



Cognos Group

COVID-19

Summary

COVID-19, or Novel Coronavirus, is a viral respiratory illness thought to spread mainly from person to person via direct contact or through respiratory droplets. It also may be possible to get COVID-19 by touching a surface that has the virus on it. The disease was first detected in China and has spread to more than 60 international locations.

CDC and the US Department of State both encourage US travelers to avoid all nonessential travel (Level 3 warning) to certain countries. As of 3/2/20, those include China, South Korea, Iran and Italy. Japan currently carries a Level 2 warning and travelers should exercise caution. The mortality rate from COVID-19 is currently around 2%.

Symptoms may appear 2-14 days after exposure:

- Fever
- Cough
- Shortness of breath

There is currently no vaccine to prevent coronavirus disease 2019 (COVID-19). There is no specific antiviral treatment recommended for COVID-19. People with COVID-19 should receive supportive care to help relieve symptoms. For severe cases, treatment should include care to support vital organs.

The best way to prevent illness is to avoid being exposed to this virus. Avoid or postpone travel to the above countries.

- Avoid close contact with people who are sick.
- Avoid touching your eyes, nose, and mouth.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean & disinfect frequently touched objects & surfaces using a regular household cleaning spray/wipe.
- Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing. If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol. Always wash hands with soap and water if hands are visibly dirty.
- Facemasks should be used by people who show symptoms of COVID-19 to help prevent the spread of the disease to others. CDC does not recommend that people who are well wear a facemask to protect themselves from respiratory diseases, including COVID-19.

Sources

<https://wwwnc.cdc.gov/travel/notices>

<https://www.cdc.gov/coronavirus/2019-ncov/summary.html>

COVID-19

Background

Coronaviruses (CoV) are a large family of viruses that cause illness ranging from the common cold to more severe diseases such as Middle East Respiratory Syndrome (MERS-CoV) and Severe Acute Respiratory Syndrome (SARS-CoV). A novel coronavirus (nCoV) is a new strain that has not been previously identified in humans.

Coronaviruses are zoonotic, meaning they are transmitted between animals and people. Detailed investigations found that SARS-CoV was transmitted from civet cats to humans and MERS-CoV from dromedary camels to humans. Several known coronaviruses are circulating in animals that have not yet infected humans. Source – <https://www.who.int/health-topics/coronavirus>.

COVID-19, or Novel Coronavirus, is a viral respiratory illness thought to spread mainly from person to person via direct contact or through respiratory droplets. The disease was first detected in China in late 2019 and has spread to more than 60 international locations. The virus has been named “SARS-CoV-2” and the disease it causes has been named “coronavirus disease 2019” (abbreviated “COVID-19”).

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.

Transmissibility and Mortality

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, meaning some people have been infected who are not sure how or where they became infected.

The virus is thought to spread mainly from person-to-person either through direct/close contact with one another (within about 6 feet) or through respiratory droplets produced when an infected person coughs or sneezes. The virus may also spread through contact with infected surfaces or objects. The virus that causes COVID-19 seems to be spreading easily and sustainably in the community (“community spread”) in some affected geographic areas. Community spread means people have been infected with the virus in an area, including some who are not sure how or where they became infected.

Imported cases of COVID-19 in travelers have been detected in the U.S. Person-to-person spread of COVID-19 was first reported among close contacts of returned travelers from Wuhan. During the week of February 23, CDC reported community spread of the virus that causes COVID-19 in California (in two places), Oregon and Washington.

