CORONAVIRUS DISEASE 2019 (COVID-19)

REPORTING INFORMATION

- **Class A with special reporting requirements:** *Confirmed* and *Probable* cases of COVID-19 should be reported within twenty-four hours to the local health district in which the person resides. If patient residence is unknown, report to the local public health department in which the reporting health care provider or laboratory is located.

- Reporting Form(s) and/or Mechanism:
  - Report within twenty-four (24) hours.
  - The local health department should enter the case into the Ohio Disease Reporting System (ODRS) within 24 hours after receiving a report.
  - The Centers for Disease Control and Prevention (CDC) Human Infection with 2019 Novel Coronavirus Case Report Form is available for use to assist in local disease investigation. Information collected from the form should be entered into ODRS. If requested, the form can be uploaded to the ODRS record.

- Key information for ODRS reporting includes: illness onset date; sensitive occupation (including location); race and ethnicity (critical to address disparities); clinical information; hospitalization status; lab results, collection date and test type; signs/symptoms/comorbidities; known contact or linkage to COVID-19 cases; travel history; membership in a risk cohort as defined below.

AGENT

SARS-CoV-2 is a novel species of the *Coronaviridae* virus family, Beta-CoV lineage B.d

**Infectious Dose:** Unknown

CASE DEFINITION

**Clinical Criteria**

To meet the clinical criteria, a patient must meet either criteria 1 and 3, or criteria 2 and 3 below.

1) At least two of the following symptoms: fever (measured or subjective), chills, rigors, myalgia, headache, sore throat, new olfactory and taste disorder(s)
   OR
   At least one of the following symptoms: cough, shortness of breath, or difficulty breathing

OR

2) Severe respiratory illness with at least one of the following:
   - Clinical or radiographic evidence of pneumonia, or
   - Acute respiratory distress syndrome (ARDS).

AND

3) No alternative more likely diagnosis
Laboratory Criteria
Laboratory evidence using a method approved or authorized by the U.S. Food and Drug Administration (FDA) or designated authority:

Confirmatory laboratory evidence:
- Detection of SARS-CoV-2 RNA in a clinical specimen using a molecular amplification detection test

Presumptive laboratory evidence:
- Detection of specific antigen in a clinical specimen
- Detection of specific antibody in serum, plasma, or whole blood indicative of a new or recent infection*

*serologic methods for diagnosis are currently being defined

Epidemiologic Linkage
One or more of the following exposures in the 14 days before onset of symptoms:
- Close contact** with a person who is lab-confirmed with COVID-19

   OR

- Close contact** with a person with:
  - Clinically compatible illness AND
  - Linkage to a confirmed case of COVID-19 disease

   OR

- Member of a risk cohort as defined by public health authorities during an outbreak.
  - In Ohio, the following are identified as risk cohorts:
    - Hospitalized patients
    - Healthcare workers
    - First responders (including law enforcement, fire services, emergency medical services, and emergency management officials)
    - Residents of long-term care facilities
    - Members of other congregate settings (e.g., group homes, schools, colleges or universities, correctional and detention facilities)

**Close contact is generally defined as being within 6 feet for a period of 15 minutes or more depending upon the exposure. Please see section titled Contacts on page 6 for additional details. Data are insufficient to precisely define the duration of exposure that constitutes prolonged exposure and thus a close contact.

Vital Records Criteria
- A death certificate that lists COVID-19 disease or SARS-CoV-2 as a cause of death or a significant condition contributing to death.
Criteria to Distinguish a New Case from an Existing Case
Not applicable until more virologic data are available.

CASE CLASSIFICATION
Probable:
- Meets clinical criteria AND epidemiologic evidence with no confirmatory laboratory testing performed for COVID-19; OR
- Meets presumptive laboratory evidence AND either clinical criteria OR epidemiologic evidence; OR
- Meets vital records criteria with no confirmatory laboratory testing performed for COVID-19.

Confirmed:
- Meets confirmatory laboratory evidence. NOTE: Asymptomatic infections are reportable as confirmed cases.

Not a Case:
- This status will not generally be used when reporting a case, but may be used to reclassify a report if investigation revealed that it was not a case.

