

# Coronavirus Disease 2019 (COVID-19)

# Coronavirus Disease 2019 (COVID-19) Situation Summary

This is an emerging, rapidly evolving situation and CDC will provide updated information as it become available, in addition to updated guidance.

Updated February 27, 2020

# Background

CDC is responding to an outbreak of respiratory disease caused by a novel (new) coronavirus that was first detected Wuhan City, Hubei Province, China and which has now been detected in 50 locations internationally, including cases the United States. The virus has been named "SARS-CoV-2" and the disease it causes has been named "coronavirus disease 2019" (abbreviated "COVID-19").

On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization declared the outbreak a "public health emergency of international concern " (PHEIC). On January 31, 2020, Health a Human Services Secretary Alex M. Azar II declared a public health emergency (PHE) for the United States to aid the nation's healthcare community in responding to COVID-19.

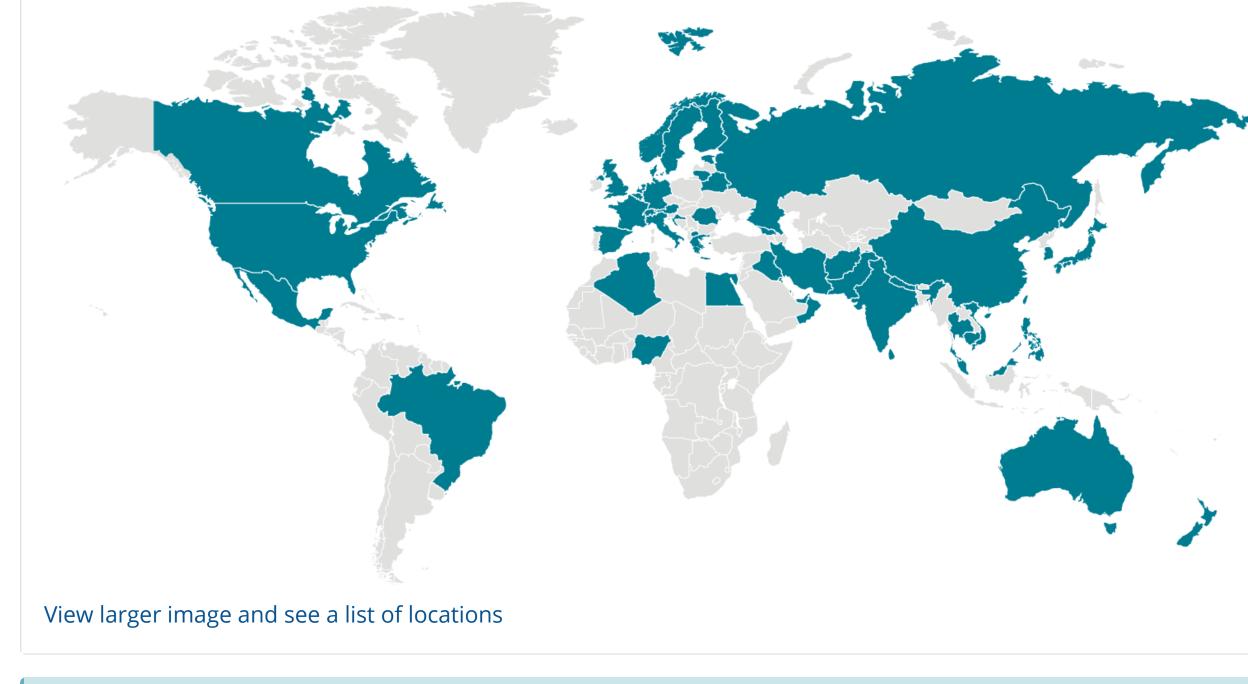
### Source and Spread of the Virus

Coronaviruses are a large family of viruses that are common in 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 NCOV, 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 bats. The sequences from U.S. patients are similar to the one that China initially posted, suggesting a likely single, recemergence of this virus from an animal reservoir.

