate the freeze-drying process. The option is the second to be exercised under the contract and follows the 2017 option of \$37 million for a phase 3 study, expected to begin in the first half of this year, that is needed to apply for approval. ... The plant will be able to produce 40 million doses of liquid vaccine and 8 million of freeze-dried vaccine each year. [CIDRAP News Scan](#) (third item)

[top of page...](#)

## U.S.: CDC experts say US-wide *C diff* prevention could net \$25 billion in benefits

23 January - Experts from the US Centers for Disease Control and Prevention (CDC) estimated ... that establishing nationwide antibiotic stewardship programs to prevent *Clostridioides difficile* infections in hospitals would result in an annual net benefit of \$25.5 billion. The investigators used new Department of Health and Human Services guidelines for their cost-benefit analyses of a national in-hospital *C difficile* prevention program to improve health and preserve antibiotics. They included estimates of antibiotic stewardship staffing and incorporated value-of-statistical-life estimates to derive economic values associated with decreasing morbidity and mortality risk. They estimated that, if they were to ignore the benefits from reducing the risk of illness and death, net benefits of such a nationwide intervention would range from \$300 million to \$7.6 billion from 2015 to 2020. But if they include the value of such risk reduction, the net social benefits jump from \$21 billion to \$624 billion. The authors say the most likely outcome scenario would realize a net benefit of \$25.5 billion per year. [CIDRAP Stewardship/Resistance Scan](#) (first item)

[top of page...](#)

## U.S.: CDC says 2018 *Candida auris* cases topped 550

23 January - Confirmed and probable *Candida auris* cases in the United States through Dec 31 rose to 551, an increase of 88 from the end of October, the CDC said in an update yesterday. Illnesses caused by the deadly, multidrug-resistant fungus have been reported in 12 states, though 90% are in New York (280), Illinois (118), and New Jersey (100). Of the 551

cases, 520 are confirmed and 31 are listed as probable. In comparison, from when the fungus was first identified in the country in June 2016 through Aug 31, 2017, US states reported 153 clinical cases. [CIDRAP Stewardship/Resistance Scan](#) (third item)

[top of page...](#)

## **U.S.: Family separation may have hit thousands more migrant children than reported**

17 January - The Trump administration most likely separated thousands more children from their parents at the Southern border than was previously believed, according to a report by government inspectors released on Thursday. The federal government has reported that nearly 3,000 children were forcibly separated from their parents under last year's "zero tolerance" immigration policy. ... But even before the administration officially unveiled the zero-tolerance policy in the spring of 2018, staff of the United States Department of Health and Human Services, the agency that oversees the care of children in federal custody, had noted a "sharp increase" in the number of children separated from a parent or guardian, according to the report from the agency's Office of Inspector General. ... Thousands of children may have been separated during an influx that began in 2017, before the accounting required by the court, the report said. [The New York Times](#)

[top of page...](#)

## **U.S.: Lead levels too high in many U.S. schools**

10 January - Millions of children could be getting too much lead in the water they drink at school, according to a new report. ... More than 40% of schools around the country appear to have higher-than-recommended levels of lead in their tap water—and most schools are not even testing for lead, the study found. ... The researchers analyzed data from 24 states that have lead testing programs in schools, plus Washington, D.C. Only 12 of the states had useable results. Among those, 12% of all water samples tested had higher-than-recommended lead levels, and 44% of schools tested had one or more samples with higher-than-recommended levels. The researchers concluded that more states should adopt programs to lower the lead content of school drinking water.

[Harvard T.H. Chan School of Public Health](#)

[top of page...](#)

## **U.S.: Measles outbreak leads to health emergency**

22 January - A southwestern Washington county has declared a public health emergency over a measles outbreak as cases mount among unvaccinated children. Since Jan. 1, health officials have confirmed 22 cases of measles in Clark County, up from 16 confirmed cases

last week. An additional three cases of the highly contagious viral infection are suspected. ... Among the 22 confirmed cases, 17 are children under 10 years old and one person is over 18. Nineteen had not been vaccinated for measles, while health officials said the immunization status for three cases was not verified. One child was hospitalized.

[U.S. News and World Report](#)

[top of page...](#)

**USSOUTHCOM**

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## **Argentina: Hantavirus pulmonary syndrome**

23 January - On 19 December 2018, the Argentinian Ministry of Health and Social Development issued an epidemiological alert regarding an increase in cases of hantavirus pulmonary syndrome (HPS) in Epuyén, Chubut Province. Between 28 October 2018 – 20 January of 2019, a total of 29 laboratory-confirmed cases of HPS, including 11 deaths have been reported in Epuyén, Chubut Province. Epuyén has a population of approximately 2 000 persons, and Chubut Province is located in Patagonia in southern Argentina. The index case had environmental exposure prior to symptom onset on 2 November, and subsequently attended a party on 3 November. Six cases who also attended the party experienced the onset of symptoms between 20-27 November 2018. An additional 17 cases, all of whom were epidemiologically-linked to previously confirmed cases, experienced symptom onset between 7 December 2018 and 3 January 2019. Potential human-to-human transmission is currently under investigation. [WHO](#)

[top of page...](#)

## **Latin America and the Caribbean: Contraceptive use with a focus on long-acting reversible contraceptives - prevalence and inequalities in 23 countries**

1 February - ... We report on surveys from 23 countries in Latin America and the Caribbean, analysing a sample of 212 573 women. The lowest modern contraceptive prevalence was observed in Haiti (31.3%) and Bolivia (34.6%); inequalities were wide in Bolivia, but almost non-existent in Haiti. Brazil, Colombia, Costa Rica, Cuba, and Paraguay had over 70% of modern contraceptive prevalence with low absolute inequalities. Use of long-acting reversible contraceptives was below 10% in 17 of the 23 countries. Only Cuba, Colombia, Mexico, Ecuador, Paraguay, and Trinidad and Tobago had more than 10% of women adopting long-acting contraceptive methods. Mexico was the only country in which long-acting contraceptive methods were more frequently used than short-acting methods.

[The Lancet](#)

[top of page...](#)

[U.S. Military](#) | [Global](#) | [Influenza](#) | [Veterinary/Food Safety](#) | [Wellness](#) | [Contact Us](#)  
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