



Kentucky Hospital Research & Education Foundation Emergency Preparedness Update for December 14, 2020

UofL Hospital Administers State's First COVID-19 Vaccines

(Governor's Press Release) Gov. Andy Beshear and UofL Health officials marked a historic moment in the fight against the novel coronavirus 2019 (COVID-19) as the first vaccines shipped to Kentucky were administered this morning at UofL Hospital.

Three Kentucky hospitals, UofL Hospital, Baptist Health Lexington and the Medical Center at Bowling Green, each received 975 doses today and began their vaccination plans.



"Today is a historic day in the commonwealth – we are at the beginning of the end of our war with COVID-19," said Gov. Beshear, who was at UofL Hospital as UPS delivered the vaccines. "The Pfizer vaccine, which we believe to be 95% effective, is the defense we have needed to end this pandemic, and with the highly effective Moderna vaccine likely on its way to approval soon, we are all filled with hope for the first time in a very long time. Thank you to everyone who helped make this possible. To our front-line workers: we are forever grateful for your bravery, talents and compassion."

The Governor watched as five UofL Health doctors and nurses, who have been working on the front lines to help Kentuckians during the once-in-100-years pandemic, received their vaccinations in public and before the media. Sarah Bishop, MSN, APRN, CCNS, CIC, director of infection prevention at UofL Hospital, administered the vaccinations to all five.

At the head of the line (pictured) was Jason Smith, MD, PhD, Chief Medical Officer at UofL Health and trauma surgeon at UofL Hospital.

Read full press release: <https://kentucky.gov/Pages/Activity-stream.aspx?n=GovernorBeshear&prId=511>

Related - WDRB story link: https://www.wdrb.com/news/five-frontline-healthcare-workers-receive-first-covid-19-vaccinations-in-kentucky/article_22d7da4a-3e01-11eb-bdb2-03f250780b4b.html

----- Governor calls this "A Truly Great Day"

The Governor was in Louisville for the arrival of the first COVID-19 vaccinations, and the administration of the first vaccines to healthcare workers at University of Louisville Hospital (story above).

As of 4 PM today the Governor noted 1,802 new cases, which is low for a Monday; total 224,890. Positivity is 8.58%. 1,712 are hospitalized, with 441 in the ICU and 243 on vents. 17 new deaths were reported.

Watch press conference: <https://www.youtube.com/watch?v=mYP9WUHFPRE>

Red Zone Counties: <https://chfs.ky.gov/agencies/dph/covid19/ThursdayRedCounties.pdf>

Daily Summary: <https://chfs.ky.gov/agencies/dph/covid19/COVID19DailyReport.pdf>

Check here later for the press release: <https://governor.ky.gov/news>

When you get COVID-19 vaccinated, you will receive a **V-safe information sheet.**

What is V-safe?

(CDC) **V-safe** is a smartphone-based tool that uses text messaging and web surveys to provide personalized health check-ins after you receive a COVID-19 vaccination. When you get a COVID-19 vaccine, your healthcare



provider will give you a **v-safe** information sheet. This sheet provides instructions on how to register and use v-safe. Through **v-safe**, you can quickly tell CDC if you have any side effects after getting the COVID-19 vaccine. Depending on your answers, someone from CDC may call to

check on you and get more information. And **v-safe** will remind you to get your second COVID-19 vaccine dose if you need one. Your participation in CDC's **v-safe** is voluntary and you can opt out at any time.

CDC link to more **v-safe** information & FAQs: <https://www.cdc.gov/coronavirus/2019-ncov/vaccines/safety/vsafe.html>

NETEC COVID-19 Webinars

Responding to Vaccine Hesitancy and Misinformation

Wednesday, December 16, 2020 | 1:00 PM ET/Noon CT

[REGISTER HERE](#)

Alternative Care Sites

Friday, December 18, 2020 | 1:00 PM ET/Noon CT

[REGISTER HERE](#)

[CNE and CME credits available for these programs.]

