CORONAVIRUS DISEASE 2019
(COVID-19)

Includes information on Multisystem Inflammatory Syndrome in Children (MIS-C) under section, "SIGNS AND SYMPTOMS".

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 health department in which the reporting health care provider or laboratory is located.
- Reporting Form(s) and/or Mechanism:
  - Persons in charge of any laboratory that examines specimens of human origin for evidence of COVID-19 infection shall electronically report within twenty-four (24) hours the results of all such examination, including, but not limited to: positive, negative, invalid, and inconclusive results.
  - Laboratory results should be electronically reported according to the protocols outlined for COVID-19 reporting on the Ohio Department of Health (ODH) Electronic Laboratory Reporting website.
    - Electronically reported negative, invalid, and inconclusive viral test results, in addition to all antibody results, will be stored within the Innovate Ohio Platform Data Lake. These results will be submitted to the Centers for Disease Control and Prevention (CDC) in accordance with national reporting requirements and will be used for percent positivity calculations. These results will not generate records within the Ohio Disease Reporting System (ODRS) as public health investigation is not required.
  - The local health department should enter the case into ODRS within 24 hours after receiving a report.
    - The 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, nausea or vomiting, diarrhea, fatigue, congestion or runny nose
  OR
- At least one of the following symptoms: cough, shortness of breath, difficulty breathing, new olfactory disorder, new taste disorder

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 or autopsy specimen using a molecular amplification detection test

Presumptive laboratory evidence:

- Detection of SARS-CoV-2 by antigen test in a respiratory specimen

Supportive laboratory evidence:

- Detection of specific antibody in serum, plasma, or whole blood
- Detection of specific antigen by immunocytochemistry in an autopsy specimen

*Laboratory developed tests (LDTs) are not currently being reviewed by the U.S. Food and Drug Administration. If a LDT is used, the case will be classified according to routine procedures. If a test-based strategy is being used to inform discontinuation of isolation precautions or return-to-work timeframes, specimens must be tested using an FDA-authorized molecular viral assay to detect SARS-CoV-2 RNA.

Epidemiologic Linkage

One or more of the following exposures in the 14 days before onset of symptoms (or, for asymptomatic persons, the 14 days before a positive test for SARS-CoV-2 was collected):

- Close contact* with someone with confirmatory or presumptive laboratory evidence of SARS-CoV-2 infection

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 level and setting. 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 an underlying cause of death or a significant condition contributing to death.

CASE CLASSIFICATION

Suspected:

- Meet supportive laboratory evidence with no prior history of being a confirmed or probable case.

Probable:

- Meets presumptive laboratory evidence AND was reported on or after November 1, 2020; OR
    - For reports received prior to November 1, 2020: meets presumptive laboratory evidence **AND** either clinical criteria **OR** epidemiologic linkage; OR
- Meets clinical criteria **AND** epidemiologic linkage with no confirmatory laboratory testing performed for SARS-CoV-2; OR
- Meets vital records criteria with no confirmatory laboratory evidence for SARS-CoV-2.

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.
- For surveillance purposes, records should be classified as "Not a Case" if SARS-CoV-2 RNA in an initial clinical specimen is not detected using a confirmatory laboratory test and the confirmatory test was collected within 1 week of symptom onset; or if SARS-CoV-2 RNA is not detected using a confirmatory laboratory test within 2 days following a rapid antigen test. For considerations related to public health management, please see section titled **Public Health Management** on page 5.

Criteria to Distinguish a New Case from an Existing Case

- Not applicable until more data are available: at this time, there has been minimal evidence for re-infection among persons with a prior confirmed COVID-19 infection.
- For surveillance purposes, additional positive test results following an initial positive should continue to be added to the same record in ODRS.

- Considerations for public health management of persons with persistent or recurrent positive tests are available in CDC's Clinical Questions about COVID-19: Questions and Answers. If a potential case of reinfection is suspected, guidance for public health management remains the same for reinfections as primary infection with SARS-CoV-2.

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).

