



## Kentucky Hospital Research & Education Foundation Emergency Preparedness Update for April 1, 2019

### China announces new crackdown on fentanyl

(CBS) China said Monday it would soon begin regulating all [fentanyl](#)-related drugs as a class of controlled substances. The change has long been pushed for by U.S. officials, including President Trump, as a way to stem the flow of [lethal opioids](#) from China.

The sweeping change in the way China regulates drugs that mimic fentanyl takes effect May 1 and could help end the game of regulatory whack-a-mole with chemists who can manufacture novel opioids faster than they can be banned. It could also facilitate prosecutions of opioid merchants in China, who until now have skirted the law by manufacturing and exporting fentanyl variants that were technically legal in China.

China already controls 25 variants of fentanyl, plus two precursors used to make the drug. Data from the U.S. Drug Enforcement Administration have shown that when China bans a variant of fentanyl, seizures of that analog in the U.S. fall. U.S. officials have repeatedly pointed to China as the main source of synthetic opioids shipped into the country directly by mail or transported via Mexico. China on Monday again denied that claim.

Learn more: <https://www.cbsnews.com/news/fentanyl-china-to-ban-opioids-related-drug-blamed-most-us-overdose-deaths/>

**Read about the Next-Generation Single-dose Antidotes for Opioid Overdoses**

<https://news360.com/article/492284565>

### President's Proposed Budget Would Fire Hundreds of Meteorologists and Slash Tornado Research

(Forbes) The president's [proposed budget for 2020](#) makes more than \$75,000,000 in cuts to the National Weather Service that, if passed, could adversely affect the agency's ability to keep the public safe during severe weather. Most Americans hardly realize how much they utilize the agency's products and services until they're under threat.

Upper-air observations would lose \$2,271,000 of funding under the proposed budget. These observations, taken by instruments attached to weather balloons, collect information on temperature, moisture, wind, and air pressure as they ascend to the top of the atmosphere. The data collected by weather balloons is ingested into weather models to "initialize" them, or tell them what the atmosphere is doing right now.

A \$12,500,000 reduction in surface-based observation stations would also reduce the ability for forecasters to see what's happening on the ground as it happens. Most of the cuts would come from the [National Mesonet Program](#), which supports dozens of mesonets across the country. The type of ground truth provided by mesonets is important—when a station records a severe wind gust as a thunderstorm passes overhead, it lets forecasters issue advanced warning to communities in the path of the storm. Rainfall data collected by mesonets also helps meteorologists monitor and study flooding rain events.

More than 300 National Weather Service employees would stand to lose their jobs if the proposed cuts are adopted. Nearly 250 meteorologists and more than 70 IT professionals would be laid off as part of a workforce adjustment based on an analysis conducted several years ago. Understaffing at NWS offices across the country has been [a pressing issue for years](#), made even more serious by hiring freezes and funding cuts.

The budget also proposes the end of [VORTEX-SE](#), a tornado research program aimed at helping meteorologists better understand how and why thunderstorms in the southeastern United States produce tornadoes.

Full story: <https://www.forbes.com/sites/dennismersereau/2019/03/31/the-presidents-proposed-budget-would-fire-hundreds-of-meteorologists-and-slash-tornado-research/#5e3162053f1b>

**New National Weather Service Strategic Plan (2019-2022):** <https://www.weather.gov/news/192203-strategic-plan>

### In Florida, Doctors See Climate Change Hurting Their Most Vulnerable Patients

Learn more: <https://www.npr.org/2019/03/30/706941118/in-florida-doctors-see-climate-change-hurting-their-most-vulnerable-patients>

**FBI Gears Up To Fight Cybercriminals**  
**KY's Former FBI SAIC Amy Hess Leads the Effort!**

(PYMNTS) The FBI has announced a directive shift away from counterterrorism and toward fighting the increasing threats from cyber attacks, according to a report in [The Wall Street Journal](#).

The move comes amid an ecosystem of attacks from foreign countries, like Russia and its election meddling and China's cyber attacks against U.S. businesses.

