

Kentucky Hospital Research & Education Foundation Emergency Preparedness Update for October 20, 2020

Largest number of new cases on a Monday reported in Kentucky

(WLEX) On Monday, Gov. Andy Beshear announced that 647 new cases of COVID-19 were reported in Kentucky on Monday, bringing the state's COVID-19 case total to 88,247.

"This is the largest Monday we've ever had," Gov. Beshear noted. "Mondays are always lower than other days because of not all labs being open or reporting on the weekends. This is a very high number for a Monday."

Of the 647 new cases, 81 include Kentuckians that are 18 or younger. Monday's positivity rate was 4.97 percent. Gov. Beshear also reported nine new coronavirus-related deaths, bringing Kentucky's coronavirus-related death total to 1,326.

As of Monday, 764 people are hospitalized for COVID-19 related reasons, 190 are in the ICU, and 89 are on ventilators. At least 17,229 Kentuckians have recovered from the virus.

Video report and story: https://www.lex18.com/news/coronavirus/647-new-cases-of-covid-19-reported-in-kentucky-on-monday Press release: https://kentucky.gov/Pages/Activity-stream.aspx?n=GovernorBeshear&prld=422

In the US, 50 States Could Mean 50 Vaccine Rollout Strategies

(WIRED) Sometime in the next months—before the end of the year, according to optimists, or more likely early in 2021—the United States will have a vaccine for Covid-19. We don't know which formula will be first to the finish line. We don't know if that vaccine will be released under an emergency use authorization or a standard new-drug approval. We don't even know how many doses will be available.

Related - Moderna CEO reportedly expects coronavirus vaccine interim results in November (CNBC) Moderna Chief Executive Officer Stéphane Bancel expects interim results from its Covid-19 vaccine trial in November and said the U.S government could give an emergency use nod in December, The Wall Street Journal reported on Monday.

Speaking at the newspaper's annual Tech Live conference, Bancel also said sufficient interim results from the study takes longer to get and that the government's permission to use the vaccine may not come until next year. The first interim analysis of the vaccine's efficacy will happen when 53 people in the entire study get symptomatic Covid-19, the report said.

Bancel also highlighted that a ramping up of production is a challenge. "If one ingredient is missing, we cannot make the vaccine," as per the Journal's report. Besides Moderna, <u>Pfizer</u>, and <u>AstraZeneca</u>, among others, are front-runners to develop the vaccine.

Read more: https://www.cnbc.com/2020/10/20/moderna-ceo-reportedly-expects-coronavirus-vaccine-interim-results-in-november.html

Why this week's meeting of an FDA advisory panel on Covid-19 vaccines matters

(STAT) For those closely watching the development of Covid-19 vaccines, Thursday is a crucial date. Nothing extraordinary is expected to happen when a committee of outside experts — known as the Vaccines and Related Biological Products Advisory Committee, or VRBPAC — meets for the first time to consider Covid-19 vaccines. But the very convening of the meeting is a reassuring sign that the Food and Drug Administration, which relies on VRBPAC for advice, plans to do what it usually does: Make decisions based not on political timetables but on data that show whether new vaccines are safe and effective.

Thursday is the first of what will be a number of meetings for this group on Covid vaccines. In general, VRBPAC meetings serve a couple of purposes: The first is that it gives the FDA a chance to seek guidance from outside experts on specific questions. The second benefit of the meeting is that it allows the public to raise concerns

Learn more: https://www.statnews.com/2020/10/20/dry-technical-but-important-why-an-fda-advisory-panels-meeting-on-covid-19-vaccines-matters/

Britain Moves Closer to COVID-19 Vaccine Trials That Infect Volunteers

(Reuters) "Human challenge" trials of potential COVID-19 vaccines, where volunteers are deliberately infected with the disease, could become a reality after a British biotech firm said it was in advanced talks with the government to create and provide strains of the virus.

Supporters of human challenge trials say they are a good way to cut short the often lengthy process of testing potential vaccines on tens of thousands of volunteers in the real world who go about normal life and are monitored to see if they contract the disease or are protected from it.

