

# CDC WEEKLY KEY MESSAGES

## 2019 Novel Coronavirus (2019-nCoV) Outbreak, Wuhan, China

February 4, 2020

This document summarizes key messages about the 2019-nCoV outbreak and the response. It will be updated and distributed regularly. For the most current information, visit [www.cdc.gov/ncov](http://www.cdc.gov/ncov).

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### OUTBREAK SUMMARY

- There is an expanding outbreak, centered in China, of respiratory illness caused by a novel (new) coronavirus abbreviated “2019-nCoV.”
- The 2019 novel coronavirus (2019-nCoV) is a new respiratory virus that can cause illness varying from mild to severe, including potentially resulting in death. It can spread from person-to-person.
- This virus is spreading from person-to-person in China. A growing number of countries are reporting cases in travelers from China and some limited person-to-person spread has been reported in countries outside of China, including in the United States.
- As of **February 3, 2020, 17,385** cases have been identified worldwide, including **11** in the United States.
- On January 30, 2020, the World Health Organization (WHO) declared this outbreak a Public Health Emergency of International Concern (PHEIC). A PHEIC is declared if an event poses a public health threat to other nations through the spread of disease and potentially requires a coordinated international response.

- On January 31, 2020, Health and Human Services Secretary Alex M. Azar II declared a public health emergency for the United States to aid the nation’s healthcare community in responding to 2019 novel coronavirus.
- Also on January 31, the President of the United States issued a “[Proclamation on Suspension of Entry as Immigrants and Nonimmigrants of Persons who Pose a Risk of Transmitting 2019 Novel Coronavirus.](#)”
- The situation is rapidly changing, and we are monitoring it closely. Guidance will be updated as needed.
- Outbreaks like this — when a new virus has emerged to infect people and spread between people — are especially concerning.
- This is a very serious public health threat and 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 goal of the ongoing U.S. public health response is to detect new cases quickly and prevent community spread of 2019-nCoV in this country.
- The coming days and weeks are likely to bring more confirmed cases of 2019-nCoV in the United States and globally, but strong public health measures now may blunt the impact of the virus in the United States.
- While it is unclear how this situation will evolve in the United States, CDC is preparing as if it were the next pandemic.

## OUTBREAK STATISTICS

As of **February 3, 2020**:

U.S. cases: 11

U.S. deaths: 0

Total patients under investigation (PUI): 260

- Positive: 11
- Negative: 167
- Pending: 82

States with patients under investigation: 36

Global cases: 17,385

- Mainland China: 17,205
- Outside mainland China: 180 in 26 locations, including the United States

Global deaths: 362

- China: 361
- Outside China: 1

## OUTBREAK BACKGROUND

- In early January 2020, Chinese health officials identified a novel (new) coronavirus linked to an outbreak of respiratory illness in Wuhan, Hubei Province, China.
- Most cases have been detected in China, but some cases have been detected in more than two dozen other locations. Most infections outside of China have occurred in travelers coming from Wuhan City.
- Initially, many of the patients in the Wuhan outbreak reportedly had some link to a large seafood and animal market, suggesting animal-to-person spread.
- Since then, Chinese officials report that sustained person-to-person spread in the community is occurring in China.
- Most cases in the U.S. have been associated with travel to Wuhan, China; however, person-to-person spread has also been seen in close (household) contacts of confirmed 2019-nCoV cases.
- Coronaviruses are a group of viruses that have a halo or crown-like (corona) appearance when viewed under a microscope. They are common in many different species of animals, including camels, cattle, cats, and bats.
- Human coronaviruses are a common cause of mild to moderate upper-respiratory illness in humans. But two coronaviruses have emerged to cause more severe illness: Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS).

## TRANSMISSION

Much is unknown about how 2019-nCoV can be spread. Current knowledge is largely based on what is known about other coronaviruses.

- Most often, person-to-person spread is thought to happen among people in close contact (about 6 feet) with each other.
- Person-to-person spread is thought to occur mainly via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza and other respiratory pathogens spread. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
- It's also possible that a person may be able to get 2019-nCoV by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes.
- Typically, with most respiratory viruses, people are thought to be most contagious when they are most symptomatic (sickest).
- How easily a virus spreads person-to-person can vary. Some viruses are highly contagious (like measles), while other viruses are less so.
- There is much more to learn about the transmissibility, severity, and other features associated with 2019-nCoV and investigations are ongoing. This information will further inform the [risk assessment](#).