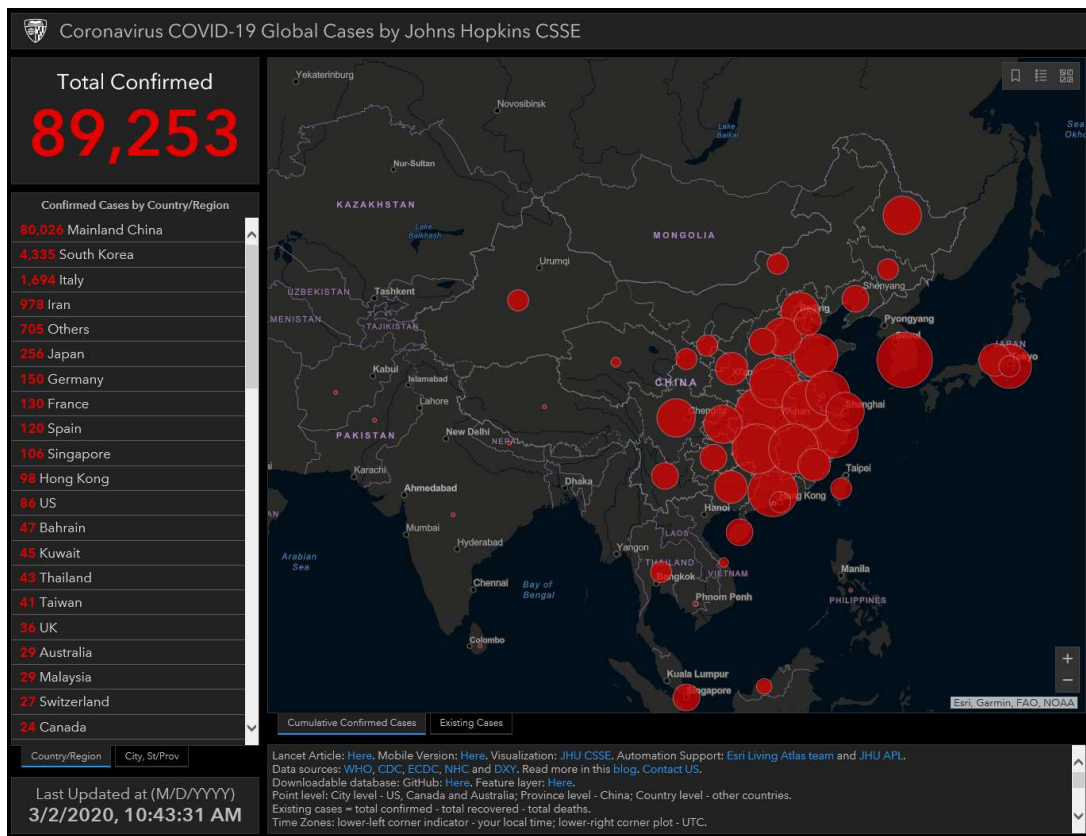
Most people in the United States will have little immediate risk of exposure to this virus. This virus is NOT currently spreading widely in the United States. However, it is important to note that current global circumstances suggest it is likely that this virus will cause a pandemic.

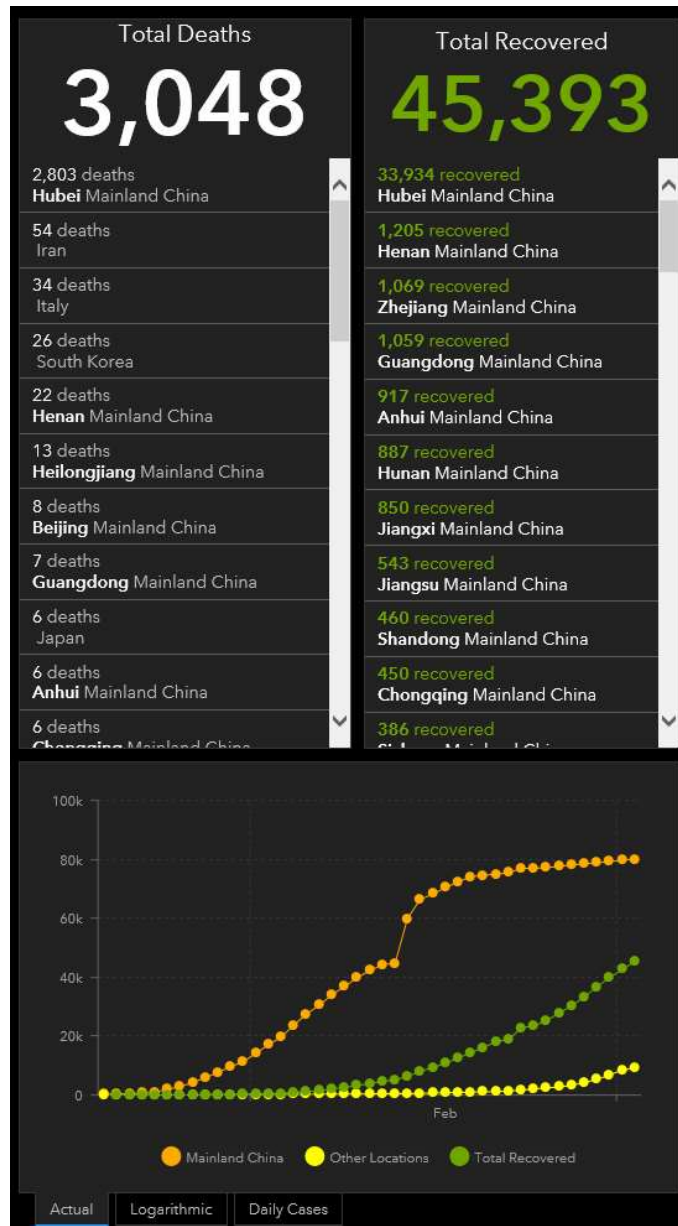
With the exception of Iran and China, the World Health Organization (WHO) estimates mortality rates to be around 2%. Iran's current rate is 5.5% and China is 3.5% (5.8% in Wuhan). Other studies ([https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(20\)30185-9/fulltext#tbl1](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(20)30185-9/fulltext#tbl1)) indicate an average expected mortality rate of 3%. The average time from first symptom to death is 14 days.