In these tightly-controlled trials, volunteers are given a vaccine and then about a month later are deliberately infected with the disease under controlled conditions. They are then isolated in a quarantine facility and monitored to see if they become sick or if the vaccine protects them.

Critics say deliberately infecting someone with a potentially deadly disease for which there is currently no effective treatment is unethical.

Full story: https://www.reuters.com/article/us-health-coronavirus-challenge-virus/britain-moves-closer-to-covid-19-vaccine-trials-that-infect-volunteers-idUSKBN2710RP

Related - Understanding how 'overdispersion' works is key to controlling COVID As few as 10% of people are responsible for 80% of transmission

(The Guardian) Simply put, overdispersion means that a minority of infected individuals are responsible for an unexpectedly high percentage of transmission. Overdispersion is often reported as the proportion of infected individuals who cause 80% of transmission. For Sars-CoV-2, this value may be 10% or lower. So, while on average a group of 10 infected individuals might cause 25 secondary infections, just one of those originally infected might infect 20 people, while the remaining nine combine to infect only five.

In part, overdispersion in disease transmission mirrors overdispersion in patterns of social contact: a typical day for most of us might result in only a few contacts, but on some days we may see hundreds of people. For some, such high-contact days are the norm. Patient 31 attended large indoor services at the Shincheonji Church of Jesus and travelled throughout central Daegu in the week prior to her diagnosis, providing thousands more opportunities to transmit the virus than if she had been at home with her family.

Full story: https://www.theguardian.com/commentisfree/2020/oct/19/overdispersion-spreads-covid-transmission-virus

Countries, Cities Impose Targeted Restrictions On COVID Hot Spots Global infections top 40-million

(<u>IACP News</u>) The <u>AP</u> (10/19, Peltz) reports that some US states and other countries are "trying more targeted measures" to battle the coronavirus as COVID-19 cases "rise again around the world, especially in Europe and the Americas." Countries are imposing restrictions on travel in certain cities or closing schools and businesses in individual neighborhoods that are identified as COVID hot spots. While "the concept of containing hot spots isn't new," the AP says, it is "being tested under new pressures as authorities try to avoid a dreaded resurgence of illness and deaths, this time with economies weakened from earlier lockdowns, populations chafing at the idea of renewed restrictions and some communities complaining of unequal treatment." Worldwide coronavirus infections "surpassed 40 million, according to a Johns Hopkins University tally early Monday."

OSHA announces \$1,222,156 in coronavirus violations

Since the start of the coronavirus pandemic through Oct. 8, 2020, the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) has cited 85 establishments for violations relating to coronavirus, resulting in proposed penalties totaling \$1,222,156.

OSHA inspections have resulted in the agency citing employers for violations, including failures to:

- ✓ Implement a written respiratory protection program;
- ✓ Provide a medical evaluation, respirator fit test, training on the proper use of a respirator and personal protective equipment;
- ✓ Report an injury, illness or fatality;
- √ Record an injury or illness on OSHA recordkeeping forms; and
- ✓ Comply with the General Duty Clause of the Occupational Safety and Health Act of 1970

OSHA has already announced citations relating to 62 establishments, which can be found at dol.gov/newsroom. In addition to those establishments, the 23 establishments below have received coronavirus-related citations totaling \$309,023 from OSHA relating to one or more of the above violations from Oct. 1 to Oct. 8, 2020. OSHA provides more information about individual citations at its Establishment Search website, which it updates periodically.

OSHA Press Release: https://www.osha.gov/news/newsreleases/national/10162020

Reportedly, OSHA inspectors have <u>removed 634,515 workers from COVID-19 hazards</u> during the coronavirus pandemic. Read more about OSHA enforcement cases: https://www.osha.gov/news/newsreleases/enforcement/

[NOTE: In Kentucky, Occupational Safety and Health is enforced by the KY OSH Division of Compliance, under the KY OSH Board. Read more: https://www.osha.gov/stateplans/ky]

CDC now "strongly recommends" masks on public transport and at hubs

(CBS) The U.S. Centers for Disease Control and Prevention (CDC) issued new guidance on Monday saying it "strongly recommends appropriate masks be worn by all passengers and by all personnel" operating public

transport across the country, including in stations, terminals and airports, to help slow spiraling coronavirus infections.