Early on, many of the patients in the COVID-19 outbreak in Wuhan, 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 has been reported outside China, including in the United States and other locations. Chinese officials report that sustained person-to-person spring in the community is occurring in China. In addition, other destinations have apparent community spread, meaning so people have been infected who are not sure how or where they became infected. Learn what is known about the spring of newly emerged coronaviruses.

Confirmed COVID-19 Cases Global Map





COVID-19 cases in the U.S.

#### Situation in U.S.

Imported cases of COVID-19 in travelers have been detected in the U.S. Person-to-person spread of COVID-19 also have been reported among close contacts of returned travelers from Wuhan. On February 25, CDC confirmed COVID-19 in person who reportedly did not have relevant travel history or exposure to another known patient with COVID-19 (unknown exposure). At this time, this virus is NOT currently spreading in the community in the United States.

## Illness Severity

Both MERS-CoV and SARS-CoV have been known to cause severe illness in people. The complete clinical picture with regard to COVID-19 is not fully understood. Reported illnesses have ranged from mild to severe, including illness result in death. Learn more about the symptoms associated with COVID-19.

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

## Risk Assessment

Outbreaks of novel virus infections among people are always of public health concern. The risk from these outbreaks depends on characteristics of the virus, including how well it spreads between people, the severity of resulting illness the medical or other measures available to control the impact of the virus (for example, vaccine or treatment medications). The fact that this disease has caused illness, including illness resulting in death, and sustained person-t person spread is concerning. These factors meet two of the criteria of a pandemic. As community spread is detected more and more countries, the world moves closer toward meeting the third criteria, worldwide spread of the new vir

The potential public health threat posed by COVID-19 is high, both globally and to the United States.

But individual risk is dependent on exposure.

- For the general American public, who are unlikely to be exposed to this virus at this time, the immediate health from COVID-19 is considered low.
- Under current circumstances, certain people will have an increased risk of infection, for example healthcare wo caring for patients with COVID-19 and other close contacts of persons with COVID-19. CDC has developed guida to help in the risk assessment and management of people with potential exposures to COVID-19.

However, it's important to note that current global circumstances suggest it is likely that this virus will cause a pander In that case, the risk assessment would be different.

# What May Happen

More cases are likely to be identified in the coming days, including more cases in the United States. It's also likely that person-to-person spread will continue to occur, including in the United States. Widespread transmission of COVID-19 the United States would translate into large numbers of people needing medical care at the same time. Schools, child centers, workplaces, and other places for mass gatherings may experience more absenteeism. Public health and healthcare systems may become overloaded, with elevated rates of hospitalizations and deaths. Other critical infrastructure, such as law enforcement, emergency medical services, and transportation industry may also be affect Health care providers and hospitals may be overwhelmed. At this time, there is no vaccine to protect against COVID-19 and no medications approved to treat it. Nonpharmaceutical interventions would be the most important response strategy.

## CDC Response

Global efforts at this time are focused concurrently on containing spread of this virus and mitigating the impact of the virus. The federal government is working closely with state, local, tribal, and territorial partners, as well as public health partners, to respond to this public health threat. The public health response is multi-layered, with the goal of detecting and minimizing introductions of this virus in the United States so as to reduce the spread and the impact of this virus CDC is operationalizing all of its pandemic preparedness and response plans, working on multiple fronts to meet the goals, including specific measures to prepare communities to respond local transmission of the virus that causes CO 19. There is an abundance of pandemic guidance developed in anticipation of an influenza pandemic that is being repurposed and adapted for a COVID-19 pandemic.

# Highlights of CDC's Response

• CDC established a COVID-19 Incident Management System on January 7, 2020. On January 21, CDC activated its Emergency Operations Center to better provide ongoing support to the COVID-19 response.