## DIAGNOSIS AND TREATMENT

- CDC has developed a real time Reverse Transcription-Polymerase Chain Reaction (rRT-PCR) test that can diagnose 2019-nCoV in respiratory and serum samples from clinical specimens. On

January 24, 2020, CDC [publicly posted the assay protocol](#) for this test. Currently, testing for this virus must take place at CDC.

- CDC submitted an Emergency Use Authorization (EUA) package to the U.S. Food and Drugs Administration on February 3, 2020.
- Once FDA approves the EUA, the CDC test kits will be distributed to domestic and international partners through the agency's [International Reagent Resource](#).
- There is no specific antiviral treatment for 2019-nCoV infection. People infected with 2019-nCoV should receive supportive care to help relieve symptoms.
- For severe cases, treatment should include care to support vital organ functions.

## PREVENTION

There is currently no vaccine to prevent 2019-nCoV infection. The best way to prevent infection is to avoid being exposed to this virus.

CDC always recommends everyday preventive actions to help prevent the spread of respiratory viruses, including:

- Avoid touching your eyes, nose, and mouth with unwashed hands.
- Avoid close contact with people who are sick.
- 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.

## TRAVEL

### Travel from China:

President Trump issued a [Presidential Proclamation](#) January 31, 2020, to implement temporary measures to increase our abilities to detect and contain the novel coronavirus proactively and aggressively.

The proclamation:

- Suspends entry to the United States to foreign nationals who have visited China (excluding Hong Kong and Macau) in the past 14 days. There are some exemptions, including for immediate family members of U.S. citizens and legal permanent residents. (Hereafter referred to as "American citizens and exempted persons.")

In addition:

- All American citizens and exempted persons coming from China will be directed to (“funneled to”) one of 11 U.S. airports.
  - American citizens and exempted persons who have been in Hubei province in the previous 14 days will have an additional health assessment (screened for fever, cough, or difficulty breathing).
    - If symptomatic, American citizens and exempted persons will be transferred for further medical evaluation. (They will not be able to complete their itinerary.)
    - If asymptomatic, American citizens and exempted persons will be subject to a mandatory 14-day quarantine at or near that location. (They will not be able to complete their itinerary.)
  - American citizens and exempted persons who have been in other parts of mainland China (outside of Hubei Province) in the previous 14 days will have an additional health assessment (screened for fever, cough, or difficulty breathing).
    - If symptomatic, American citizens and exempted persons will be transferred for medical evaluation. (They will not be able to complete their itinerary at that time.)
    - If asymptomatic, American citizens and exempted persons will be allowed to reach their final destination and, after arrival, will be monitored under self-quarantine for 14 days.

The declaration took effect at 5 p.m. EST, Sunday, February 2, 2020.

The 11 airports where flights are being funneled to include:

- John F. Kennedy International Airport (JFK), New York
- Chicago O’Hare International Airport (ORD), Illinois
- San Francisco International Airport (SFO), California
- Seattle-Tacoma International Airport (SEA), Washington
- Daniel K. Inouye International Airport (HNL), Hawaii
- Los Angeles International Airport, (LAX), California
- Hartsfield-Jackson Atlanta International Airport (ATL), Georgia
- Washington-Dulles International Airport (IAD), Virginia
- Newark Liberty International Airport (EWR), New Jersey
- Dallas/Fort Worth International Airport (DFW), Texas
- Detroit Metropolitan Airport (DTW), Michigan

### **Travel to China:**

- On January 30, 2020, the U.S. State Department issued a [level 4 travel advisory](#), their highest threat level, requesting Americans not to travel to China because of the public health threat posed by the new coronavirus.
- CDC has issued a level 3 Travel Health Notice for Wuhan, China recommending that all travelers avoid non-essential travel.