Health officials encourage Kentuckians without symptoms to get coronavirus tests at testing sites, not hospital emergency rooms

(KY Health News) Lexington health officials are imploring Kentuckians without Covid-19 symptoms who want or need to get tested for the coronavirus to go to a testing site, and not the busy emergency departments of local hospitals. "If your question is, 'Do I have Covid?' there are many, many options better than our emergency departments to get that question answered," Dr. Roger Humphries, chair of emergency medicine at **UK HealthCare**, said at a virtual press conference Friday.

Physician leaders and administrators from **CHI Saint Joseph Hospital** and **Baptist Health Lexington**, who made the plea along with UK, said they are seeing similar difficulties in their organizations' hospitals across the state.

Colleen Swartz, UK HealthCare's vice president for hospital operations, said there are "hotspots" all across Kentucky, and many hospitals are experiencing a surge of Covid-19 patients that need inpatient care, including those in Pikeville, Danville and Bowling Green, Somerset and the rest of the Lake Cumberland area. She said many hospitals "are fairly overrun right now."

The officials said many people often come to emergency departments to get tested because they think they've been exposed. Humphries called them the "worried well."

The Centers for Disease Control and Prevention offers a "Coronavirus Self-Checker" tool to help you make decisions on when to seek testing and medical care.

CMS releases vaccine administration billing details

(From [AHA Today](#)) The Centers for Medicare & Medicaid Services recently posted information on how hospitals and other health care providers should bill Medicare for administering COVID-19 vaccines. Of particular note, providers who contract with Medicare Advantage plans should submit claims for administering the vaccines to original Medicare through their Medicare administrative contractor.

Major airlines will introduce a health passport app to verify passengers' test results

In the coming weeks, major airlines including United, JetBlue and Lufthansa plan to introduce a health passport app, called *CommonPass*, that aims to verify passengers' coronavirus test results — and perhaps soon, vaccinations.

CommonPass notifies users of local travel rules — like having to provide proof of a negative virus test — and then aims to check that they have met them. The app will then issue confirmation codes, enabling passengers to board certain international flights.

Electronic vaccination credentials could have a profound effect on efforts to control the virus and restore the economy. They could prompt more employers and college campuses to reopen. And developers say they may also give some consumers peace of mind by creating an easy way for movie theaters, cruise ships and sports arenas to admit only those with documented virus vaccinations. But the digital passes also raise the specter of a society split into health pass haves and have-nots, particularly if venues begin requiring the apps as entry tickets.

Full story: <https://swisscom.press/2020/12/14/major-airlines-will-introduce-a-health-passport-app-to-verify-passengers-test-results/>

Johns Hopkins: Health Security Headlines
Extracts from [December 14, 2020](#)

Baricitinib Plus Remdesivir for Hospitalized Adults with Covid-19 (*NEJM*) We conducted a double-blind, randomized, placebo-controlled trial evaluating baricitinib plus remdesivir in hospitalized adults with Covid-19. Baricitinib plus remdesivir was superior to remdesivir alone in reducing recovery time and accelerating

improvement in clinical status among patients with Covid-19, notably among those receiving high-flow oxygen or noninvasive ventilation.

[Simplifying Policy and Operational Considerations for COVID-19 Surge Planning: The 5S Framework](#)

(JAMA Health Forum) While the death toll from coronavirus disease 2019 (COVID-19) has surpassed 240 000, the less appreciated ravage has been excess morbidity and mortality from patients who have forgone essential care¹ due to patient fears of contracting COVID-19 in health care settings and to policy makers' restrictions of care activities to ensure capacity for patients with COVID-19. Preserving that capacity is well intended, but what is missing from the interface between policy makers and the clinician community is a mutually understood framework for contemplating triggers for responsible deceleration of non-COVID-19 activities to manage the community COVID-19 load. In caring for more than 80 000 COVID-19 inpatients in HCA Healthcare's multistate health system, the 5S Framework—Surge, Space, (life) Support, Staffing, and Supplies—that we developed has proved useful in making such decisions.