SIGNS AND SYMPTOMS
Symptoms of COVID-19 are non-specific and the disease presentation can range from no symptoms (asymptomatic) to severe pneumonia and death. COVID-19 presents as a mild to moderate illness for approximately 80% of individuals evaluated with the disease; 15% of individuals experience severe illness requiring supplemental oxygen; and 5% experience critical illness requiring mechanical ventilation. People with COVID-19 generally develop signs and symptoms, including mild respiratory symptoms and fever ~5 days after infection (mean incubation period 4-5 days, range 1-14 days).

DIAGNOSIS
Patients who present with symptoms consistent with COVID-19 should also be evaluated for common causes of community-acquired pneumonia (e.g., influenza A and B viruses, respiratory syncytial virus, Streptococcus pneumoniae, and Legionella pneumophila). This evaluation should be based on clinical presentation and epidemiologic and surveillance information.

If infection with COVID-19 is suspected based on current clinical and epidemiological screening criteria recommended by public health authorities, healthcare providers should consider testing clinical specimens.

Testing for other respiratory pathogens should not delay shipping of specimens for COVID-19 testing for suspected cases. If a suspected case tests positive for another respiratory pathogen, after clinical evaluation and consultation with public health authorities, they may no longer be considered a suspect case. This may evolve as more information becomes available on possible COVID-19 co-infections.

If testing is to be performed at ODH Laboratory, use nasopharangeal swabs in viral transport media and include the ODH Laboratory Microbiology Specimen Submission Form (HEA 2530) with the specimen.

For initial diagnostic testing for SARS-CoV-2 (COVID-19), CDC recommends collecting an upper respiratory specimen. The following are acceptable specimens:
- Nasopharyngeal (NP) specimen collected by a healthcare professional, or
• Oropharyngeal (OP) specimen collected by a healthcare professional, or
• Nasal mid-turbinate (NMT) swab collected by a healthcare professional or by a supervised onsite self-collection (using a flocked tapered swab), or
• Anterior nares (nasal swab; NS) specimen collected by a healthcare professional or by onsite or home self-collection (using a flocked or spun polyester swab), or
• Nasopharyngeal wash/aspirate or nasal wash/aspirate (NW) specimen collected by a healthcare professional

Specimens should be collected as soon as possible once a suspected case is identified, regardless of the time of symptom onset. Maintain proper infection control when collecting specimens. Further guidance for collection, handling, and testing of clinical specimens is available at Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 (COVID-19)

Virus isolation in cell culture and initial characterization of viral agents recovered in cultures of COVID-19 specimens are NOT recommended at this time, except at a BSL3 facility.

See also:
• Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with Coronavirus Disease 2019 (COVID-19)

EPIDEMIOLOGY
Chinese health officials identified COVID-19 in Wuhan City, Hubei Province, China in December 2019 based on testing of individuals with severe pneumonia. On January 21, 2020, the United States announced its first infection with COVID-19 detected in a traveler returning from Wuhan. On March 9, 2020, Ohio reported its first COVID-19 cases. For an updated list of countries reporting confirmed COVID-19 cases, please visit the CDC website here.

Source
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. Most international destinations now have ongoing community spread with the virus that causes COVID-19, as does the United States.

Occurrence
COVID-19 is widespread through almost every country in the world.

Mode of Transmission
COVID-19, like other coronaviruses, is thought to mainly spread from person-to-person between people who are in close contact with one another (within about 6 feet) through respiratory droplets produced when an infected person coughs, sneezes or talks. Recent studies have suggested that COVID-19 may be spread by people who are not showing symptoms. However, the precise ways the virus spreads are not currently well understood.
**Period of Communicability**

Available data indicate that persons with mild to moderate COVID-19 remain infectious for no longer than 10 days after symptom onset. Persons with more severe to critical illness or severe immunocompromise likely remain infectious no longer than 20 days after symptom onset. Patients are believed to be contagious two days prior to symptom onset.

**Incubation Period**

The incubation period for COVID-19 is thought to extend to 14 days, with a median time of 4-5 days from exposure to symptom onset.

**PUBLIC HEALTH MANAGEMENT**

**Case Investigation**

Healthcare providers/Local health departments should continue to routinely ask about travel history and healthcare facility exposure and consider a diagnosis of COVID-19 infection in persons who present with symptoms consistent with COVID-19.

Detailed guidance on case investigation and contact tracing is available on the CDC website. See [Contact Tracing](#).

**Treatment**

There are no drugs or other therapeutics presently approved by the U.S. Food and Drug Administration (FDA) to prevent or treat COVID-19. Current clinical management includes infection prevention and control measures and supportive care, including supplemental oxygen and mechanical ventilatory support when indicated. The National Institutes of Health have published interim guidelines for the medical management of COVID-19.