The Navy also recently reported that it was under siege by Chinese cyber attacks, and FBI Director Christopher Wray said all 56 bureau field offices have open investigations that lead to China.

"It's very analogous to the shift after 9/11," said Amy Hess, the new head of the Federal Bureau of Investigation's criminal, cyber, response and services branch [and former Special Agent In Charge of the FBI's Louisville Field Office]. "I grew up in the FBI working criminal investigation — I worked violent crimes and gangs and drugs. And then, 9/11 happened. And we all, it felt like, were shifted to work terrorism. And so I think now, you're seeing the same thing (with cybersecurity)."

"The future of cyber, that's the future of the organization. That's the future of the world," Hess said. "We've got to be thinking about how our adversaries think about cyber — whether it's a nation-state or just an individual criminal for-profit type of attack. Because that's the way we are increasingly doing business."

One of the ways the FBI plans to accomplish this is by improving its recruitment and retention processes and making sure all agents have a baseline of competency when it comes to cybersecurity.

Learn more: <https://www.pymnts.com/news/security-and-risk/2019/fbi-cybercriminals/>

**Related: Cybersecurity is broken: Here's how we start to fix it**

*We are building our future on a creaking digital foundation.*

*It's time for that to change!*

(ZDNet) Cybersecurity is in a terrible state, possibly the worst it's ever been. Literally not a day goes by without another report of a security breach or a data spill or a hack spilling corporate secrets.

Few police forces have the time, money and skill to catch these groups or bring them to justice. Then there are state-backed hackers who switch between [espionage and cyberwarfare](#) — and the governments that either turn a blind eye to their activities or positively encourage them.

Who else to blame? More from ZDNet: <https://www.zdnet.com/article/cybersecurity-is-broken-heres-how-we-start-to-fix-it/>

**Hundreds of compromised Wordpress and Joomla websites  
are serving up malware to visitors**

Learn more: <https://news360.com/article/492111984>

**Police, SWAT and med students participate in active shooter training  
at U of L Health Sciences Center in downtown Louisville**

(WDRB) -- Emergency crews and police swarmed a downtown Louisville building Saturday morning, responding to gunfire and injuries. But it was all just part of a drill. Loud booms, gun shots and an increased police presence were all seen and heard as part of an active aggressor drill organized by



students at U of L's School of Medicine. Louisville Metro Police Department (LMPD), SWAT, Emergency Management and other first responders all took part.

An IED explosive triggered two gunmen to enter the building, simulating the active shooting scenario on the U of L Health Sciences Center campus. 40 U of L Medical students volunteered to play victims. They were covered in makeup to create a situation that almost seemed like real life. It also allowed first responders to

train for a situation the city of Louisville hopes to never see.

**Watch video and read more:** [https://www.wdrb.com/news/lmpd-swat-students-participate-in-active-shooter-training-at-u/article\\_95e3e8ae-5351-11e9-b561-03cc66a4e2bb.html](https://www.wdrb.com/news/lmpd-swat-students-participate-in-active-shooter-training-at-u/article_95e3e8ae-5351-11e9-b561-03cc66a4e2bb.html)

## **Kids Can Get 'Stuck' on Traumatic Event, Leading to PTSD**

(HealthDay News) -- The risk of [post-traumatic stress disorder \(PTSD\)](#) among children and [teens](#) is higher if they think their response to a traumatic event is abnormal, a new study indicates. Most kids fully recover after a traumatic event, such as a car accident. But some develop [PTSD](#) that may endure for months, years or even into adulthood

Learn more: <https://www.medicinenet.com/script/main/art.asp?articlekey=219808>

## **Suicide Risk Grew After Missouri Medicaid Kids Shifted To Managed Care, Hospitals Say**

(Kaiser Health News) After more than 2,000 Missouri children diagnosed with mental illness were shifted from traditional Medicaid into three for-profit managed-care companies, the state's hospitals noticed an alarming trend: a doubling in the percentage who had thoughts of suicide or attempted suicide.

Additionally, the average length of stay for these children in psychiatric hospitals dropped from 10 days to seven following the Medicaid change in May 2017, according to [a study](#) released this month by the Missouri Hospital Association.