[The Coronavirus at 1: A Year Into the Pandemic, What Scientists Know About How it Spreads, Infects, and Sickens](#)

(STAT News) The coronavirus behind the pandemic presents some vexing dualities. It's dangerous enough that it dispatches patients to hospitals in droves and has killed more than 1.6 million people, but mild enough that most people shrug it off. It blocks one arm of the immune system from responding as it takes hold, but lures other parts into dangerous hyperdrive. It homes in on cells high up in the airway — think the nose and throat — but also burrows deeper into the lungs, maximizing infectiousness without ceding how sick it can make people.

[Roche Signs Agreement with Moderna for its COVID-19 Antibody Test](#)

(Homeland Preparedness News) Roche has formed a partnership with Moderna to use its Elecsys Anti-SARS-CoV-2 S, or COVID-19, antibody test in Moderna's mRNA-1273 vaccine research trials. The Roche tests will provide a quantitative measurement of SARS-CoV-2 antibodies and help to establish a correlation between vaccine-induced protection and levels of anti-receptor binding domain (RBD) antibodies. Roche recently received Emergency Use Authorization (EUA) from the U.S. Food and Drug Administration (FDA) for the Elecsys Anti-SARS-CoV-2 S antibody test.

[Feasibility of Continuous Fever Monitoring Using Wearable Devices](#)

(Nature) Evidence that sensors could be used to develop fever monitoring capabilities would enable large-scale health-monitoring research and provide high-temporal resolution data on fever responses across heterogeneous populations. We launched the TemPredict study in March of 2020 to capture continuous physiological data, including peripheral temperature, from a commercially available wearable device during the novel coronavirus pandemic. Here we report findings from the first 50 subjects who reported COVID-19 infections. These cases provide the first evidence that illness-associated elevations in peripheral temperature are observable using wearable devices and correlate with self-reported fever. Our analyses support the hypothesis that wearable sensors can detect illnesses in the absence of symptom recognition.

CDC - Recognize Stress & Where to Go for Help

- [Stress and Coping](#)
- [Grief and Loss](#)
- [Helping Children Cope](#)
- [Support for Teens and Young Adults](#)
- [COPING-19](#)
- [National Child Traumatic Stress Network](#)

[CDC COVID What's New?](#)

- [Providing Spiritual and Psychosocial Support to People with COVID-19 at Home \(Non-US Settings\)](#) Monday, December 14, 2020
- [10 Things Healthcare Professionals Need to Know about U.S. COVID-19 Vaccination Plans](#) Monday, December 14, 2020
- [Screening K-12 Students for Symptoms of COVID-19: Limitations and Considerations](#) Monday, December 14, 2020
- [Considerations for Communities of Faith](#) Monday, December 14, 2020
- [Pets and Other Animals](#) Monday, December 14, 2020
- [Strategies to Mitigate Healthcare Personnel Staffing Shortages](#) Monday, December 14, 2020
- [EARLY RELEASE: The Advisory Committee on Immunization Practices' Interim Recommendation for Use of Pfizer-BioNTech COVID-19 Vaccine - United States, December 2020](#) Sunday, December 13, 2020

HHS proposes changes to HIPAA Privacy Rule

(From [AHA Today](#)) The Department of Health and Human Services' Office for Civil Rights Dec. 10 released a [proposed rule](#) that would modify HIPAA privacy standards for individually identifiable health information. HHS said the proposed changes address standards that may impede value-based care by limiting or discouraging care coordination and management or impose other unnecessary burdens. OCR will accept comments on the rule for 60 days after its publication in the Federal Register.

