Introduction

Coronavirus is a family of viruses that can cause respiratory infections similar to influenza or the “flu.” Coronavirus can be found in both humans and animals, and occasionally, coronaviruses found in animals can spread to people and cause respiratory infections. Previous examples of this include Middle East Respiratory Syndrome (MERS) and Severe Acute Respiratory Syndrome (SARS).

The current coronavirus outbreak is being caused by a virus named SARS CoV-2 and the disease it causes is coronavirus disease 2019, or “COVID-19.” This virus appears to have originated in bats, but we aren’t sure what type of animal transmitted it to humans. The outbreak began in a seafood and live animal market in Wuhan, Hubei Province, China. The virus was first identified in a patient on Dec. 30, 2019. China implemented a vigorous public health effort to try and limit the spread of the virus, rapidly identify those who are infected and implement appropriate supportive treatments to reduce the number of deaths associated with the disease. While the number of COVID-19 cases in China rapidly expanded in the early phase of the outbreak, they peaked between Jan. 23-27, and have been declining since that time.

Unfortunately, outside of China, the number of countries with patients who have been infected with COVID-19, and the number of patients and deaths associated with the virus have steadily increased. The CDC provides up to date information regarding the countries with confirmed COVID-19 cases. It is apparent that the widespread presence of COVID-19 increases the likelihood of exposure to this disease. Therefore, it is important for athletes and staff to be aware of the situation, take appropriate precautions to prevent infection, understand when they should seek medical treatment, and what resources are available to keep informed.

What is the big deal about COVID-19?

COVID-19 is a novel coronavirus. What that means is our immune systems haven't been exposed to it previously and aren't very good at fighting the virus. We don't currently have a vaccine for COVID-19, and it will take about a year to develop one that can be used safely. This means we can't rely on a vaccine in the near term to prevent COVID-19 infections. Finally, none of our current anti-viral medications work on COVID-19. Our current treatment is supportive care, which means treating the symptoms. All of this means that COVID-19 has the potential to infect a large number of people and we haven't developed an effective treatment for it. This is why it is so important to prevent the spread of the infection.
How does it spread?

The virus is spread through respiratory droplets and contact with surfaces that have the virus on it. Respiratory droplets are produced when an infected person coughs or sneezes. The droplets can land on the mouths or noses of people around them, or on a surface. If a person touches the droplets on a surface and then touches their mouth, nose, or eyes, they can become infected. It may also be on the hands of the person who is coughing or sneezing. If they then touch another person or a surface, they can transmit the virus to that person or surface.

Although it is possible that the disease may be transmitted by someone before they have symptoms, it is thought that they are most contagious when they are symptomatic.

Signs and Symptoms

Signs and symptoms develop between 2 and 14 days after exposure to the virus. Symptoms typically include fever (> 101), fatigue, cough (dry or productive), and shortness of breath. Other less common symptoms include sore throat, headache, muscle and joint pain, chills, nausea or vomiting, congestion or diarrhea.

When to go to the doctor

You should be evaluated by a doctor if you have been with people known to have COVID-19 or live in an area or recently traveled to or from an area with known cases of COVID-19 and you subsequently feel sick, have a fever, cough or shortness of breath.

Be sure to call ahead to let the health care team know that you are coming to see them and that you have symptoms suggestive of a respiratory infection so they can prepare for your arrival and take the necessary steps to protect health care workers and other patients.

When you arrive at the clinic or hospital, they will probably have you wear a face mask to reduce the risk of transmitting your infection. They will also instruct you on appropriate cough etiquette (i.e.: cough into a tissue or your elbow). You should wash your hands for 20 seconds with soap and water if you cough on your hands and frequently use alcohol-based hand sanitizer. You will also typically be placed in a room away from other people.

Diagnosis

In the United States, health care providers are taking oral and nasal swabs and collecting phlegm from coughing and sending it to the CDC for testing.

Treatment

At this time, there are no known treatments for COVID-19 beyond supportive measures, which include treatments that reduce symptoms (i.e.: acetaminophen for fever, cough suppressants, decongestants, etc.). For more severe cases, patients may need extra oxygen or to be on a ventilator to help them breath.
Disease Severity

In China, 80% of people with COVID-19 have mild to moderate symptoms. However, 13.8% have severe disease, and 6.1% are critical, with a death rate of approximately 3.8%. People at the highest risk are those over 60 years of age, and those with underlying medical problems such as high blood pressure, diabetes, heart disease, lung disease or cancer. Children under 19 years of age are rarely infected (only 2.4% of cases) and typically have less severe symptoms.

Prevention

Since there currently isn’t a treatment for COVID-19, the best thing you can do is prevent getting infected. The following are ways you can reduce your risk of becoming infected:

1. Avoid getting closer than 3 feet to anyone coughing or sneezing.
2. Wash your hands frequently with soap and water for 20 seconds (i.e. time it takes to sing “Happy Birthday” twice) or use hand sanitizer that has 60-95% alcohol. This is especially important after going to the bathroom, before eating, or after blowing your nose, coughing or sneezing.
3. Avoid touching your eyes, nose and mouth.
4. Cover your mouth with a tissue or your elbow if you cough or sneeze. Throw the tissue in the trash, and then wash your hands.
5. Stay home if you are sick.
6. Clean and disinfect frequently touched surfaces regularly (i.e. keyboard, airplane seat armrests and tray table, and door knobs).
7. Monitor the WHO and CDC websites for travel advisories and follow their recommendations.