

Kentucky Hospital Research & Education Foundation Emergency Preparedness Update for July 8, 2021

CDC: Delta variant now 50% of US COVID-19 cases

(CIDRAP) By the end of the month, the Delta (B1617.2) variant will likely become an even more dominant strain of SARS-CoV-2 in the United States, as the more transmissible variant now accounts for 51.7% of all new COVID-19 cases in the country, <u>CNN</u> reports. The Alpha (B117) variant now accounts for <u>28.7% of cases</u>. The variant, first identified in India, has swept across the globe and caused delayed reopening throughout the

The variant, first identified in India, has swept across the globe and caused delayed reopening throughout the United Kingdom.

The United States reported 23,839 new COVID-19 cases yesterday, and 338 deaths, according to the Johns Hopkins COVID-19 <u>tracker</u>. In total, the country has the most confirmed cases and deaths in the world, with 33,758,758 recorded infections, and 606,121 fatalities.

Across the southern and western parts of the country, where vaccination rates lag, the Delta variant has led to increased cases in recent weeks.

According to the Centers for Disease Control and Prevention (CDC), Delta now accounts for 73.3% of detected cases in Missouri, 39.7% in Nevada, and 36.3% in Colorado. In Arkansas, which has one of the lowest vaccinated populations in the country, the number of patients hospitalized with COVID-19 jumped by 55 yesterday, to 416, The <u>Arkansas Democrat Gazette</u> reports. It's the largest one-day increase since January.

Read more: <u>https://www.cidrap.umn.edu/news-perspective/2021/07/cdc-delta-variant-now-50-us-covid-19-cases</u>

KY COVID Update from July 7, 2021

(<u>KY COVID Daily Report</u>) There were 397 new cases reported, with 76 18 and under. The positivity rate was 2.87%. There were 5 new deaths recorded, for a total of 7,250. 214 are currently hospitalized with COVID, with 66 in an ICU, and 33 on a vent. Region 8 (eastern KY) is the only region with ICU capacity in use over 80% (82.35%). The next closest is Region 10 (Southcentral KY) at 71.11%. There are NO Kentucky counties in the RED zone for Current Incidence Rate/100K Population. About 21counties are now in the GREEN zone. (Source: <u>https://govstatus.egov.com/kycovid19</u>)

Myocarditis Guidelines for Kids Have Answers for COVID Cases Too New scientific statement emphasizes clinical feature- and CMR-based diagnosis

(MedPage Today) Guidelines for the diagnosis and treatment of myocarditis in children were recently released by the American Heart Association (AHA), proving timely.

While the <u>scientific statement</u>, published in *Circulation* and endorsed by the Myocarditis Foundation, was developed before the COVID-19 pandemic started, the recommendations should be useful for suspected myocarditis following <u>infection</u> or <u>vaccination</u>, as cases have been reported primarily in teens and young adults, according to a press release with an additional <u>statement</u> from the AHA and its science leadership. Full story: <u>https://www.medpagetoday.com/cardiology/chf/93450</u>

Language Barriers Keep 25 million in U.S. From Good Health Care

(HealthDay News) Due to language barriers, 25 million Spanish speakers receive about a third less health care than other Americans, a large study of U.S. adults shows. The analysis of federal survey data from more than 120,000 adults revealed that total use of health care (as measured by spending) was 35% to 42% lower among those whose primary language is Spanish compared to English speakers.

The study found that Spanish speakers had 36% fewer outpatient visits; 48% fewer prescription medications; and 35% fewer outpatient visits. Compared to Hispanic adults who were proficient in English, Spanish speakers also had 37% fewer prescription medications. Spanish speakers also had slightly fewer emergency department visits and hospitalizations, according to findings published in the July issue of the journal *Health Affairs*.

Learn more: <u>https://www.medicinenet.com/script/main/art.asp?articlekey=261231</u>

COVID-19 surges at US hospitals may have led to 6,000 deaths

(CIDRAP) COVID-19 case surges at the most overwhelmed US hospitals in spring and summer 2020 may have contributed to nearly one in four adult inpatient deaths, according to a <u>study</u> yesterday in the *Annals of Internal Medicine*.