US purchases additional 100 million doses of COVID-19 investigational vaccine from Moderna

The Administration, through the U.S. Department of Health and Human Services (HHS) and Department of Defense (DoD), will purchase an additional 100 million doses of COVID-19 vaccine candidate, called mRNA-1273, from Moderna. Read [full news release](#)

Scientists Test Safest Way Driver, Passengers Can Avoid COVID Spread

(MedicineNet) Traveling in a car with another person during the pandemic? Certain key steps might cut the odds of coronavirus spread during the trip, researchers say.

One big move that helps: Drive with all four windows down and have the passenger sit in the rear seat on the opposite side from the driver, the new study found. This helps create an air flow pattern that travels across the cabin, farthest from the occupants, [which] can potentially reduce the transmission risk.

Learn more: <https://www.medicinenet.com/script/main/art.asp?articlekey=249612>

Pandemic Causing Dangerous Delays in Care When Appendicitis Strikes Kids

(MedicineNet) Early in the [COVID-19](#) pandemic, doctors became concerned that people were delaying needed medical care to avoid hospitals. Now a new study hints that some parents may have waited to get emergency treatment for their children's [appendicitis](#). In the new study, doctors found a concerning trend at their children's hospital. During the early months of the pandemic, more children started arriving in the emergency department with a ruptured appendix. Read more: <https://www.medicinenet.com/script/main/art.asp?articlekey=249619>

ADHD Medication ODs Rising in U.S. Kids, Teens

(MedicineNet) Growing numbers of younger kids are overdosing on stimulant medications commonly used to treat attention-deficit/[hyperactivity](#) disorder ([ADHD](#)), a new study indicates. The researchers called for greater efforts to identify kids at risk for overdose, and more education on safe storage of prescription and [over-the-counter](#) medications for parents and caregivers.

"Stimulant prescribing has been on the rise among youth, and as more prescribed [stimulants](#) are in the public, there is greater potential for misuse among all populations," said study author Douglas Roehler, an epidemiologist at the U.S. Centers for Disease Control and [Prevention](#). "We need a better understanding of effective interventions for youth who are at risk for stimulant overdoses."

Full story: <https://www.medicinenet.com/script/main/art.asp?articlekey=249599>

Germany to Enter Hard Lockdown Until Mid-January

The [New York Times](#) (12/13, Eddy) reports German Chancellor Angela Merkel on Sunday announced Germans "will be forced into a strict lockdown over Christmas, after weeks of milder restrictions on public life failed to slow the spread of the coronavirus, leading to record numbers of new infections and deaths." [Bloomberg](#) (12/13, Delfs, Reiter) reports that under the "hard lockdown" that starts Wednesday, non-essential stores will be "shuttered, employers [are] urged to close workplaces and school children [are] encouraged to remain at home." [Reuters](#) (12/13, Rinke) reports the government "will support affected companies with a total of around 11 billion euros (\$13.3 billion) a month," while businesses "forced to close may receive up to 90% of fixed costs, or up 500,000 euros a month, Finance Minister Olaf Scholz said."

Kentucky
Opioid
Assistance &
Resource Hotline
(800) 854-6813
KYOARHotline.com

(From KIPRC) Operated by the Kentucky Poison Control Center, OAR is an opioid-related support hotline for the public, health care providers, and first responders. Partially funded by OD2A, the hotline serves all of Kentucky and is available 24 hours a day, seven days a week. OAR is staffed by health care professionals who are nationally certified in toxicology and who provide information about opioid dependence, withdrawal, and where to get help.

For the public, OAR hotline staff offer advice on safe medication disposal, where to get naloxone (a medication that is used to reverse an opioid overdose), and how to use it. OAR staff also can connect users and their families to Operation UNITE for substance use disorder treatment information and assist displaced patients of pain clinics that suddenly close. For first responders, OAR hotline staff offer advice on immediate decontamination for those who may have been exposed to fentanyl or other opioids at a scene. For health care providers, hotline staff can offer recommendations for safe opioid prescribing, managing patient withdrawal, and using medication-assisted

therapy for opioid use disorders. Last year, the Kentucky Poison Control Center handled more than 3,000 opioid exposures or opioid-related questions.