Multisystem Inflammatory Syndrome in Children (MIS-C)

MIS-C is a condition where different body parts can become inflamed, including the heart, lungs, kidneys, brain, skin, eyes, or gastrointestinal organs. Children with MIS-C may present with persistent fever, abdominal pain, vomiting, diarrhea, skin rash, mucocutaneous lesions, and in severe cases, hypotension and shock. Patients usually have elevated markers of inflammation, and some patients may develop myocarditis, cardiac dysfunction, and acute kidney injury. Additional clinical considerations are available in CDC's Information for Healthcare Providers about MIS-C. We do not currently know what causes MIS-C. However, many children with MIS-C were recently infected with SARS-CoV-2 or had been around someone with COVID-19.

The case definition for MIS-C is available here. Per the ODH Director's Journal Entry dated May 15, 2020, MIS-C is a reportable condition. LHDs who are notified of confirmed or suspected cases of MIS-C should notify ODH via entry into ODRS within 24 hours of identification. A MIS-C case report form should be completed and attached to the ODRS record; a fillable MIS-C case report form is available here.

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 nasopharyngeal 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)

Considerations for Interpreting Test Results and Public Health Management

Information on the performance of rapid antigen rests for SARS-CoV-2 and evaluation of results, including considerations for when confirmatory testing might be warranted, is available in CDC's Interim Guidance for Rapid Antigen Testing for SARS-CoV-2. Guidance specific to antigen testing in nursing homes is available in CDC's Considerations for Use of SARS-CoV-2 Antigen Testing in Nursing Homes.

The "gold standard" for clinical diagnostic detection of SARS-CoV-2 remains RT-PCR; these tests are highly sensitive and specific, but a false negative result is possible.

- When a confirmatory test is negative but epidemiologic linkage and clinical criteria are met, persons should follow isolation protocols for COVID-19 unless an alternative etiology is identified after evaluation by a healthcare provider. If an alternative etiology is identified, persons should follow quarantine protocols for COVID-19 due to epidemiologic linkage.
- For asymptomatic persons, when a confirmatory test is negative but epidemiologic linkage criteria are met, persons should follow quarantine protocols for COVID-19.
- For residents or healthcare personnel in nursing homes, please follow CDC's guidance for Considerations for Use of SARS-CoV-2 Antigen Testing in Nursing Homes (testing algorithm available here).

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 COVID-19 travel recommendations by country, 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, talks, or breathes. While evidence suggests that COVID-19 can sometimes be spread by airborne transmission, it most commonly spreads during close contact. COVID-19 may be spread by people who are not showing symptoms. The precise ways the virus spreads is an area of continued study.

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 (or, for persons who tested positive for COVID-19 but have not had any symptoms, the two days before the date the first positive viral test was collected).

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 Developing a COVID-19 Case Investigation and Contact Tracing Plan.

Treatment
The National Institutes of Health (NIH) has published guidelines on testing and management of patients with COVID-19. For more information, please visit the NIH COVID-19 Treatment Guidelines. Current clinical management includes infection prevention and control measures and supportive care, including supplemental oxygen and mechanical ventilatory support when indicated. The U.S. Food and Drug Administration (FDA) has approved one drug, remdesivir (Veklury), for the treatment of COVID-19 in certain situations.

Early effective treatment of any disease can help avert progression to more serious illness, especially for patients at high risk of disease progression and severe illness, with

the additional benefit of reducing the burden on healthcare systems. A number of novel therapeutics (e.g., monoclonal antibodies) are available under EUA for early outpatient treatment. Trials to assess the potential effectiveness of these therapeutics in outpatients at high risk of disease progression are ongoing. Clinicians and patients who wish to consider their use, or the use of any other available investigational therapies, should review the COVID-19 Treatment Guidelines as well as the FDA EUA for the therapy.

