Coronavirus disease
What you should know about COVID-19

MAYO CLINIC

A Q&A with a Mayo Clinic infectious diseases expert

A new strain of coronavirus causes a disease called coronavirus disease 2019 (COVID-19). It emerged at the end of 2019 in some residents of a central Chinese province called Hubei. Although initial cases were concentrated in China, there are increasing numbers of cases in countries throughout the world, including the United States. The virus has killed several thousand people worldwide, although most who have died of the virus have had serious underlying illness.

Here, Salvador Alvarez, M.D., an Infectious Diseases specialist at Mayo Clinic in Jacksonville, Florida, answers questions about the virus.

Q Why is the new coronavirus such a big concern?

A This is the third coronavirus to emerge in the human population in the past two decades, after the severe acute respiratory syndrome (SARS) outbreak in 2002 and the Middle East respiratory syndrome (MERS) outbreak in 2012. Their emergence has put global public health institutions on high alert.

Many details of this virus, such as its origin and its ability to spread among humans, remain unknown. But an increasing number of cases appear to have resulted from human-to-human contact between people who are in close proximity (within about 6 feet). When an infected person coughs or sneezes, he or she releases respiratory droplets that can land in the mouths or noses of people nearby and possibly be inhaled into the lungs.

Q Who is most at risk of infection and of serious complications?

A Anybody who's had close contact with an infected person is at risk since most people have no protective antibodies against a new virus. Older adults with underlying medical conditions such as lung and heart disease, diabetes, cancer, and a suppressed immune system seem to have a higher rate of complications such as pneumonia and an increased risk of death.

Q What is the risk level in the US? Is it expected to rise?

A The risk in the U.S. is increasing with 647 documented cases (as of March 10). However, with a large number of people traveling from other countries and evidence of human-to-human transmission and spread of the virus to multiple states, the possibility of an increase in cases seems likely. The medical community should be prepared, as should individuals around the globe.

Q If I have a trip planned, should I cancel it?

A The Centers for Disease Control and Prevention (CDC) has issued a warning for people to avoid trips to China and other countries in Asia affected by the virus. Business, leisure and educational trips to these areas should be canceled. Travel advisories may change, so check for updates frequently (see internet links on page 3).

Salvador Alvarez, M.D.
Infectious Diseases

Q How can I travel safely?

A The CDC recommends the following if you are traveling abroad:
- Wash your hands often with soap and water for at least 20 seconds after contact with sick travelers or touching potentially contaminated bodily fluids or surfaces. Use alcohol-based hand sanitizer (containing at least 60% alcohol) if soap and water are not available.
- Avoid crowded areas.

Q Are there any treatments or vaccines in development?

A There are no effective treatments for COVID-19 so far. Researchers are testing some available drugs to see if they are effective against the virus. There is also a rush to create a vaccine since researchers already know the virus and its DNA composition. Once the vaccine is available, it will take time to prove its protective value.

Infection prevention

There are many unknowns about the recent outbreak of COVID-19, a disease caused by a member of the coronavirus family, which can cause illnesses such as the common cold. Among the unknowns, what does the future hold for this outbreak? Will it fade in coming weeks and months, or continue to spread worldwide, including more severely to the United States?

It's understandable to feel worried about news of a spreading illness. Particularly since COVID-19 — like other infectious diseases such as flu (influenza)

— appears to be most severe in older adults and in those with significant existing medical conditions. However, there are practical steps you can take to help avoid getting — and help prevent spreading — community-acquired infectious diseases of all kinds. Here are some important steps to remember:

Stay healthy

A healthy body means a strong immune system that fights off infection. Eating a balanced diet, exercising regularly and getting adequate sleep are all things you can do to help maintain good health.

Wash hands frequently

Use soap and water or, when traveling or when water is scarce, an alcohol-based hand sanitizer — with at least 60% alcohol — to help prevent the spread of infection of all kinds.

Get your flu shot

A flu shot won't shield you from COVID-19. But in the U.S., influenza is far more common than COVID-19. As of the end of February, the CDC estimated there were between 34 to 49 million cases of influenza — and between 20,000 and 52,000 influenza deaths — in the U.S. this flu season.

Hand-washing for virus protection

The process of hand-washing should take at least 20 seconds. To start, wet your hands and apply soap to cover the hand surfaces. Rub your hands together palm to palm.