### **First Repatriated Flight Plus Quarantine Order:**

- The Department of Health and Human Services (DHHS) Secretary, under statutory authority, issued federal quarantine orders to 195 evacuees who came to the U.S. from Wuhan, China on January 29, 2020.
- The quarantine will last 14 days from when the plane left Wuhan, China.
- This action is a precautionary and preventive step to maximize the containment of the virus in the interest of the health of the American public.
- This quarantine order also will protect the health of the evacuees, their families, and their communities.
- These individuals will continue to be housed at the March Air Reserve Base in Riverside, California.
- Medical staff will monitor the health of each traveler, including temperature checks and observation for respiratory symptoms.

### **Additional Repatriation Flights:**

- On January 23, 2020, the Department of State ordered the departure of all U.S. Consulate General Wuhan personnel and their family members.
- The Department of State is working with the U.S. Government interagency and People's Republic of China counterparts on staging additional evacuation flights to the U.S. from Wuhan.
- CDC will continue to support the Department of State in the safe and expedient ordered departure of all evacuees from Wuhan, China.

## **CDC LABORATORY TEST FOR 2019 NOVEL CORONAVIRUS**

- CDC has developed a new laboratory test kit for use in testing patient specimens for 2019 novel coronavirus (2019-nCoV).
- The test kit is called the "Centers for Disease Control and Prevention (CDC) 2019-Novel Coronavirus (2019-nCoV) Real-Time Reverse Transcriptase (RT)-PCR Diagnostic Panel." It is intended for use with the Applied Biosystems 7500 Fast DX Real-Time PCR Instrument with SDS 1.4 software.
  - Each test kit is enough for conducting 1,000 tests.

- The test utilizes a technology that can provide results in 4 hours from initial sample processing to result. (Note: Other steps involved in management of patient specimens, laboratory testing, and reporting may require additional time to perform.)
- CDC’s test kit is intended for use by laboratories designated by CDC as qualified, and in the United States, certified under the Clinical Laboratory Improvement Amendments (CLIA) to perform high complexity tests.
  - This includes U.S. state and local public health laboratories and Department of Defense (DoD) laboratories.
  - The test kits also will be shipped to qualified international laboratories, such as WHO Global Influenza Surveillance Response System (GISRS) laboratories. For more information, see the section labeled [CDC Laboratory Test Kit Distribution \(general audiences\)](#).
- The test will not be available in U.S. hospitals or other primary care settings.
- This test is intended for use with upper and lower respiratory specimens collected from individuals who meet CDC criteria for 2019-nCoV testing.
- At this time, CDC only recommends diagnostic testing of patients who meet the clinical criteria for a 2019-nCoV patient under investigation (PUI), per [Interim Guidelines for Collecting, Handling and Testing Clinical Specimens from Patients Under Investigation \(PUIs\) for 2019 Novel Coronavirus \(2019-nCoV\)](#).
  - For more information about interpreting test results, see section labeled “[Interpretation of test results from CDC 2019-Novel Coronavirus \(2019-nCoV\) Real-Time RT-PCR Diagnostic Panel](#).”

**Emergency Use Authorization Package Submittal:**

- On Monday, February 3, 2020, CDC submitted an Emergency Use Authorization (EUA) package to the U.S. Food and Drug Administration (FDA) in order to expedite FDA permitted use of the CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel in the United States. For more information, see FDA EUA Website: <https://www.fda.gov/emergency-preparedness-and-response/mcm-legal-regulatory-and-policy-framework/emergency-use-authorization>.
- The EUA process enables FDA to consider and authorize the use of unapproved, but potentially life-saving medical or diagnostic products during a public health emergency. The U.S. Secretary of Health and Human Services declared the 2019-nCoV virus a U.S. public health emergency on Friday, January 31, 2020. (For more information, see the [Emergency Use Authorization Background](#) section below).
- Criteria upon which CDC’s 2019-nCoV test is being submitted for EUA authorization, include the following:
  - The 2019-nCoV can cause a serious or life-threatening disease or condition, including severe respiratory illness, to humans infected by this virus;
  - There is no adequate, approved, and available alternative to the emergency use of the CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel for diagnosing 2019-nCoV infection.

- Based on the totality of scientific evidence available to FDA, it is reasonable to believe that the CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel may be effective in diagnosing 2019-nCoV infection, and that the known and potential benefits of the CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel, when used for diagnosing 2019-nCoV infection, outweigh the known and potential risks.
- CDC has provided guidance on specimen collection, storage and shipping at “[Interim Guidelines for Collecting, Handling and Testing Clinical Specimens from Patients Under Investigation \(PUIs\) for 2019 Novel Coronavirus \(2019-nCoV\).](#)”
- Public health officials anticipate that distribution of the tests will improve 2019-nCoV laboratory testing capacity in the United States.