Issuing its new "interim guidance" note on Monday, the CDC called masks "one of the most effective strategies available for reducing COVID-19 transmission," and said well-fitted face coverings "are most likely to reduce the spread of COVID-19 when they are widely used by people in public settings. Wide use of masks especially helps protect those at higher risk of severe illness from COVID-19 as well as workers who frequently come into close contact with other people (e.g., in airports, seaports or other docks, bus terminals, and train stations)."

There has been a clear consensus from scientific research for months that face masks — far more even than plastic face shields — <u>are effective at preventing the spread</u> of the virus that causes COVID-19.

Story link: https://www.cbsnews.com/news/coronavirus-mask-guidance-cdc-strongly-recommends-face-coverings-public-transport-stations-airports/

CDC Interim Guidance on Masks while traveling (Oct 19): https://www.cdc.gov/quarantine/masks/mask-travel-guidance.html

Johns Hopkins: Health Security Headlines Extracts from October 19, 2020

The Effect of Temperature and Humidity on the Stability of SARS-CoV-2 and Other Enveloped Viruses (BioRxiv) Our results highlight scenarios of particular transmission risk, and provide a mechanistic explanation for observed superspreading events in cool indoor environments such as food processing plants. Moreover, our model predicts observations from other human coronaviruses and other studies of SARS-CoV-2, suggesting the existence of shared mechanisms that determine environmental stability across a number of enveloped viruses.

Will SARS-CoV-2 Become Endemic? (Science) Reinfection, in which an individual is subject to multiple, distinct infections from the same virus species throughout their lifetime, is a salient feature of many respiratory viruses. Indeed, the persistence and ubiquity in human society of common respiratory viruses—including influenza viruses, respiratory syncytial virus (RSV), rhinovirus, and the endemic coronaviruses—are largely due to their ability to produce repeat infection. Since the emergence of severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), the virus responsible for the ongoing coronavirus disease 2019 (COVID-19) pandemic, a critical concern has been whether humans will experience reinfections with this pathogen, which might enable it to become endemic.

STAT-Harris Poll: The Share of Americans Interested in Getting Covid-19 Vaccine As Soon As Possible Is Dropping (STAT News) Overall, 58% of the U.S. public said they would get vaccinated as soon as a vaccine was available when asked earlier this month, down considerably from 69% who said the same thing in mid-August. That change suggests growing concern that the regulatory approval process for a Covid-19 vaccine has been politicized by the Trump administration in the run-up to the presidential election. Drill down further, and the new data show a striking disparity by race. The poll found that 59% of white Americans indicated they would get vaccinated as soon as a vaccine is ready, a decline from 70% in mid-August. Only 43% of Black individuals said they would pursue a vaccine as soon as it was available, a sharp drop from 65% in mid-August. The poll, which queried more than 2,000 people from Oct. 7 to 10, was weighted to the general U.S. population.

Coronavirus Test Results Get Faster, But Still Too Slow To Help Slow Disease Spread (NPR) People are getting the results of coronavirus tests in the U.S. faster than they were in the spring, but testing still takes far too long to help with effective disease control measures such as contact tracing and quarantining, according to the results of a large national survey. The survey, which is conducted monthly by a consortium of researchers from Northeastern, Northwestern, Harvard and Rutgers universities, also finds that Hispanics and African Americans are waiting about a day longer than whites on average, underscoring yet another way the pandemic is hitting minorities harder. The researchers also found that a disturbingly high proportion of those testing positive — almost half — are never contacted by a health worker to determine who they may have infected, a crucial step for preventing outbreaks.