The hospital association called on state Medicaid officials to investigate the study's findings about children covered by the state-federal program for low-income families.

Missouri hospitals and psychiatrists for years have speculated that the state's move to require Medicaid enrollees to get coverage through private managed-care plans reduced their access to mental health services.

Full report: <https://khn.org/news/suicide-risk-grew-after-missouri-medicaid-kids-shifted-to-managed-care-hospitals-say/>

## **With Teen Suicide Rates Soaring, Some High School Athletes Focus on Mental Health**

(Forbes) Even at the youth level, there is a lot of talk about being mentally tough as an athlete -- though the conversation about what that means may be changing.

The definition of mentally tough generally means ignoring or handling all the pressure and issues around you and being excellent at the task at hand. But with teen suicide rates rising ([deaths up 33 percent between 2009 and 2017, and the number of high schoolers contemplating suicide up 25 percent in the same period](#)), with an estimated [70 percent of high schoolers reporting anxiety and depression is a major problem among their peers](#), and with high-profile athletes such as [Michael Phelps](#), [Kevin Love](#) and [DeMar DeRozan acknowledging their struggles with depression](#), high school sports is becoming a central point to discuss depression, mental health and [suicide prevention](#).

According to a University of Wisconsin study released in January, athletes or active students report [higher mental and physical health than non-athletic peers](#). However, it's a big leap to say that youth athletes are always the epitome of fine mental health (and the study doesn't do that), so it's heartening that at the high school level there is getting to be more of an acknowledgement of [promoting mental health](#), and that athletes are using their prominence to [lead the discussion](#).

Full article: <https://www.forbes.com/sites/bobcook/2019/03/31/with-teen-suicide-rates-soaring-some-high-school-athletes-focus-on-mental-health/#4e04481d3479>

## **Bullied Teen Gets New Nike Sneakers from Classmates**

*[This is a "feel good" story you may want to share with your kids!]*

(Inside Edition) A 15-year-old [Tennessee](#) boy was surprised with gifts from his classmates after they learned he'd been bullied. Azzy Robinson was the target of [bullying](#) a few years ago and it tore him apart. "[It] made me feel like I was worthless and didn't really mean anything to anyone," Robinson told Inside Edition. His mom, Traci Robinson, said Azzy became "reclusive and would [sleep](#) all the time." But all that changed when Azzy switched to a new school, LaVergne High School.

Watch the video and read more: <https://www.insideedition.com/bullied-teen-gets-new-nike-sneakers-classmates-51625>

## **San Francisco could become the first US city to eliminate new HIV infections**

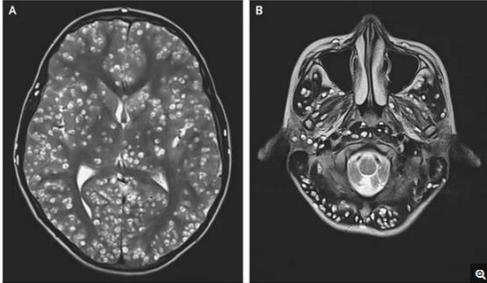
Read about what they have done: <https://news360.com/article/492265509>

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**Where is your safe place from extreme weather?**  
**April 3 is SafePlaceSelfie Day!**

No matter what the hazard is, the #1 preparedness action everyone should take is to know where your safe location is. Participate yourselves, with your employees, and encourage others by asking them over social media, "Where is your safe place when extreme weather threatens?"

Learn more at: <https://www.weather.gov/wrn/safeplaceselfie>

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**What Caused All These Spots on This Man's Brain?**



A man in India had numerous tapeworm larvae cysts in his brain, a condition known as neurocysticercosis. Above, MRI images showing cysts in the man's cerebral cortex (left) and brain stem (right).  
Credit: The New England Journal of Medicine ©2019

(Live Science) When a young man in India started having seizures, doctors scanned his brain and found a grim image: His brain was dotted with parasitic cysts — the result of a severe and ultimately fatal [tapeworm infection](#). The 18-year-old man was taken to the emergency room after having so-called tonic-clonic [seizures](#), in which a person loses consciousness and experiences violent muscle contractions, according to a new report of the case.