Led by researchers from the National Institutes of Health Clinical Center, the study involved patient- and hospital-level analyses of the Premier Healthcare Database, creation of a weighted COVID-19 caseload-to-bed

capacity surge index, and hierarchical modeling. The authors calculated risk-adjusted odds ratios (aORs) for death from Mar 1 to Aug 31, 2020, or release to hospice at 558 hospitals through Oct 31.

High-burdened hospitals had twice the risk of death

Among 144,116 coronavirus inpatients 18 years and older, 78,144 (54.2%) were admitted to hospitals in the top surge index decile. Of all inpatients, 35,883 (24.9%) were admitted to an intensive care unit (ICU), 19,583 (13.6%) required mechanical ventilation, and 25,344 (17.6%) died, with decreasing death rates over time at all surge index levels.

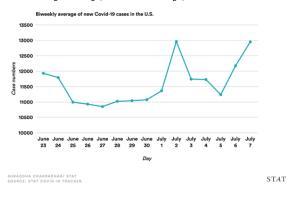
Hospital overcrowding may have contributed to 5,868 (23.2%) of COVID-19 hospital deaths. Compared with hospitals without surges (less than the 50th surge index percentile), the aOR for COVID-19 death in the 50th to 75th percentile was 1.11, while it was 1.24 for the 75th to 90th percentile, 1.42 for the 90th to 95th percentile, 1.59 for the 95th to 99th percentile, and 2.00 in the top percentile. The association did not differ by hospital ward, ICU, or intubation status.

Full story: <u>https://www.cidrap.umn.edu/news-perspective/2021/07/covid-19-surges-us-hospitals-may-have-led-6000-deaths</u>

U.S. COVID vaccination campaign averted nearly 280,000 COVID deaths

Covid-19 in the U.S.

New cases yesterday (two-week average): **12,951** New deaths yesterday (two-week average): **228**



(STAT Morning Rounds) The Covid vaccination progress in the U.S. may have saved nearly 280,000 deaths, according to a new report from the Commonwealth Fund and Yale School of Public Health. Looking at the trajectory of the pandemic from December 2020 through June 2021. researchers simulated what the deaths and hospitalizations in the U.S. would have looked like had no one been vaccinated. In addition to the prevented deaths, the study found that the U.S. also averted 1.25 million hospitalizations from Covid. Even if the U.S. had vaccinated people at half the rate during those six months, the country would have seen an additional 121,000 deaths and 450,000 more hospitalizations. The report's authors warn, however, that these gains may be lost with the spread of the Delta variant among unvaccinated people and call for renewed focus on vaccine access.

Johns Hopkins: Health Security Headlines Extracts from <u>July 7, 2021</u>

BARDA Purchases Paratek's NUZYRA to Treat Anthrax Infections (Homeland Preparedness News) Looking to address a medical need and reduce development and preparedness costs for taxpayers, the Biomedical Advanced Research and Development Authority (BARDA) has purchased and begun accepting the Paratek Pharmaceuticals antibiotic NUZYRA for use on anthrax infections. The contract could reach a total of \$285 million distributed over a decade, all going toward the late-stage development of the drug and obtaining appropriate regulatory approvals.

WHO Advises 2 Monoclonal Antibodies for Severe COVID (CIDRAP) The World Health Organization

(WHO) recommended the use of anti-inflammatory monoclonal antibodies—tocilizumab and sarilumab alongside corticosteroids for treating patients who have severe or critical COVID-19 infections. In other global developments, some countries including Indonesia, Vietnam, and Bangladesh, reported new record daily highs for infections, as COVID-19 cases continued to rise in parts of Europe.

Moderna Begin Human Trials Of mRNA-Based Flu Shot

(OMMCOM) US-based biotechnology company Moderna on Wednesday announced that it has started human trials of an mRNA-based flu shot. The pharmaceutical giant said the first participants have been dosed in the Phase 1/2 study of mRNA-1010, the company's quadrivalent seasonal influenza mRNA vaccine candidate. This Phase 1/2 randomised, stratified, observer-blind, dose-ranging study will evaluate the safety, reactogenicity and immunogenicity of mRNA-1010, Moderna's seasonal influenza vaccine candidate in healthy adults 18 years and older in the US. The company said it intends to enroll approximately 180 participants in the study

mRNA-1010 is Moderna's first seasonal influenza vaccine candidate to enter the clinic and targets lineages recommended by the World Health Organization (WHO) for the prevention of influenza, including seasonal influenza A H1N1, H3N2 and influenza B Yamagata and Victoria.