Health Authorities Warn: This Holiday Favorite Could Make You Sick

Don't eat 'cannibal sandwiches'

Curious? See <http://newser.com/s299988>

---- **ED and Trauma Interests** ----

Helmetless Bikers Ride '*Donorcycles*,' Organ Transplant Experts Warn

(MedicineNet) 'Donorcycles:' That what hospital [trauma](#) staff call motorcycles, since riding one without a helmet greatly raises the odds the driver will become an organ donor far too soon.

A new study out of Michigan supports the grim nickname: It found that organ donations among unhelmeted riders rose three-fold after the state repealed its mandatory helmet law.

"From a public health perspective, helmets should be required for all motorcyclists," study leader Stephen Thorp and colleagues wrote recently in the *Journal of Safety Research*. Thorp is a general surgery resident with Spectrum Health/Michigan State University.

Investigators analyzed Michigan motorcycle fatalities, comparing the rate of organ donation when the rider wore a helmet to the rate from riders without helmets. Data was collected between 2009 and 2015, a timeframe that bridged a 2012 decision to repeal the state's 35-year-old universal helmet law.

The bottom line: Unhelmeted riders are more than three times as likely to become organ donors today than pre-repeal. The likely reason: a dramatic increase in death due to severe [traumatic brain injury](#) (TBI).

Full story: <https://www.medicinenet.com/script/main/art.asp?articlekey=249645>

***Related story* - Are Helmets Required For Motorcyclists by Law In Kentucky?**

(Source: [Gary C. Johnson, Attorney at Law PSC](#)) According to information from the Kentucky Department of Transportation (DOT), there are approximately 122,000 registered motorcycles in the state. Motorcycles are popular methods of transportation, and riders should take steps to remain safe on the roadway. There is no single "universal" motorcycle helmet law in Kentucky. Rather, there are certain groups of riders that must wear a helmet. The three groups who must wear helmets when riding motorcycles in Kentucky include:

- ✓ Any motorcyclists under the age of 21 must wear a DOT-approved helmet. This includes whether they are operating the motorcycle or riding as a passenger.
- ✓ Anyone who has only a motorcycle instruction permit must wear a helmet.
- ✓ Anyone who has had a motorcycle operator's permit for less than one year must wear a helmet.
- ✓ Any motorcycle operator who does not fall under those three categories is not required to wear a helmet while riding in Kentucky. The debate over helmet use for motorcyclists has been hotly debated in this state for years. Kentucky first passed a universal helmet law in 1968, but that law was amended to include only the three groups listed above in the year 2000.

The legislation also makes it clear that ***only registered motorcycle owners over the age of 21 are permitted to ride without a helmet.*** Motorcycle passengers, regardless of age, are required to wear a helmet.

Learn more: <https://www.garycjohnson.com/are-helmets-required-for-motorcyclists-by-law-in-kentucky/>

329 Americans Are Injured by Guns Every Day: Study

Firearm injury is a major health crisis in the United States and new research sheds more light on how many of those who are injured survive and the circumstances of their shootings.

For the study, researchers from the University of Pennsylvania and Columbia University analyzed nationwide data from death certificates and emergency room visits. Between 2009 and 2017, the United States recorded an average of nearly 85,700 ER visits a year for nonfatal firearm injuries and an annual average of more 34,500 deaths. Overall, that added up to an annual average of just over 120,200 firearm injuries -- or 329 per day.

Read full report: <https://www.drugs.com/news/329-americans-injured-guns-every-day-study-94541.html>

Russia Suspected In Months-Long Cyber Attack on Federal Agencies

(NPR) Hackers invaded computer systems at the departments of Treasury and Commerce starting in the spring, according to reports. The hackers reportedly broke into the (Microsoft Office 365) email systems at those two government departments. But the full extent of the breach was not immediately clear as U.S. officials scrambled to make an assessment. There are concerns that hackers may have penetrated other government departments and perhaps private companies as well.