Vaccines and General Public Health Recommendations for Vaccinated Persons
Currently, two vaccines are authorized and recommended to prevent COVID-19:

- Pfizer-BioNTech COVID-19 vaccine
- Moderna COVID-19 vaccine

Given the currently limited information on how much the mRNA COVID-19 vaccines may reduce transmission in the general population and how long protection lasts, vaccinated persons should continue to follow current guidance to protect themselves and others. This includes wearing a mask, staying at least 6 feet away from others, avoiding crowds, avoiding poorly ventilated spaces, washing hands often, following CDC travel guidance, and following any applicable workplace or school guidance, including guidance related to personal protective equipment use or SARS-CoV-2 testing.

For quarantine recommendations for vaccinated persons, please see information under "Contacts", below.

Please see CDC's Interim Clinical Considerations for Use of mRNA COVID-19 Vaccines for additional details and most current information.

Isolation
Patients with suspected or confirmed SARS-CoV-2 infection should be asked to wear a facemask or cloth face covering, if tolerated, and be evaluated in a private room with the door closed and a dedicated bathroom. Airborne infection isolation rooms (AIIRs) should be reserved for patients who will be undergoing aerosol generating procedures. 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 Healthcare Personnel During the COVID-19 Pandemic. Immediately notify your healthcare facility's infection control personnel and local health department.

Ill people who are being evaluated for SARS-CoV-2 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 in CDC's Interim Guidance for Implementing Home Care of People Not Requiring Hospitalization for 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 and should 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 testing, isolation, and quarantine for persons who have recovered from previous SARS-CoV-2 infection (including 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 (total/cumulative time) starting from 2 days before illness onset (or, for asymptomatic clients, 2 days prior to positive specimen collection) until the time the patient is isolated. Additionally, a person would be considered a close contact if they provided care in the home to someone who is sick with COVID-19, had direct physical contact with them (e.g., hugged or kissed them), shared eating or drinking utensils, or had unprotected direct contact with infectious secretions or excretions of the infected person (e.g., was coughed/sneezed on, touched used tissues with a bare hand). Data are limited to precisely define 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) and whether the individual has symptoms (e.g., coughing likely increases exposure risk). At this time, differential determination of close contact for those using cloth face coverings or barriers (e.g., plastic dividers) is not recommended.

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/sneezed 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, testing is recommended for close contacts of persons with SARS-CoV-2 infection because of the potential for asymptomatic and pre-symptomatic transmission. Persons with known or suspected exposure to SARS-CoV-2 should continue to follow quarantine protocols for COVID-19 even if they are tested and results are negative.

Evaluation and management of close contacts of a case should be discussed with state and local health departments. See CDC Public Health Guidance for Community-Related Exposure, Public Health Guidance for Potential COVID-19 Exposure Associated with

International or Domestic Travel and Interim U.S. Guidance for Risk Assessment and Work Restrictions for Healthcare Personnel with Potential Exposure to COVID-19.

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 as described below. When COVID-19 is suspected, prompt initiation of quarantine protocols for close contacts may be warranted to prevent the potential spread of SARS-CoV-2 while the individual with suspected COVID-19 awaits test results or evaluation by a healthcare provider.

Detailed guidance on quarantine for persons who have recovered from previous SARS-CoV-2 infection is available on the CDC website. See Clinical Questions about COVID-19: Questions and Answers.

- If a person has clinically recovered from SARS-CoV-2 infection and is then identified as a contact of a new case 3 months or more after the date of symptom onset of their previous illness episode (or date of first positive viral diagnostic test [PCR or antigen test] if the person never experienced symptoms), then they should follow quarantine recommendations for contacts and undergo repeat viral diagnostic testing.
- If a person has clinically recovered from SARS-CoV-2 infection that was verified with a viral diagnostic test and then, within 3 months since the date of symptom onset of the previous illness episode (or date of positive viral diagnostic test if the person never experienced symptoms), is identified as a contact of a new case and remains asymptomatic, then they do not need to be retested for SARS-CoV-2 and do not need to be quarantined. However, if the person experiences new symptoms consistent with COVID-19 and a clinical evaluation fails to identify a diagnosis other than SARS-CoV-2 infection, then repeat viral diagnostic testing may be warranted, in consultation with a clinical provider.

