COVID-19

What is the coronavirus?

The best and most comprehensive explanations of the novel coronavirus can be found on the Center for Disease Control website (https://www.cdc.gov/coronavirus/2019-nCoV/) or the World Health Organization website (https://www.who.int/emergencies/diseases/novel-coronavirus-2019).

Basically, the coronavirus is a family of viruses that are quite common in animals and people. This is a new strain, or newly identified member of that family. Because it is new, people have not been able to build up any immunity and since it can be community spread, the virus can affect wide categories of people fairly quickly. Among those who are most at risk are the elderly and those with preexisting conditions, such as asthma, diabetes or heart disease. Other risk factors include conditions in which the immune system is already compromised making it more difficult to ward off disease.

How is the virus transmitted?

The virus is spread through the community from person to person. In some cases, a person can develop symptoms of infection (now referred to as COVID 19) without ever having knowingly been exposed or having been to an area of the country where the virus has been identified. This is called community spread.

The virus is thought to spread mainly between people who are in close contact with one another (within about 6 feet), or through respiratory droplets produced when an infected person coughs or sneezes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.

How do we stop the virus?

This is a complicated question with a pretty simple answer—social distancing. That means staying out of large groups, avoiding direct contact with each other to the extent possible, and practicing good hygiene.

Unlike bacteria, which can grow basically anywhere, a virus like COVID 19 needs a host cell to keep reproducing. If there is no host to reproduce the virus cells, it dies. Experts still haven't determined exactly how long the virus can be sustained without a host; it could be several hours or several days. But the virus is easily destroyed with antiseptics, including alcohol and bleach. So even if a surface is exposed to the virus, it can be made safe with an antiseptic wipe down.

Person-to-person transmission through droplets of liquid can be mitigated by staying apart. The rule of thumb is six feet. It is an oversimplification but think of a child's water blaster. If the water is the virus, it is easily spread to others who are close by. But as the distance increases, more water tends to fall to the ground where it eventually dries up. In a large group setting, like a school classroom or a church sanctuary, an infected person can spread the virus to others easily. Increase the distance between people, decrease the chances of spreading the virus.

The other aspect of stopping the spread of the virus is good hygiene. Wash your hands frequently and avoid touching your face, mouth and nose. COVID 19 is a respiratory disease, so lung tissue serves as the host cells referenced earlier. If the virus is kept at bay or minimized, the risk of serious infection is reduced or eliminated.

What should I do if I or someone in my family develops symptoms?

First, know the symptoms. We are currently approaching the end of cold and flu season and starting with a spring peak of allergy season. Some of the symptoms for all three are similar to coronavirus symptoms—especially those of the more common Type A flu. The difference could be determined by your exposure risk. Have you traveled recently? Do you live in an area where there is community spread of coronavirus already? Are you experiencing shortness of breath? If you answer those in the affirmative, you may have contracted the coronavirus.

Testing procedures are becoming more available, but are still somewhat limited compared to other diseases, such as flu or strep throat. But a test is the only conclusive means of determining whether you have been infected. With that being said, however, think seriously about whether your symptoms warrant testing at a medical facility. The health care system is being overwhelmed with panicked patients who show some symptoms but may have only a common cold.

As of Wednesday, March 18, there were 29 confirmed cases of COVID 19 in Kentucky—six of those in Harrison County where the virus was first detected. By practicing good hygiene, exercising social distancing, and using sanitary practices for homes, offices, schools, businesses, and churches, the risk of more contamination can be greatly reduced.

Aren't all of these lockouts and cancellations overreacting?

In a word, no. The virus spreads easily from person to person in a normal setting. Right now, there is no vaccine, and there is no "cure." Leaders across the state and the country are practicing what they consider to be in the best interest to the health and welfare of their communities—whether that is a basketball fan missing a tournament, students missing school, or even families missing a parade.

Without a commonsense approach, the virus could have dramatic impact in a very short time. Think back to the old penny game from school. If you start with a single penny and double the amount each day, in 30 days, you will have more than $5 million. If one person is infected and that number doubles each day, in 30 days, more than 5 million people would be infected.

Remember also that social distancing does not mean isolation. We're coming up on one of the most beautiful seasons of the year in Kentucky. Get outside and enjoy it. Go for a walk. Take the family on a picnic. Ride your bike. Take your grandchildren fishing. Just practice safe hygiene while you're out. Wave to the neighbor instead of shaking hands. Wipe your grocery cart with disinfecting towelettes and keep the cart between you and the shopper in front of you while you talk. Don't be antisocial; be responsibly social.

What if I am planning to travel over spring break?

Plans for a spring break trip could be more affected by travel policies than by personal preference. Airlines, cruise lines, and even some destination resorts have curtailed operations, which means if you are planning to travel, the first call would be regarding whether you can travel and, if so, whether your destination will be open for business.