Emergency Directive on “SolarWinds” Software: Meanwhile, the U.S. Cybersecurity and Infrastructure Security Agency (CISA), which is part of Homeland Security, issued an emergency directive overnight calling on all federal civilian agencies to review their computer networks for signs of the compromise and to **disconnect from SolarWinds Orion products immediately** [versions 2019.4 through 2020.2.1, which was released between March 2020 through June 2020].

SolarWinds has government contracts, including with the military and intelligence services, according to Reuters. The attackers are believed to have used a “supply chain attack” method that embeds malicious code into legitimate software updates.

“The compromise of SolarWinds’ Orion Network Management Products poses unacceptable risks to the security of federal networks,” CISA’s Acting Director Brandon Wales said in a statement. “Tonight’s directive is intended to mitigate potential compromises within federal civilian networks, and we urge all our partners — in the public and private sectors — to assess their exposure to this compromise and to secure their networks against any exploitation.”

FireEye reported last week that hackers, also believed to be Russians, stole the company’s key tools used to test vulnerabilities in the computer networks of its customers, which include government agencies.

Full story: <https://www.npr.org/2020/12/14/946163194/russia-suspected-in-months-long-cyber-attack-on-federal-agencies>

Additional information and advisories from an InfraGard call this afternoon:

1. [CISA Current Activity Alert “Active Exploitation of SolarWinds Software](#)
2. [CISA Emergency Directive 21-01. “Mitigate SolarWinds Orion Code Compromise](#)
<< KEY DOCUMENT PER CISA >>
3. [SolarWinds Security Advisory](#)
4. [FireEye Advisory: Highly Evasive Attacker Leverages SolarWinds Supply Chain to Compromise Multiple Global Victims With SUNBURST Backdoor](#)
5. [FireEye GitHub page: Sunburst Countermeasures](#)

Google services are back online after a major global outage

(Business Insider) Google was hit by a major outage on Monday morning. Per [Downdetector](#), a wide range of Google services including YouTube, Gmail, Google Suite, and Google Maps started experiencing problems at about 6:30 a.m. ET. Google’s Workplace Status Dashboard later confirmed that **all of its products** were affected. Google’s search engine, however, appeared to keep working throughout.

Downdetector’s data suggested the problem was worldwide, with reports coming in from Europe, the US, India, Japan, Australia and more.

Story link: <https://www.businessinsider.com/google-down-outage-youtube-gmail-maps-global-outage-2020-12>

**CDC Clinician Webinar
December 17 at 2 PM ET**

**Making Practical Decisions for Crisis Standards of Care
at the Bedside During the COVID-19 Pandemic**

(CDC) Healthcare operations and healthcare services delivery change due to scarcity of required resources under pervasive (e.g., pandemic influence, COVID-19) and catastrophic disaster (e.g., earthquake, hurricane) conditions. The standards of care proposed under these unique and challenging conditions must be a reasonable approach to healthcare service delivery that merges public health, ethical, and medical care demands.

During this COCA Call, experts from Hennepin Healthcare and Bellevue Hospital will present background on the Institute of Medicine (IOM) framework, *Guidance for Establishing Crisis Standards of Care for Use in Disaster Situations* (IOM, 2009), and identify how Crisis Standards of Care apply to the current COVID-19 pandemic. Presenters will also highlight systems-level information sharing and coalition-level coordination activities to help clinicians plan for these potential situations and make medical decision during a crisis.