- The U.S. government has taken unprecedented steps with respect to **travel** in response to the growing public h threat posed by this new coronavirus:
  - Effective February 2, at 5pm, the U.S. government suspended entry of foreign nationals who have been in China within the past 14 days.
  - U.S. citizens, residents, and their immediate family members who have been in Hubei province and other possible quarantine for up to 14 days.
  - CDC has issued the following travel guidance related to COVID-19:
    - China Level 3, Avoid Nonessential Travel updated February 22;
    - South Korea Level 3, Avoid Nonessential Travel updated February 24;
    - Japan Level 2, Practice Enhanced Precautions updated February 22;
    - Iran Level 2, Practice Enhanced Precautions issued February 23;
    - Italy Level 2, Practice Enhanced Precautions issued February 23;
    - Hong Kong Level 1, Practice Usual Precautions issued February 19.
  - CDC also recommends that all travelers reconsider cruise ship voyages into or within Asia at this time.
- CDC is issuing clinical guidance, including:
  - An interim Health Alert Network (HAN) Update to inform state and local health departments and healthcar professionals about this outbreak on February 1.
  - o On January 30, CDC published guidance for healthcare professionals on the clinical care of COVID-19 patie
  - On February 3, CDC posted guidance for assessing the potential risk for various exposures to COVID-19 and managing those people appropriately.
  - o On February 27, CDC updated its criteria to guide evaluation of persons under investigation for COVID-19.
- CDC has deployed multidisciplinary teams to support state health departments with clinical management, conta tracing, and communications.
- CDC has worked with the Department of State, supporting the safe return of Americans who have been strande a result of the ongoing outbreaks of COVID-19 and related travel restrictions. CDC has worked to assess the hea of passengers as they return to the United States and provided continued daily monitoring of people who are quarantined.



This is a picture of CDC's laboratory test kit for severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). CDC shipping the test kits to laboratories CDC has designated as qualified, including U.S. state and local public health laboratories, Department of Defense (DOD) laboratories and select international laboratories. The test kits are bolstering global laboratory capacity for detecting SARS-CoV-2.

#### View Larger

- CDC laboratories have supported the COVID-19 response, including:
  - CDC has developed a real time Reverse Transcription-Polymerase Chain Reaction (rRT-PCR) test that can diagnose COVID-19 in respiratory samples from clinical specimens. On January 24, CDC publicly posted the assay protocol for this test.
  - On February 26, CDC and FDA developed a protocol that uses two of the three components of the original test kit to detect the virus that causes COVID-19. This will allow at least 40 public health laboratories to be to begin testing.
  - CDC has been uploading the entire genome of the viruses from reported cases in the United States to Gen
    as sequencing was completed.
  - CDC has grown the COVID-19 virus in cell culture, which is necessary for further studies, including for addit genetic characterization. The cell-grown virus was sent to NIH's BEI Resources Repository for use by the broad scientific community.

## **CDC Recommends**

- While the immediate risk of this new virus to the American public is believed to be low at this time, everyone can their part to help us respond to this emerging public health threat:
  - It's currently flu and respiratory disease season and CDC recommends getting a flu vaccine, taking everyda preventive actions to help stop the spread of germs, and taking flu antivirals if prescribed.
  - If you are a healthcare provider, be on the look-out for people who recently traveled from China and have and respiratory symptoms.
  - If you are a healthcare provider caring for a COVID-19 patient or a public health responder, please take car yourself and follow recommended infection control procedures.
  - o If you have been in China or have been exposed to someone sick with COVID-19 in the last 14 days, you will face some limitations on your movement and activity. Please follow instructions during this time. Your cooperation is integral to the ongoing public health response to try to slow spread of this virus. If you dever COVID-19 symptoms, contact your healthcare provider, and tell them about your symptoms and your trave exposure to a COVID-19 patient.
  - For people who are ill with COVID-19, please follow CDC guidance on how to reduce the risk of spreading y illness to others.

#### Other Available Resources

The following resources are available with information on COVID-19

- U.S. Department of State China Travel Advisory
- World Health Organization, Coronavirus

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