According to [the WHO](#), preventing infections with *Taenia solium* will require a wide range of public health interventions, including improving sanitation, personal hygiene and food safety, as well as better identification and treatment of

patients. Learn more: <https://www.livescience.com/65090-tapeworm-cysts-brain.html>

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**Long US flu season extends but shows signs of decline**

(CIRAP) The flu season in the United States has now reached 18 straight weeks above baseline levels but shows signs of easing, the Centers for Disease Control and Prevention (CDC) said today in its weekly FluView update.

Partly because of increased activity of the H3N2 strain, however, the CDC issued a Health Alert Network (HAN) advisory yesterday to clinicians about the prolonged season and the need for antiviral drugs for some patients. The past five seasons have averaged 16 weeks, with the longest being 20 weeks. The agency noted that, while H3N2 cases have climbed in recent weeks, the 2009 H1N1 strain is still circulating, and low levels of influenza B have been detected, as well.

Learn more: <http://www.cidrap.umn.edu/news-perspective/2019/03/long-us-flu-season-extends-shows-signs-decline>

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**Related: CDC issues flu treatment advisory**

(AHA Today) The Centers for Disease Control and Prevention yesterday [recommended](#) treating all hospitalized, severely ill and high-risk patients who have suspected or confirmed influenza with antiviral medications as soon as possible. H3N2 A viruses have been [predominating](#) since late February, and in past seasons have been associated with more hospitalizations and deaths in older adults and young children. As of last week, 20 states were reporting a high proportion of outpatient visits for influenza-like illness.

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**Many with type 1 diabetes unaware of low blood sugar episodes**

(UPI) When you have type 1 diabetes, keeping track of your blood sugar levels can be challenging. But new research suggests that seniors might really have trouble avoiding low blood sugar, or hypoglycemia. In fact, many patients over age 60 may experience up to 100 minutes of a day with low blood sugar and not even know it, the study researchers said.

The bottom line: "Older adults with type 1 diabetes do spend a considerable amount of time in hypoglycemia," said study author Dr. Anders Carlson. He's medical director of the International Diabetes Center in Minneapolis.

Read more: [https://www.upi.com/Health\\_News/2019/03/29/Many-with-type-1-diabetes-unaware-of-low-blood-sugar-episodes/6201553878570/](https://www.upi.com/Health_News/2019/03/29/Many-with-type-1-diabetes-unaware-of-low-blood-sugar-episodes/6201553878570/)

### **CHA Report: Seismic upgrades to Calif. hospitals could cost billions**

(AHA Today) California hospitals would need to invest between \$34 billion and \$143 billion statewide to meet 2030 state seismic safety standards, according to the latest cost [estimate](#) by the RAND Corporation. A state law enacted after the 1994 Northridge Earthquake requires hospitals to pay for upgrades to reduce their risk of collapse by 2020 and to remain operational after an earthquake by 2030. According to the RAND report, one in three California hospitals are currently in financial distress, which could rise to more than 50 percent as hospitals comply with the law. "There is little question that it is in the public interest to have seismically resilient hospitals," said lead author Benjamin Preston, director of RAND's Community Health and Environmental Policy Program. "But given that hospitals most at risk of collapse will be upgraded by 2020, there is an opportunity for analysis and discussion for how to most effectively and efficiently enhance resilience in health service delivery in the future." The report was funded by the California Hospital Association.

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### **Doctors raise the alarm about esports injuries**

(CBS) A growing number of colleges and universities are offering competitive esports teams. Now some doctors are calling for [gamers](#) to be treated like other college athletes — because just like with other sports, they also suffer injuries. New research in the British Journal of Medicine looked at 65 college esports players and found they averaged about five to 10 hours of gaming training daily, with many reporting overuse injuries including hand and wrist pain and neck and back pain. Players also report insomnia because the blue light from the screens can suppress the sleep hormone melatonin.