Zoom link below to join: <https://www.zoomgov.com/j/1613403966>

Other connection options & more info: https://emergency.cdc.gov/coca/calls/2020/callinfo_121720.asp

Continuing Education info: <https://emergency.cdc.gov/coca/continuingeducation.asp>

**Related – ASPR TRACIE Recording Available
Crisis Standards of Care - Legal Considerations during COVID-19**

In [this presentation](#), James Hodge Jr., JD, LL.M (Director of the Center for Public Health Law and Policy at Arizona State University; Director, Western Region Office, Network for Public Health Law) shares legal

information specific to COVID-19 emergency declarations, emergency powers and limitations, crisis standards of care, and liability protections.

Check out the other presentations from the [ASPR TRACIE Healthcare Operations during COVID-19 Speaker Series](#).

----- Toolbox Information on Dry Ice

The following was sent out by KHA to hospitals on Friday, December 11th, to give them general guidance on handling dry ice. A lot of people receiving the new Pfizer ultra-cold packs have never dealt with dry ice before, and there was a request for more information. Sources, and a draft organizational policy template, are shown below.

Guidance on Dry Ice Safety

When the Pfizer vaccine is shipped, it will come in special containers packed with dry ice. While it can keep the vaccines ultra-cold, dry ice comes with its own hazards and risks. Many have never dealt with dry ice, so please consider the guidance and references below.

- **Dry ice is the solid form of carbon dioxide (CO₂).** It is non-combustible (will not burst into flames), and is available in flakes, pellets or block form. Dry ice will sublime (vaporizes directly to the gas state) at a temperature of -78.5C (-109.3 F) or higher. In this case, vaporizing means that it is becoming CO₂ that will mix with the room's air (normal air is about 78% nitrogen, 21% oxygen and only 0.035% CO₂).
 - The sublimated carbon dioxide gas will sink to low areas and replace oxygenated air (meaning that if it is off-gassing in a closed room, the CO₂ levels will be higher along the floor. If the concentration of carbon dioxide rises above 0.5%, it can become a health problem.
 - It is important to note that the storage or use of dry ice in poorly ventilated areas can result in depletion of the oxygen levels resulting in potential asphyxiation. Therefore, the room that these vaccine coolers are stored in should have good ventilation, with a regular exchange of fresh air.
- **Dry ice should never be stored in any air tight container.** The sublimation of dry ice to carbon dioxide gas will cause any airtight container to expand, and it could possibly explode.
- Another significant hazard of dry ice includes "frost bite"-like injuries.
 - Contact with the skin will freeze cells and cause damage like that of a burn. Never use your bare hands to handle dry ice!
 - Insulated gloves must be worn when handling dry ice.
 - Use tongs if available, especially if they have serrated edges. Consider using the pointed edge of a chisel and tapping lightly if large pieces need to be broken up.
 - Treat dry ice burns the same as a regular heat burns. See a doctor if the skin blisters or comes off. Otherwise, if only red, it will heal in time as any other burn. Apply antibiotic ointment to prevent infection and bandage only if the burned skin area needs to be protected.
- **Do not leave dry ice unattended around children.**
- Do not leave dry ice on a tiled or solid surface countertop as the extreme cold could crack it.
- Unwrap and leave remaining dry ice at room temperature in a well-ventilated area. It will sublime from a solid to a gas.
- [Dry Ice Material Safety Data Sheet](#) for your records.

Reference sources used for this guidance:

- Dry Ice Info: <https://dryiceinfo.com/safe.htm>
- Safe Handling and Storage of Dry Ice: <https://www.safetymanualosha.com/safe-handling-and-storage-of-dry-ice/>

TEMPLATE for an organizational Safety Program Policy: <https://www.safetyinfo.com/written-safety-programs-dry-ice-solid-carbon-dioxide-safety-program-free-index/>

The International Association of Fire Chiefs also posted a White Paper document on November 23rd on Dry Ice (Carbon Dioxide) Response that is aimed at the first responder community:

Download it here: https://www.iafc.org/docs/default-source/1ems/dry-ice-response-guide.pdf?sfvrsn=65c46f0c_2

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 add or delete, or have something you would like to contribute to a future edition of the Emergency Preparedness Update, please contact Preparedness@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.