Rub one palm over the back of the other hand, then switch hands and repeat. Next, rub your fingers together.

Rub the tops of your fingers in the palm of the other hand. Switch hands and repeat.

Grab your thumb in the palm of the other hand; rub all around the thumb. Switch hands and repeat.

Twist the tips of your fingers back and forth in the palm of your hand. This helps clean under your fingernails. Switch and repeat.

Rub your hands while you rinse them under running water. Dry your hands well, preferably with a paper towel. Use the towel to turn off the faucet and open the door as needed.

Try not to touch your eyes, nose and mouth with unwashed hands

It's unclear exactly how contagious the COVID-19 virus is or how it spreads. It appears to be spreading from person to person among those in close contact. It may be spread by respiratory droplets released when someone with the virus coughs or sneezes.

It's not known if a person can catch the virus by touching a surface that an infected person has touched, and then putting his or her hand to the mouth. However, other viruses can spread this way. Remember to also wash your hands before handling food or after using the restroom, coughing, sneezing or blowing your nose.

Clean and disinfect surfaces you often touch

Since viruses can spread by hand-to-surface contact, consider periodically wiping down frequently touched surfaces in your environment with a disinfectant wipe. This is especially important if you are ill to avoid spreading the infection to others in your household. In addition, avoid sharing bedding, dishes, cups or other household items if you are sick.

Use proper respiratory hygiene

Cover your mouth and nose with facial tissue when you cough or sneeze. Throw away used tissues immediately. If no tissue is available, cough or sneeze into your upper sleeve.

Stay informed

Look to reliable news sources for up-to-date information and recommendations from health experts, whether it's a reminder to get a seasonal influenza vaccine, or information on a disease outbreak. Don't let conspiracy theories and medical misinformation distract you from the facts on staying healthy. Visit the CDC and WHO websites listed on this page for trustworthy information.

Should I use a face mask?

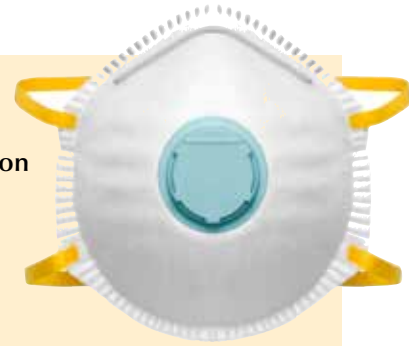**The Centers for Disease Control and Prevention (CDC) recommends face masks for:**
- People with COVID-19 symptoms
- Health care workers
- Caregivers of people with COVID-19

The CDC does not advise face masks for:
- The general public as a means of prevention against the virus

The World Health Organization notes that masks must be:
- *Coupled with hand-washing* — Hands should be washed before putting on a mask, after taking it off and anytime the mask is unintentionally touched while it's on.
- *Used properly* — A mask must be secure on the face and should be disposed of if it becomes damp.
- *Discarded correctly* — A mask should be removed by the ear straps and placed in a closed trash container right away.

Stay informed with reliable sources

Centers for Disease Control and Prevention (CDC)
www.cdc.gov/coronavirus/2019-ncov/index.html

World Health Organization (WHO)
www.who.int/emergencies/diseases/novel-coronavirus-2019

Travel tips and advisories

U.S. Department of State travel advisory map
https://travelmaps.state.gov/TSGMap

CDC's Coronavirus Disease 2019 Information for Travel
www.cdc.gov/coronavirus/2019-ncov/travelers/index.html

Follow travel advisories

Travel advisories to various countries can change rapidly depending on how any disease outbreak evolves, including COVID-19. See the box above for reliable website options.

Take steps if you become ill

If you have signs and symptoms of a potentially serious viral infection — such as abrupt onset of fever, aches and chills, fatigue, headache, and respiratory symptoms such as coughing and difficulty breathing — contact your doctor. Be sure to mention any recent travel or contact with someone who has traveled recently. Your doctor can help determine if you may have COVID-19, seasonal influenza or another infection. He or she can help you access appropriate care. Otherwise, steps for self-care include rest, drinking plenty of fluids, using nonprescription pain medications to control fever and restricting social contact to avoid spreading the infection to others. ❑