**CDC Laboratory Test Kit Distribution:**

- Once CDC’s diagnostic test is authorized by FDA under the EUA , the [International Reagent Resource \(IRR\)](#) will begin distributing the test to the following laboratories:
  - 115 qualified U.S. laboratories; this includes U.S. state and local public health laboratories and Department of Defense (DoD) laboratories.
  - 191 qualified international laboratories, such as WHO Global Influenza Surveillance Response System (GISRS) laboratories.
  - Laboratories will place orders via the IRR Website. All the laboratories that will be placing orders are already registered and have active accounts with the IRR.
  - Each laboratory that places an order will receive one test kit initially, and each test kit is enough for approximately 1,000 patient specimens.

**Background: Emergency Use Authorization:**

- The FDA is responsible for reviewing and approving medical products for use in the United States. This usually is a lengthy process.
- However, when the U.S. Secretary of Health and Human Services (HHS) determines that there is a significant potential for a public health emergency that has a significant potential to affect national security or the health and security of United States citizens living abroad and that circumstances exist justifying the authorization of an emergency use of a product pursuant to section 564 of the Federal Food, Drug and Cosmetic Act, the commissioner of the FDA can use an EUA to permit use of certain unapproved medical products or unapproved uses of approved medical products. There are several criteria necessary for the FDA Commissioner to issue an EUA, including:
  - The agent or agents specified in the declaration can cause a serious or life-threatening disease or condition;
  - Based on the scientific information available, it is reasonable to believe that the medical countermeasure may be effective in diagnosing, treating, or preventing the disease or caused by a CBRN (chemical, biological, radiological, nuclear) agent. The exact type and amount of data needed to support an EUA may vary depending on the nature of the circumstances giving rise to the declaration and the type of the candidate product;



- The known and potential benefits outweigh the known and potential risks of the product when used to diagnose, prevent, or treat the serious or life-threatening disease or condition; AND
- There is no adequate, approved, and available alternative to the product for diagnosing, preventing, or treating the serious or life-threatening disease or condition. A potential alternative product may be considered “unavailable” if there are insufficient supplies to fully meet the emergency need. A potential alternative product may be considered “inadequate” if there are contradicting data for special circumstances or populations (e.g., immunocompromised individuals, individuals with drug allergies).

**Information for Laboratory Professionals:**

- The CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel contains the following:
  - 2019-nCoV\_N1, 2019-nCoV\_N2 and 2019-nCoV\_N3 primers and probes that target the nucleocapsid (N) gene and are designed for both universal detection of SARS-like coronavirus as well as specific detection of the 2019-nCoV. CDC has published the primers and probes sequences for 2019-nCoV online: <https://www.cdc.gov/coronavirus/2019-ncov/lab/rt-pcr-panel-primer-probes.html>
  - RP primers and probes that target the Human RNase P gene
  - nCoVPC, the 2019-nCoV positive control used in the assay
- The CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel also requires the use of additional authorized materials and authorized ancillary reagents that are not included with the test but are commonly used in clinical laboratories and are described in the authorized CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel Instructions for Use Package Insert.
- The CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel requires the following control materials, or other authorized control materials; all controls listed below must generate expected results in order for a test to be considered valid, as outlined in the CDC 2019-nCoV Real-Time RT-PCR Diagnostic Panel Instructions for Use:
  - Human Specimen Control (HSC): A human cell culture preparation used as an extraction control and positive control for the RNase P primer and probe set that is extracted and tested concurrently with each specimen extraction run.
  - Positive Control for 2019-nCoV (nCoVPC): Run with each batch of specimens. Monitors for failures of rRT-PCR reagents and reaction conditions.
  - No Template Control (NTC): Nuclease-free water included in each run. Monitors for reagent and system contamination.
- Contact your state and/or local public health laboratory for a consultation for testing of a patient under investigation (PUI).
- Use appropriate personal protective equipment when collecting and handling specimens from individuals suspected of being infected with 2019-nCoV as outlined in the CDC [Interim Guidelines for Collecting, Handling and Testing Clinical Specimens from Patients Under](#)

[Investigation \(PUIs\) for 2019 Novel Coronavirus \(2019-nCoV\)](#). Other specimens not listed in this guidance will not be accepted for testing.