**Isolation**

Although the transmission dynamics have yet to be determined, CDC currently recommends a cautious approach to patients under investigation for COVID-19 who require hospitalization for medical reasons. Such patients should be asked to wear a surgical mask as soon as they are identified and be evaluated in a private room with the door closed, ideally an airborne infection isolation room if available. Healthcare personnel entering the room should use standard precautions, contact precautions, airborne precautions, and use eye protection (e.g., goggles or a face shield). Guidance on isolation measures for patient in healthcare settings is available in CDC’s [Interim Infection Prevention and Control Recommendations for Patients with Suspected or Confirmed COVID-19 in Healthcare Settings](#). Immediately notify your healthcare facility’s infection control personnel and local health department.

Ill people who are being evaluated for COVID-19 infection and do not require hospitalization for medical reasons may be cared for and isolated in their home. Isolation is defined as the separation or restriction of activities of an ill person with a contagious disease from those who are well. Guidance on home care and isolation measures is available at CDC [Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for 2019 Novel Coronavirus (COVID-19)](#). Most people with COVID-19 have mild illness and can recover at home without medical care. Ill individuals should stay home, except to get medical care. Do not visit public areas. Visit the CDC page for [What to Do If You Are Sick](#) for more guidance on isolation.
The decision to monitor a patient in the inpatient or outpatient setting should be made on a case-by-case basis. This decision will depend on the clinical presentation, requirement for supportive care, potential risk factors for severe disease, and the ability of the patient to self-isolate at home. Patients with risk factors for severe illness should be monitored closely given the possible risk of progression to severe illness in the second week after symptom onset.

Discontinuation of Isolation
For guidance on discontinuation of isolation and return to work criteria, please see:
- Discontinuation of Isolation for Persons with COVID-19 Not in Healthcare Settings
- Discontinuation of Transmission-Based Precautions and Disposition of Patients with COVID-19 in Healthcare Settings
- Criteria for Return to Work for Healthcare Personnel with SARS-CoV-2 Infection

Detailed guidance on patients with persistent or recurrent positive tests is available on the CDC website. See Clinical Questions about COVID-19: Questions and Answers.

Contacts
Close contact is defined as: someone who was within 6 feet of an infected person for at least 15 minutes starting from 48 hours before illness onset (or, for asymptomatic clients, 48 hours prior to positive specimen collection) until the time the patient is isolated. Data are limited to precisely define the "prolonged exposure" to determine "close contact", however 15 minutes of close exposure can be used as an operational definition for contact investigation. Factors to consider when defining close contact include proximity, the duration of exposure (e.g., longer exposure time likely increases exposure risk), whether the individual has symptoms (e.g., coughing likely increases exposure risk) and whether either the case patient or contact were wearing an N95 respirator (which can efficiently block respiratory secretions from contaminating others and the environment). At this time, differential determination of close contact for those using cloth face coverings is not recommended at this time.

In healthcare settings, close contact for healthcare exposures is defined as follows: a) being within approximately 6 feet of a person with COVID-19 for a prolonged period of time (such as caring for or visiting the patient; or sitting within 6 feet of the patient in a healthcare waiting area or room) while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection); or b) having unprotected direct contact with infectious secretions or excretions of the patient (e.g., being coughed on, touching used tissues with a bare hand). It is reasonable to consider an exposure of 15 minutes or more as prolonged. However, any duration should be considered prolonged if the exposure occurred during performance of an aerosol generating procedure.

As part of investigation of confirmed cases, in consultation with a state or local health department, a person who develops fever or symptoms of respiratory illness within 14 days following close contact with a confirmed case of COVID-19 while the case was ill should be evaluated for COVID-19 infection.

Close contacts of a confirmed case who are ill and do not require hospitalization for medical reasons may, in consultation with the state and local health department, be cared for and isolated in their home while being evaluated for COVID-19 infection.

Close contacts of a confirmed or probable case should be quarantined for 14 days after their last contact with a case.

**Outbreaks**
Please follow existing ODH guidance on outbreaks in Section 3 of the IDCM.

Outbreak resolution is defined as: No new symptomatic/asymptomatic probable or confirmed COVID-19 cases after 28 days (two incubation periods) have passed since the last case’s onset date or specimen collection date (whichever is later).