Full; story: https://ommcomnews.com/world-news/moderna-begin-humantrials-of-mrna-based-flu-shot

Climate crisis 'may put 8bn at risk of malaria and dengue'

Reducing global heating could save millions of people from mosquito-borne diseases, study finds

(The Guardian) More than 8 billion people could be at risk of malaria and dengue fever by 2080 if greenhouse gas emissions continue to rise unabated, a new study says. Malaria and dengue fever will spread to reach billions of people, according to new projections.

Researchers predict that up to 4.7 billion more people could be threatened by the world's two most prominent mosquito-borne diseases, compared with 1970-99 figures. The figures are based on projections of a population growth of about 4.5 billion over the same period, and a temperature rise of about 3.7C (38.6F) by 2100. The study, led by the London School of Hygiene & Tropical Medicine (LSHTM) and published in the Lancet Planetary Health journal, found that if emission levels continue to rise at current rates, the effect on global temperatures could lengthen transmission seasons by more than a month for malaria and four months for dengue over the next 50 years.

Full story: https://www.theguardian.com/global-development/2021/jul/08/climate-crisis-may-put-8bn-at-risk-of-malaria-and-dengue

North America Has Its Hottest June on Record

(Seattle Times) Last month was the warmest June on record in North America, researchers said Wednesday, confirming the suspicions of millions of people who endured some of the hottest temperatures ever experienced on the continent. The Copernicus Climate Change Service, an agency supported by the European Union, said that average surface temperatures for June in North America were about one-quarter of a degree Fahrenheit (0.15 of a degree Celsius) higher than the average for June 2012, the previous record-holder. <<u>Read more ></u>

Hundreds died in the West's heat wave last week. Now another one is gearing up.

(*The Mercury News*) Unrelenting heat is expected to continue in the West after a late-June heat wave left hundreds dead in the Pacific Northwest and British Columbia. Records could topple again this weekend as temperatures climb well above normal. <<u>Read more ></u>

Related story - Soaring Temperatures Bring Heat Stroke Dangers Those most at risk for heat exhaustion include children, the elderly, overweight people and young athletes

(HealthDay News) On sizzling hot summer days, it's important to guard against <u>heat exhaustion</u> and <u>heat</u> <u>stroke</u>, an expert says.

"<u>Heat stroke</u> occurs when the core temperature of the body reaches 104 degrees Fahrenheit and changes in our central nervous system take place, such as disorientation, <u>confusion</u>, behavioral or emotional changes or <u>altered mental status</u>," said Isabel Valdez, a physician assistant and assistant professor of general internal medicine at Baylor College of Medicine in Houston.

"In some case, <u>seizures</u> or comas can also occur. Vital internal organs like the brain, <u>liver</u> and kidneys can be damaged by heat <u>stroke</u>," she said in a Baylor news release.

Heat <u>stroke</u> -- which can be fatal if not treated immediately -- may occur if signs of <u>heat exhaustion</u> are ignored. They include <u>sweating</u>, rapid <u>heart</u> rate, <u>lightheadedness</u>, <u>headache</u>, <u>low blood pressure</u>, <u>muscle cramps</u>, <u>nausea</u>, <u>vomiting</u> or <u>diarrhea</u>.

If <u>heat exhaustion</u> is suspected, find a place to rest, drink water and move to a cooler setting. If a person becomes confused and has an elevated body temperature of greater than 104 degrees, they require emergency care, Valdez advised.

One way to prevent <u>heat exhaustion</u> is to drink water early in the day and while in the heat. "Fluids with <u>electrolytes</u> are very helpful but not necessary," Valdez said. "If you are going to be outdoors for extended periods, acclimatize yourself to the heat by spending only a few hours outdoors at first and adding more time in the outdoors over a span of two weeks."

High humidity may contribute to heat exhaustion, so wear cool clothing and take breaks from the heat.