For most age groups, the death rates remain below 2% for age groups under 59 years of age. COVID-19 seems to impact those over 60 most significantly. Other significant risk factors appear to be connected to other existing illnesses including cardiovascular disease, diabetes and chronic respiratory disease. Source - The Epidemiological Characteristics of an Outbreak of 2019 Novel Coronavirus Diseases (COVID-19) - China CCDC, February 17 2020 (<http://weekly.chinacdc.cn/en/article/id/e53946e2-c6c4-41e9-9a9b-fea8db1a8f51>)

As of March 2nd, there have been two confirmed deaths in the US, both males who were suffering from unrelated health issues and were being treated for those in a Kirkland Washington hospital.

Johns Hopkins Centers for Systems Science and Engineering has created a GIS interface for tracking the spread of COVID-19, including data on mortality rates.





Source -

<https://gisanddata.maps.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

Comparison with other viruses

For comparison, the case fatality rate with seasonal flu in the United States is less than 0.1% (1 death per every 1,000 cases). (<https://www.cdc.gov/flu/about/burden/past-seasons.html>)

Mortality rate for SARS was 10%, and for MERS 34%.

Symptoms

COVID-19 typically causes flu-like symptoms including a fever, cough and shortness of breath. In some patients - particularly the elderly and others with other chronic health conditions - these symptoms can develop into pneumonia, with chest tightness, chest pain, and shortness of breath.

It seems to start with a fever, followed by a dry cough. After a week, it can lead to shortness of breath, with about 20% of patients requiring hospital treatment. 80.9% of infections are mild (with flu-like symptoms) and can recover at home.

Notably, the COVID-19 infection rarely seems to cause a runny nose, sneezing, or sore throat (these symptoms have been observed in only about 5% of patients). Sore throat, sneezing, and stuffy nose are most often signs of a cold.

Treatment

There is currently no vaccine to prevent coronavirus disease 2019 (COVID-19). There is no specific antiviral treatment recommended for COVID-19. People with COVID-19 should receive supportive care to help relieve symptoms. For severe cases, treatment should include care to support vital organ functions.

People who are mildly ill with COVID-19 are able to isolate at home during their illness. You should restrict activities outside your home, except for getting medical care. Do not go to work, school, or public areas. Avoid using public transportation, ride-sharing, or taxis. As much as possible, you should stay in a specific room and away from other people in your home.

Recommendations

The best way to prevent illness is to avoid being exposed to this virus. Avoid or postpone travel to the above countries (Level 3 - China, South Korea, Iran and Italy, Level 2 – Japan).

- Avoid close contact with people who are sick.
- Avoid touching your eyes, nose, and mouth.
- Stay home when you are sick.
- Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
- Clean and disinfect frequently touched objects and surfaces using a regular household cleaning spray or wipe.
- Wash your hands often with soap and water for at least 20 seconds, especially after going to the bathroom; before eating; and after blowing your nose, coughing, or sneezing. If soap and water are not readily available, use an alcohol-based hand sanitizer with at least 60% alcohol. Always wash hands with soap and water if hands are visibly dirty.

- Facemasks should be used by people who show symptoms of COVID-19 to help prevent the spread of the disease to others. CDC does not recommend that people who are well wear a facemask to protect themselves from respiratory diseases, including COVID-19.

Impacts

Resources

<https://www.worldometers.info/coronavirus/>

U.S. Centers for Disease Control & Prevention (CDC) COVID-19 Page - <https://www.cdc.gov/coronavirus/2019-ncov/index.html>

U.S. National Institutes of Health COVID-19 Resource Page <https://www.nih.gov/health-information/coronavirus>

World Health Organization (WHO) COVID-19 Q&A <https://www.who.int/news-room/q-a-detail/q-a-coronaviruses>

International Air Travel Association (IATA) Travel Bans <https://www.iata.org/en/programs/safety/health/diseases/government-measures-related-to-coronavirus/>

Global Database of COVID-19 cases and deaths <https://www.arcgis.com/apps/opsdashboard/index.html#/bda7594740fd40299423467b48e9ecf6>

Occupational Health & Safety Administration (OSHA) COVID-19 Page <https://www.osha.gov/SLTC/covid-19/>

U.S. State & Local Government Health Resource Listing <https://www.livescience.com/coronavirus-resources-state-local-health-departments.html>

The Lancet COVID-19 Resource Centre <https://www.thelancet.com/coronavirus>

Disclaimer – The above information was compiled from various public and government sources. We have tried to the best of our ability, to simplify the vast information out there for readability. Cognos Group does not employ any medical practitioners and does not guarantee the accuracy of the above information. Please do your own independent research, and discuss with your own medical practitioner before taking any actions.