Read more: <https://www.cbsnews.com/news/esports-video-game-players-injuries-can-be-serious/>

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### **CDC: Health care-associated infections declined in 2017**

(AHA Today) Acute-care hospitals reduced Clostridium difficile infections by 13 percent and central line-associated bloodstream infections by 9 percent in 2017, according to the latest progress report on reducing health care-associated infections from the Centers for Disease Control and Prevention. Hospitals also reduced methicillin-resistant staphylococcus aureus infections by 8 percent, catheter-associated urinary tract infections by 5 percent, and ventilator-associated events by 3 percent in 2017, among other improvements. [Read more.](#)

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### **How Can Doctors Be Sure A Self-Taught Computer Is Making The Right Diagnosis?**

(NPR) Some computer scientists are enthralled by programs that can teach themselves how to perform tasks, such as reading X-rays. Many of these programs are called "black box" models because the scientists themselves don't know how they make their decisions. Already these black boxes are moving from the lab toward doctors' offices.

The technology has great allure, because computers could take over routine tasks and perform them as well as doctors do, possibly better. But as scientists work to develop these black boxes, they are also mindful of the pitfalls. Black-box algorithms are the favored approach to a new combination of medicine and computers.

What really matters is whether an algorithm gets enough testing along the way to assure doctors and federal regulators that it is dependable and suitable for its intended use. And it is equally important to avoid misuse of an algorithm, for example if a health insurer tried to use a death-forecasting algorithm to make decisions about whether to pay for medical care.

Learn more: <https://www.npr.org/sections/health-shots/2019/04/01/708085617/how-can-doctors-be-sure-a-self-taught-computer-is-making-the-right-diagnosis>

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### **Dogs can detect an odor humans emit during epileptic seizures**

(National Geographic) Dogs' miraculous sense of smell allows them to do many things that no human technology can achieve, such as sniffing out drugs, explosives, and even diseases like cancer. Dogs are trained to respond to and even sense epileptic seizures before they occur—though effectiveness varies widely, and there's been little solid scientific evidence that such a thing is possible. Further, it hasn't been understood how dogs might be capable of such a feat. A new small study suggests that humans emit a specific odor during epileptic seizures that some dogs can recognize.

Learn more: <https://www.nationalgeographic.com/animals/2019/03/dogs-smell-odors-humans-produce-during-seizures/>

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### **International Red Cross ready for Venezuela humanitarian aid operation**

(Reuters) - The International Federation of the Red Cross and Red Crescent Societies said on Friday it was prepared to channel humanitarian aid to Venezuela through an operation that could be similar to one in Syria, potentially helping ease chronic hunger and disease in the South American nation.

The group within 15 days could begin providing assistance, and expects that it will initially be able to help 650,000 of the most needy citizens in the country of around 30 million inhabitants. The first supplies would include medical equipment, surgical kits and power generators, Rocca said, following two major blackouts this month.

Full story: <https://www.reuters.com/article/us-venezuela-politics/international-red-cross-ready-for-venezuela-humanitarian-aid-operation-idUSKCN1RA1XP>

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### **Webinar – Prehospital Care of Children: Review of Evidence-Based Guidelines, May 22**

As prehospital professionals, patient care decisions should be based upon the best evidence available to improve patient outcomes. This webinar, hosted by Emergency Medical Services for Children – Innovation and Improvement Center (IIC), will take place on **May 22, at 1:00 PM ET** and will review the prehospital pediatric evidence-based guidelines for the management of asthma, seizures, pain, and cardiac arrest. [Register Here](#)

The KHREF Emergency Preparedness Update is assembled several times a week. When events make it necessary, the Update may be sent out several times a day to keep our hospital and the healthcare community advised on preparedness news and information. Most of this information is compiled from open sources, and where possible reference links will be provided. There is an archive of [Emergency Preparedness Updates available here](#). If you would like to added or deleted, or have something you would like to contribute to a future edition of the Emergency Preparedness Update, please contact [rbartlett@kyha.com](mailto:rbartlett@kyha.com) (include your current email address). The preparedness program for the Kentucky Hospital Association (KHA) and KHREF are supported by US DHHS ASPR HPP funds through a contract with Kentucky Public Health.