Vaccinated persons* with an exposure to someone with suspected or confirmed COVID-19 are not required to quarantine if they meet all of the following criteria:

- Are fully vaccinated (i.e., ≥ 2 weeks following receipt of the second dose in a 2-dose series, or ≥ 2 weeks following receipt of one dose of a single-dose vaccine)
- Are within 3 months following receipt of the last dose in the series
- Have remained asymptomatic since the current COVID-19 exposure

*Vaccinated inpatients and residents in healthcare settings should continue to quarantine following an exposure to someone with suspected or confirmed COVID-19; outpatients should be cared for using appropriate Transmission-Based Precautions. This exception is due to the unknown vaccine effectiveness in this population, the higher risk of severe disease and death, and challenges with social distancing in healthcare settings.

For additional information on post-vaccination recommendations see Interim Clinical Considerations for Use of mRNA COVID-19 Vaccines Currently Authorized in the United States.

On December 2, 2020, the Centers for Disease Control and Prevention (CDC) released a scientific brief with considerations for reducing quarantine for COVID-19. Recommendations for quarantine adapted by ODH support efficient use of resources and a reduced risk of post-quarantine transmission:

- **Optimal Duration to Minimize Risk of Transmission:** Standard 14-day quarantine period. A 14-day quarantine period presents the lowest risk of post-quarantine transmission. This strategy is preferred for people living, working at, or visiting congregate living facilities, high density workplaces, or other settings where potential extensive transmission or contact with people at increased risk for severe illness from COVID-19 is possible.
- **Reduced Duration 1:** Stay at home for at least 10 days after last exposure AND symptom monitoring through day 14. Consider obtaining a viral test at the end of this period (day 8 or later) to increase certainty that the individual is not infected, but quarantine cannot be discontinued earlier than after day 10.
- **Reduced Duration 2:** Negative viral test result for SARS-CoV-2 from a test collected on day 5 or later after last exposure AND stay at home for at least 7 days after last exposure AND symptom monitoring through day 14.

Recommended actions during quarantine, regardless of duration, include staying at home until quarantine may be discontinued, maintaining social distance (at least 6 feet) from others, wearing a mask when around other people, and self-monitoring for symptoms of COVID-19 through day 14. Persons who develops symptoms of COVID-19 or who test positive for SARS-COV-2 should self-isolate and follow recommendations for discontinuing isolation.

Special Considerations for Quarantine in In-Person K-12 Classroom Environments

Students and adults within K-12 schools who meet the definition of close contact of someone with COVID-19 should be notified of their exposure based on normal public health and school policies. Such notifications help ensure that families can make informed decisions for activities which occur outside of the classroom setting, including interaction with vulnerable populations. Students and their parents or guardians should be advised to restrict their activities outside of the classroom, including gatherings with individuals outside of their household and activities where face masks cannot be safely or effectively worn.

Students and adults within K-12 schools may continue to attend in-person school if the following conditions are met:

- The school has documented COVID-19 prevention policies, including universal mask wearing, social distancing, handwashing, identification and management of students exhibiting symptoms of COVID-19, and routine environmental cleaning and disinfection protocols.
- The exposure occurred **within a classroom environment** or while on required school transport (e.g., school buses).
- The case and any associated contacts were wearing face masks that covered their nose and mouth at all times.
    - If meals were consumed, a distance of at least 6 feet between students must have been maintained.
- Social distancing was maintained.
    - CDC defines acceptable distancing as a minimum of 6 feet. In accordance with the American Academy of Pediatrics, desks should be placed ideally 6 feet apart and at a minimum 3 feet. This may be considered for school quarantine recommendations. (https://services.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/clinical-guidance/covid-19-planning-considerations-return-to-in-person-education-in-schools/).

- If transmission in the school has been identified, quarantine should be implemented for students and staff identified as close contacts. Schools should then work with their local health department to assess policies and procedures.

Contacts should self-monitor for symptoms for 14 days following exposure. Any contact who develops symptoms should be isolated away from other students and adults and evaluated for COVID-19.