**Prevention and Control**
The best way to prevent illness is to avoid being exposed to COVID-19. The virus that causes COVID-19 is thought to spread mainly from person-to-person through respiratory droplets produced when an infected person coughs, sneezes or talks. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. Spread is more likely between people who are in close contact with one another (within about 6 feet). To prevent illness:

- **Wash hands** often with soap and water for at least 20 seconds especially after you have been in a public place or after blowing your nose, coughing or sneezing.
- If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
- Avoid touching your eyes, nose, and mouth with unwashed hands.

**Additional Resources**

- [Infectious Diseases Society of America Guidelines on the Treatment and Management of Patients with COVID-19](https://www.idsociety.org/practice-guidelines/coronavirus/)
- [WHO Clinical management of severe acute respiratory infection when COVID-19 is suspected](https://www.who.int/publications/m/item/clinical-management-of-severe-acute-respiratory-infection-when-covid-19-is-suspected)
What is COVID-19?

COVID-19 is a respiratory illness. It is caused by a virus called SARS-CoV-2. This virus was first identified in 2019 in Wuhan City, Hubei Province, China. It is different from any other coronaviruses that have been found in people before.

What are the symptoms and complications of COVID-19?

People with COVID-19 have had a wide range of symptoms reported, ranging from mild symptoms to severe illness. Symptoms may include:

- Fever or chills
- Cough
- Shortness of breath or difficulty breathing
- Fatigue
- Muscle pain or body aches
- Headache
- Sore throat
- New loss of taste or smell
- Congestion or runny nose
- Nausea or vomiting
- Diarrhea

Complications of COVID-19 may include respiratory failure, shock or multiorgan system dysfunction.

How does the virus spread?

The virus that causes COVID-19 is thought to spread mainly from person-to-person, through respiratory droplets produced when an infected person coughs, sneezes or talks. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. Spread is more likely between people who are in close contact with one another (within about 6 feet). Some recent studies suggest that COVID-19 may be spread by people who are not displaying symptoms. It may be possible that a person can get COVID-19 by touching a contaminated surface or object and then touching their own mouth, nose, or possibly their eyes (this is not thought to be the main way the virus spreads).

The virus that causes COVID-19 is spreading very easily and sustainably between people.

Prevention and Control

The best way to prevent illness is to avoid being exposed to COVID-19. The virus that causes COVID-19 is thought to spread mainly from person-to-person through respiratory droplets produced when an infected person coughs, sneezes or talks. These droplets can land in the mouths and noses of people who are nearby or possibly be inhaled into the lungs. Spread is more likely between people who are in close contact with one another (within about 6 feet). To prevent illness:

- Avoid close contact with people who are sick, stay at home as much as possible, and put distance between yourself and other people.
- Cover your mouth and nose with a cloth face cover when around others.
- Clean and disinfect frequently touched surfaces daily.
• Wash hands often with soap and water for at least 20 seconds especially after you have been in a public place or after blowing your nose, coughing or sneezing.
• If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
• Avoid touching your eyes, nose and mouth with unwashed hands.

Is there a vaccine?
There is currently no vaccine to protect against COVID-19.

What are the treatments?
Treatment is supportive. There are currently no FDA-approved drugs.

What do I do if I am sick with COVID-19 and have pets?
If you are sick with COVID-19 (either suspected or confirmed by a test), you should restrict contact with your pets and other animals, just like you would with people.
• Have another member of your household care for your pets while you are sick, if possible.
• Avoid contact with your pet including petting, snuggling, being kissed or licked and sharing food or bedding.
• If you must care for your pet or be around other animals while you are sick, wear a cloth face covering and wash your hands before and after you interact with them.

If you are sick with COVID-19 and your pet becomes sick, do not take your pet to the veterinary clinic yourself. Call your veterinarian and let them know you have been sick with COVID-19. Some veterinarians may offer telemedicine consultations or other plans for seeing sick pets. Your veterinarian can evaluate your pet and determine the next steps for your pet’s treatment and care. Routine testing of animals is not recommended at this time.

What can I do to protect my pet and my family from COVID-19?
Until we learn more about how this virus affects animals, treat pets as you would other human family members to protect them from a possible infection.
• Do not let pets interact with people or other animals outside the household.
• Keep cats indoors when possible to prevent them from interacting with other animals or people.
• Walk dogs on a leash, maintaining at least 6 feet (2 meters) from other people and animals.
• Avoid dog parks or public places where a large number of people and dogs gather.