Full story: <u>https://www.medicinenet.com/script/main/art.asp?articlekey=261174</u>

FBI Probing Fatal Ambush of Indiana Police Officer

(From IACP "<u>The Lead</u>") The <u>AP</u> (7/7) reports from Terre Haute, Indiana, "A western Indiana police officer was fatally shot Wednesday when he was ambushed near FBI offices in Terre Haute, according to federal officials." The AP adds, "Sgt. Ryan Adamson of the Terre Haute Police Department identified the officer as 30-year veteran Detective Greg Ferency. Ferency had been a federal task force officer since 2010, the FBI said in a statement. 'An FBI agent shot and wounded the suspect who is currently in custody receiving medical attention at a local hospital,' the FBI said in a statement late Wednesday that also indicated Ferency was 'ambushed' at the FBI Indianapolis Resident Agency. The shooting incident is under investigation by the FBI's Inspection Division, according to authorities."

"Rise of the Moors" Suspects Refuse To Cooperate With Authorities After Massachusetts I-95 Standoff

<u>WBTS-TV</u> Boston (7/6) reports, "Some of the 11 people charged in connection with a 9-hour armed standoff that partially shut down Interstate 95 in Wakefield, Massachusetts, over the weekend refused to cooperate with court authorities during their arraignments Tuesday." According to WBTS-TV, "The 10 men and one teenager – who say they are members of a group called the Rise of the Moors – allegedly refused to speak with their court-appointed lawyers, delaying their arraignments. They arrived at Malden District Tuesday morning and were greeted by family, friends and a large police presence. The courtroom reached maximum capacity, where the men from Rhode Island, New York and Michigan started to be arraigned on various gun-related charges."

[WBUR] What is *"Rise of the Moors"*? The Moors consider themselves <u>sovereign citizens</u> — who believe they are not U.S. citizens, and not beholden to laws. WBUR/Boston takes a look at *Rise of the Moors*: <u>https://www.wbur.org/news/2021/07/07/rise-of-the-moors-sovereign-citizens-adl</u>

Domestic Preparedness Journal Feature Emergency Operations Centers: The Heartbeat of Disaster Management

(By Kay Goss, former Associate Director for FEMA)

Emergency Operations Centers (EOCs) are complex facilities to design and build. Many emergency managers and other participants in response operations may be involved in only one new facility or only one remodeling during their careers. To begin with, it is a major challenge to obtain funding for an EOC that is designed not only to meet the needs of all partners and participants but also to take into account all of the critical factors and forces involved. Options for laying out functions in an operations room, and the relationships among designated spaces, are only two of many key factors to consider. In addition, the technology that is both available and accessible plays a huge role – e.g., audio-visual displays that make facilities media-friendly, the wireless capacity that makes a virtual operation possible, and the geographic information system that makes damage assessments readily available. Trends in the construction of new facilities and staffing issues for new facilities are increasingly offering numerous innovative options for configuration.

However, it is the incident action plans (IAPs) put into place in advance (in collaboration with all of the stakeholders involved), the professional leadership of the partners – honed and developed in joint planning, training, and exercises – and the resourcefulness of the participants that make or break an EOC's effectiveness. Other keys to success are management ability in a command-and-control environment, overall resource-management capabilities, and the mutual-aid arrangements reached through pre-arranged understandings such as Emergency Management Assistance Compacts (EMACs),

It also is essential that the facility possess both survivability and redundancy, or there could be a repeat of the situation that occurred when New York City's EOC, which was located in the World Trade Center at the time of the 9/11 terrorist attacks, was itself destroyed. A well-equipped EOC features excellent and redundant communications, so that decision makers will have ready access at all times to real-time situational awareness. Flexibility also is required of all participants, so an open architecture is a plus (provided, though, that security can be maintained at the highest levels).

The physical structure of the center is less important, however, than the competency of the professionals who staff it. They must have the ability to respond effectively and authoritatively to any possible disaster, and should also be able to think outside the proverbial box when confronting the robust uncertainties of the emergencies and disasters that have occurred so frequently in recent years.

The DHS/FEMA guidance provided for the Incident Command System/National Incident Management System (ICS/NIMS) and the National Response Framework (NRF) set the stage for successful EOC operations. The National Fire Protection Association's "1600" guidelines – available from the NFPA website (<u>www.nfpa.org</u>) and similar guidance from the Emergency Management Accreditation Program (<u>www.emap.org</u>) both provide a good foundation for an effective response.

Read the whole feature here: <u>https://www.domesticpreparedness.com/preparedness/emergency-operations-centers-the-heartbeat-of-disaster-management/</u>

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 <u>Emergency Preparedness Updates available here</u>. 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 <u>Preparedness@kyha.com</u> (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.