### **Interpretation of test results from CDC 2019-Novel Coronavirus (2019-nCoV) Real-Time RT-PCR**

#### **Diagnostic Panel:**

Note: \*these are consistent with but not identical to the package insert and were synthesized from input from lab and epi teams.

#### **Positive Result:**

A positive test result means that 2019-nCoV was found in your sample. If you have a positive test result, it is very likely that you are infected with 2019-nCoV. Your healthcare professional will work with you to determine how best to care for you based on the test results along with other factors of your medical history and symptoms.

#### **Negative Result:**

A negative test result means that 2019-nCoV was not found in your sample. However, negative results do not necessarily preclude 2019-nCoV infection and should not be used as the sole basis for treatment or other patient management decisions. Other risk factors such as travel history or contact with 2019-nCoV infected individuals should be considered.

#### **Negative result if you are symptomatic:**

For 2019-nCoV, a negative test result for a sample collected while a person has symptoms likely means that 2019-nCoV is not causing your current illness.

#### **Negative result if you are asymptomatic:**

While a negative test most likely means you do not have 2019-nCoV infection, patients who have no symptoms may:

- 1) in fact, not be infected with nCoV, or
- 2) have an infection that has not developed enough to be detected by the test. Optimum specimen types and timing for peak viral levels during infections caused by 2019-nCoV have not been determined so collection of multiple specimens (types and time points) may be necessary to definitively rule out 2019-nCoV viral presence in asymptomatic PUI's.

## **WHAT CDC IS DOING**

### **CDC Response in the United States:**

- 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 goal of the ongoing U.S. public health response is to detect new cases quickly and prevent further spread of 2019-nCoV in this country.
- CDC established a 2019-nCoV Incident Management Structure on January 7, 2020. On January 21, 2020, CDC activated its Emergency Operations Center to better provide ongoing support to the 2019-nCoV response.

- On January 27, 2020, CDC issued updated travel guidance for China, recommending that travelers avoid all nonessential travel to all of the country ([Level 3 Travel Health Notice](#)).
- The U.S. government has taken unprecedented steps with respect to travel in response to the growing public health threat posed by this new coronavirus.
  - Effective February 2, 2020, 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 parts of mainland China are allowed to enter the United States, but they are subject to health monitoring and possible quarantine for up to 14 days.
  - See more at: "[Proclamation on Suspension of Entry as Immigrants and Nonimmigrants of Persons who Pose a Risk of Transmitting 2019 Novel Coronavirus](#)"
- CDC issued an [updated interim Health Alert Notice \(HAN\) Update](#) to inform state and local health departments and healthcare professionals about this outbreak on February 1, 2020.
- On January 30, 2020, CDC published [guidance for healthcare professionals on the clinical care of 2019-nCoV patients](#).
- CDC has deployed multidisciplinary teams to Washington, Illinois, California, and Arizona to assist health departments with clinical management, contact tracing, and communications.
- CDC has developed a real time Reverse Transcription-Polymerase Chain Reaction (rRT-PCR) test that can diagnose 2019-nCoV in respiratory and serum samples from clinical specimens. On January 24, 2020, CDC [publicly posted the assay protocol](#) for this test. Currently, testing for this virus must take place at CDC.
- CDC submitted an Emergency Use Authorization package to the FDA on February 3, 2020.
- Once FDA approves the EUA, the CDC test kits will be distributed to domestic and international partners through the agency's [International Reagent Resource](#).
- CDC uploaded to GenBank the entire genome of the virus from reported cases in the United States as sequencing was completed.
- CDC also is growing the virus in cell culture, which is necessary for further studies, including for additional genetic characterization.