<u>Detoxifying Mustard Gas</u> (Chemical and Engineering News) Mustard gas has been used in chemical warfare for more than 100 years, yet scientists are still seeking the ideal antidote to counter its blistering—and potentially lethal—effects. Now, researchers from the US Army show that a dry, powdered form of hydrogen peroxide decomposes this hazardous agent and renders it nontoxic. The powder could be incorporated into protective gear like face masks and gloves and degrade mustard gas on contact, safeguarding soldiers in situations where liquid treatments could cause problems.

[Note: Mustard gas is one of the products that was at the Blue Grass Army Depot near Richmond, KY. That was scheduled to be destroyed beginning in 2017. Background story: https://bereadylexington.com/csepp-bgad/]

Health experts say 'herd immunity' strategy would kill thousands

(The Hill) Public health experts are growing alarmed that the Trump administration is increasingly embracing scientists who argue against lockdowns and restrictions as a means to control the coronavirus pandemic. Public health experts are growing alarmed that the Trump administration is increasingly embracing scientists who

argue against lockdowns and restrictions as a means to control the coronavirus pandemic. Those scientists maintain that the costs of locking down society and closing schools and businesses outweighs their benefits in combating the virus. In a document known as the Great Barrington Declaration, signed earlier this month, they embrace a concept known as "herd immunity," in which a population builds up enough resistance to a pathogen that it runs out of victims to infect.

But to public health experts, allowing the virus to run its deadly and devastating course is an unacceptable option that would lead to hundreds of thousands of deaths on top of the 217,000 in the U.S. who have already died from the disease.

At least three people in the United States have been reinfected after initially recovering from the virus. Doctors at Swedish Medical Center in Seattle identified a third patient, who spent more than 40 days in the hospital before being reinfected with a new strain of the virus several months later. Scientists have documented about two dozen people around the world who have been infected more than once.

The herd immunity strategy — a term that derives from livestock — also relies on the assumption that few younger people will experience serious symptoms of the disease. But about 30 percent of Americans have an underlying condition that could exacerbate the virus, Dr. Anthony Fauci said.

Full story: https://thehill.com/policy/healthcare/521259-health-experts-say-herd-immunity-strategy-would-kill-thousands

Center for Homeland Defense & Security COVID Webinar

Extreme Complexity – Management of Congregate Jail Populations during COVID-19

Friday, October 23, 2020 - 2:00 PM EDT / 11:00 AM PDT

- REGISTER HERE -

Fukushima: Japan 'to release contaminated water into sea'

(BBC) Japan is to release treated radioactive water from the destroyed Fukushima nuclear plant into the sea, media reports say. It follows years of debate over how to dispose of the liquid, which includes water used to cool the power station hit by a massive tsunami in 2011. Environmental and fishing groups oppose the idea but many scientists say the risk it would pose is low.

The government says no final decision has been made. An official decision could emerge by the end of this month. The release of more than a million tons of water, which has been filtered to reduce radioactivity, would start in 2022 at the earliest, according to Japanese media outlets including national dailies the Nikkei and the Yomiuri Shimbun. The water would be diluted inside the plant before release so it is 40 times less concentrated, the Yomiuri Shimbun said, with the whole process taking 30 years.

Learn more: https://www.bbc.com/news/world-asia-54566978

Living In Harm's Way: Why Most Flood Risk Is Not Disclosed

(NPR) About 15 million properties in the U.S. are prone to flooding, but patchwork and ineffective disclosure laws mean most people get little to no information about flood risk before they move.

Read more: https://www.npr.org/2020/10/20/921132721/living-in-harms-way-why-most-flood-risk-is-not-disclosed

CDC Clinicians Zoom Call

Leveraging Existing Resources to Meet the Challenges Faced by People Who Use Drugs or Who Have Substance Use Disorders During the Pandemic

Date: Thursday, October 22, 2020 - **Time:** 2:00 pm - 3:00 pm (ET) A few minutes before the webinar starts, please click on the Zoom link below to join: https://www.zoomgov.com/j/1609288166

Reminder - National Prescription Drug Take Back Day is Oct. 24; Disposal locations available across Kentucky

Read more: https://www.kyforward.com/national-prescription-drug-take-back-day-set-for-october-24-disposal-locations-available-across-ky/

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 (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.