Spring break trips can be a short drive to visit family, a trains, planes, and automobile experience to an exotic location, or anything in between. Consult with the Center for Disease Control website or the U.S. State Department site to determine if there are any travel restrictions. If you do travel, use the same tips on personal hygiene and social distancing that you would at home. Of course, that is exponentially more difficult on a plane or aboard a cruise ship—especially when some of the staff may be from countries where the virus outbreak is more severe.

Ultimately, we cannot advise you one way or another. It is purely a personal decision. But if you do travel—especially in an area where the virus is prevalent—be vigilant about practicing good hygiene and expect to spend some time in a self-imposed quarantine of sorts when you return. It would be ill-advised to take the serious steps to halt the spread of the virus only to have it reignited when spring breakers return home.

Will all of the days children miss at school have to be made up?

It's premature to make a definitive statement on this. We know that Governor Beshear has recommended that all schools be closed through April 3 as a means of curtailing spread of the virus. After that, we'll have to wait and see whether additional closure is required.

We fully realize that this is an inconvenience to working parents who now must deal with childcare issues and it's a strain on already strained family budgets as a result. But the health and welfare of our students, staff, and faculty is of paramount importance. We want to make sure that in the interim period when there are no classes that learning can continue to the extent possible, that we are providing the best possible educational opportunities for our children in this disruptive environment, and that—when we can—we continue to offer nourishing meals to those students in need.

At the proper time, your school board—in all likelihood in concert with the governor's office, state education leaders, and the legislature—will determine how to deal with the extended closure.

Background from the Centers for Disease Control and Protection

Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats. Rarely, animal coronaviruses can infect people and then spread between people such as with MERS-CoV, SARS-CoV, and now with this new virus (named SARS-CoV-2).

The SARS-CoV-2 virus is a betacoronavirus, like MERS-CoV and SARS-CoV. All three of these viruses have their origins in bats. The sequences from U.S. patients are similar to the one that China initially posted, suggesting a likely single, recent emergence of this virus from an animal reservoir.

Early on, many of the patients at the epicenter of the outbreak in Wuhan, Hubei Province, China had some link to a large seafood and live animal market, suggesting animal-to-person spread. Later, a growing number of patients reportedly did not have exposure to animal markets, indicating person-to-person spread. Person-to-person spread was subsequently reported outside Hubei and in countries outside China, including in the United States. Some international destinations now have apparent community spread with the virus that causes COVID-19, as do some parts of the United States.
Community spread means some people have been infected and it is not known how or where they became exposed. Learn what is known about the spread of this newly emerged coronaviruses.

Severity

The complete clinical picture with regard to COVID-19 is not fully known. Reported illnesses have ranged from very mild (including some with no reported symptoms) to severe, including illness resulting in death. While information so far suggests that most COVID-19 illness is mild, a report external icon out of China suggests serious illness occurs in 16 percent of cases. Older people and people of all ages with severe underlying health conditions — like heart disease, lung disease and diabetes, for example — seem to be at higher risk of developing serious COVID-19 illness.

COVID-19 Now a Pandemic

A pandemic is a global outbreak of disease. Pandemics happen when a new virus emerges to infect people and can spread between people sustainably. Because there is little to no pre-existing immunity against the new virus, it spreads worldwide.

The virus that causes COVID-19 is infecting people and spreading easily from person-to-person. Cases have been detected in most countries worldwide and community spread is being detected in a growing number of countries. On March 11, the COVID-19 outbreak was characterized as a pandemic by the World Health Organization (WHO)external icon.

This is the first pandemic known to be caused by the emergence of a new coronavirus. In the past century, there have been four pandemics caused by the emergence of novel influenza viruses. As a result, most research and guidance around pandemics is specific to influenza, but the same premises can be applied to the current COVID-19 pandemic.

Pandemics of respiratory disease follow a certain progression outlined in a “Pandemic Intervals Framework.” Pandemics begin with an investigation phase, followed by recognition, initiation, and acceleration phases. The peak of illnesses occurs at the end of the acceleration phase, which is followed by a deceleration phase, during which there is a decrease in illnesses. Different countries can be in different phases of the pandemic at any point in time and different parts of the same country can also be in different phases of a pandemic.

There are ongoing investigations to learn more. This is a rapidly evolving situation and information will be updated as it becomes available.

Situation in U.S.

Different parts of the country are seeing different levels of COVID-19 activity. The United States nationally is currently in the initiation phases, but states where community spread is occurring are in the acceleration phase. The duration and severity of each phase can vary depending on the characteristics of the virus and the public health response.

- CDC and state and local public health laboratories are testing for the virus that causes COVID-19. View CDC's Public Health Laboratory Testing map.
- More and more states are reporting cases of COVID-19 to CDC.
- U.S. COVID-19 cases include:
    - Imported cases in travelers
    - Cases among close contacts of a known case
    - Community-acquired cases where the source of the infection is unknown.