#### **Internationally:**

- CDC is working diligently and closely with partners to support the response to this novel coronavirus outbreak.
- CDC will work through WHO's China country office to support Chinese public health counterparts and help improve understanding of this new disease, including learning more about transmissibility and severity.
- One Beijing-based CDC expert is currently working with WHO in China and additional CDC headquarters experts are being identified and prepared for deployment.
- CDC staff based in 60+ countries around the world are working closely with ministries of health and other health partners to prepare and respond to the novel coronavirus.
- In addition to working with host country officials, CDC staff are working in coordination with Department of State and other agencies within U.S. embassies.
- CDC is mobilizing Atlanta-based staff to support the response. Many of these staffers have extensive experience responding to global outbreaks.

- CDC and the government of China have collaborated for the past 30 years addressing public health priorities affecting the U.S., China, and the world.
- CDC works closely with countries to establish Field Epidemiology Training Programs (FETPs) that train a workforce of field epidemiologists —or disease detectives— to identify and contain outbreaks close to the source.
- In China, CDC is the primary technical partner for the Chinese FETP. Using classroom and hands-on experience, this program has graduated 279 epidemiologists who conducted more than 2,000 outbreak investigations as part of their training.
- Specialized training tracks are now being established in non-communicable diseases and tuberculosis.
- With technical guidance from CDC, 71 graduates completed training for the new Western FETP that supports 13 under-served provinces of China — remote areas more vulnerable to novel infections and with increasing transport corridors.
- CDC has supported China CDC’s national influenza laboratory for more than 20 years.
- CDC works in close partnership with the China CDC’s National Influenza Epidemiology, Virology, and Pandemic Preparedness Centers, China’s provincial and local CDCs, hospitals, and academic institutions.
- CDC supports Chinese partners in monitoring seasonal and novel influenza viruses, as well as enhancing efforts to detect and respond to seasonal, avian, and other novel influenza viruses with pandemic potential. CDC’s key supporting activities include:
  - Strengthening influenza surveillance for seasonal and novel influenza viruses
  - Conducting research to estimate disease burden and vaccine effectiveness among populations at greatest risk (including young children, older adults, and pregnant women)
  - Promoting influenza vaccination policy development and coverage
  - Supporting novel virus risk assessments
  - Establishing pandemic influenza preparedness in China
  - Maintaining close ties between U.S. and China influenza experts

## RECOMMENDATIONS

CDC routinely advises that people help protect themselves from respiratory illnesses by washing their hands often, avoiding touching their face with unwashed hands, avoiding close contact with people who appear sick, and cleaning frequently touched surfaces.

### **Recent Travelers to China:**

If you were in China and feel sick with fever, cough, or difficulty breathing, within 14 days after leaving the country, you should:

- Seek medical advice. Before you go to a doctor’s office or emergency room, call ahead and tell them about your recent travel and your symptoms.
- Avoid contact with others.
- Not travel while sick.
- Cover your mouth and nose with a tissue or your sleeve (not your hands) when coughing or sneezing.

- Wash your hands often with soap and water for at least 20 seconds to avoid spreading the virus to others. Use an alcohol-based hand sanitizer if soap and water are not available.

**People Confirmed to Have, or Being Evaluated for, 2019-nCoV:**

Your doctors and public health staff will evaluate whether you can be cared for at home. If it is determined that you can be isolated at home, you will be monitored by staff from your local or state health department. You should follow the prevention steps below until a healthcare professional or local or state health department says you can return to your normal activities. Detailed information is available at [Interim Guidance for Preventing 2019 Novel Coronavirus \(2019-nCoV\) from Spreading to Others in Homes and Communities](#).

- Stay home except to get medical care.
- Separate yourself from other people in your home.
- Call ahead before visiting your doctor.
- Wear a facemask.
- Cover your coughs and sneezes with a tissue or cough or sneeze into your sleeve.
- Wash your hands often with soap and water for at least 20 seconds.
- Avoid sharing household items like eating utensils, cups, or linens.
- Monitor your symptoms and seek prompt medical attention if your symptoms worsen.

**On February 3, 2020, CDC published interim guidance for state and local public health officials on how to assess and manage the risks posed by patients who may have been exposed to the 2019-nCoV virus.**

- This guidance establishes four risk categories: High, Medium, Low and No Identifiable Risk.
- The categories are based on a person’s travel history and possible contact with patients who have laboratory-confirmed infections.
- The guidance **offers recommendations** for movement restrictions and public health evaluations for people in different risk categories.
- **In most cases, state and local authorities will make these decisions. Federal public health authority primarily extends to international arrivals at ports of entry and preventing interstate communicable disease threats.**
- These guidelines are subject to change as the situation requires. They do not apply retroactively to people who have been in China during the previous 14 days and are already in the United States, or those being managed as part of a contact investigation.
- CDC will provide separate guidance for healthcare settings.

**Close Contacts of Patients Under Investigation:**

People who have had close contact with someone who is confirmed to have, or being evaluated for, 2019-nCoV infection, should:

- Monitor your health starting from the day you first had close contact with the person and continue for 14 days after you last had close contact with the person. Watch for these signs and symptoms:
  - Fever—take your temperature twice a day.
  - Coughing.
  - Shortness of breath or difficulty breathing.

- Other early symptoms to watch for are chills, body aches, sore throat, headache, diarrhea, nausea, vomiting, and runny nose.
- **If you develop fever or any of these symptoms, call your healthcare professional right away.**
  - **Before** going to your medical appointment, be sure to tell your healthcare professional about your close contact with someone who is confirmed to have, or being evaluated for, 2019-nCoV infection. This notification will help the healthcare professional’s office take steps to keep other people from getting infected. Ask your healthcare professional to call the local or state health department.
- If you do not have any symptoms, you can continue with your daily activities, such as going to work, school, or other public areas.

Detailed information for caregivers and household members can be found on the [Interim Guidance for Preventing 2019 Novel Coronavirus \(2019-nCoV\) from Spreading to Others in Homes and Communities](#) web page.

**For Healthcare Professionals:**

Patients in the United States who meet the following criteria should be evaluated as a patient under investigation (PUI) in association with the outbreak of 2019-nCoV in Wuhan City, China.

Clinical Features	&	Epidemiologic Risk
Fever <b>or</b> signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)	<b>AND</b>	Any person, including healthcare workers, who has had close contact with a laboratory-confirmed 2019-nCoV patient within 14 days of symptom onset
Fever <b>and</b> signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)	<b>AND</b>	A history of travel from <b>Hubei Province</b> , China within 14 days of symptom onset
Fever <b>and</b> signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization	<b>AND</b>	A history of travel from mainland <b>China</b> within 14 days of symptom onset

**Note:** Fever may be subjective or confirmed. The criteria are intended to serve as guidance for evaluation. Patients should be evaluated and discussed with public health departments on a case-by-case basis if their clinical presentation or exposure history is equivocal (e.g., uncertain travel or exposure). The above criteria are available on the [Interim Guidance for Healthcare Professionals web page](#).

### **Recommendations for Reporting, Testing, and Specimen Collection:**

- Healthcare professionals should **immediately** notify both infection control personnel at their healthcare facility AND their local or state health department in the event of a PUI for 2019-nCoV.
- State health departments that have identified a PUI should immediately contact CDC's Emergency Operations Center (EOC) at 770-488-7100 and complete a 2019-nCoV PUI case investigation form available on [CDC's Interim Guidance for Healthcare Professionals](#).
- At this time, diagnostic testing for 2019-nCoV can be conducted only at CDC.
- Clinical specimens should be collected from PUIs for routine testing of respiratory pathogens at either clinical or public health labs. Note that clinical laboratories should NOT attempt viral isolation from specimens collected from 2019-nCoV PUIs.
- Testing for other respiratory pathogens should not delay specimen shipping to CDC.
- **For biosafety reasons, it is not recommended to perform virus isolation in cell culture or initial characterization of viral agents recovered in cultures of specimens from a PUI for 2019-nCoV.**
- To increase the likelihood of detecting 2019-nCoV infection, CDC recommends collecting and testing multiple clinical specimens from different sites, including all three specimen types— lower respiratory, upper respiratory, and serum specimens. Additional specimen types (e.g., stool, urine) may be collected and stored initially until decision is made by CDC whether additional specimen sources should be tested. Specimens should be collected as soon as possible once a PUI is identified regardless of time of symptom onset. Maintain [proper infection control](#) when collecting specimens.

[Additional guidance for collection, handling, and testing of clinical specimens is available](#) on CDC's website. Detailed information on specimen types and shipping can be found on the [Information for Laboratories](#) web page.