Students and adults should continue to follow normal protocols for quarantine when outside of the K-12 classroom environment, including staying home and if possible, staying away from people who are at higher risk severe illness from COVID-19. During the quarantine period, students may not participate in extracurricular activities outside of a classroom environment, such as sports practices or games.

Outbreaks
Please follow existing ODH guidance on outbreaks in Section 3 of the IDCM. For COVID-19, an outbreak is defined as two or more cases who are epidemiologically linked with a common exposure in a community, institutional, or healthcare setting*, do not share a household, and were not identified as close contacts of each other in another setting during standard case investigation and contact tracing.

*For long-term care facilities**, one case of facility-onset COVID-19 in a resident is considered an outbreak. Facility-onset COVID-19 is defined as a COVID-19 diagnosis 14 days or more after admission for a non-COVID condition, without an exposure during the previous 14 days to another setting where an outbreak was known or suspected to be occurring; it does not include residents who were known to have COVID-19 on admission or who were placed into transmission-based precautions upon admission and developed COVID-19 within 14 days after admission.

**Including long-term acute care hospitals, skilled nursing facilities, assisted living facilities, residential care facilities, intermediate care facilities for the intellectually disabled, wrap-around facilities, and any other facilities providing comparable services.

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, talks, or breathes. 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

CDC Coronavirus (COVID-19)

Evaluating and Testing Persons for Coronavirus Disease 2019 (COVID-19)

CDC Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19)

CDC Information for Pediatric Healthcare Providers

Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons for Coronavirus Disease 2019 (COVID-19)

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

Infectious Diseases Society of America Guidelines on the Treatment and Management of Patients with COVID-19

WHO 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, talks, or breathes. These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs. COVID-19 can sometimes be spread by airborne transmission (when small droplets are able to infect people who are further than 6 feet away from the infected person or after that person has left the space), however, spread is more likely between people who are in close contact with one another (within about 6 feet). 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, talks, or breathes. 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?
Currently, two vaccines are authorized and recommended to prevent COVID-19:
- Pfizer-BioNTech COVID-19 vaccine
- Moderna COVID-19 vaccine

Initial supplies of COVID-19 vaccine are limited. It is important that vaccines are given to people in a fair, ethical, and transparent way. Those who are at highest risk of contracting and transmitting the virus will be among the first to be able to access vaccination. Once the vaccine is widely available, Ohio intends to have an orderly system for distributing the vaccine to anyone who chooses to receive it.

What are the treatments?
Treatment is supportive. The U.S. Food and Drug Administration (FDA) has approved one drug, remdesivir (Veklury), for the treatment of COVID-19 in certain situations. Early effective management of any disease can help prevent progression to more serious illness, especially for patients at high risk of disease progression and severe illness. If you are sick with COVID-19 or suspect you have COVID-19, please call your healthcare provider.

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.

Can I get COVID-19 from my pets or other animals?
Based on the limited information available to date, the risk of animals spreading COVID-19 to people is considered to be low. See If You Have Pets for more information about pets and COVID-19. However, since animals can spread other diseases to people, it's always good to practice healthy habits around pets and other animals, such as washing your hands and maintaining good hygiene. For more information on the many benefits of pet ownership, as well as staying safe and healthy around animals including pets, livestock, and wildlife, visit CDC's Healthy Pets, Healthy People website.

Can animals carry the virus that causes COVID-19 on their skin or fur?
Although we know certain bacteria and fungi can be carried on fur and hair, there is no evidence that viruses, including the virus that causes COVID-19, can spread to people from the skin, fur, or hair of pets. However, because animals can sometimes carry other germs that can make people sick, it's always a good idea to practice healthy habits around pets and other animals, including washing hands before and after interacting with them.

Can I use hand sanitizer on pets?
Do not wipe or bathe your pet with chemical disinfectants, alcohol, hydrogen peroxide, or other products, such as hand sanitizer, counter-cleaning wipes, or other industrial or surface cleaners. If you have questions about appropriate products for bathing or cleaning your pet, talk to your veterinarian. If your pet gets hand sanitizer on their skin or fur, rinse or wipe down your pet with water immediately. If your pet ingests hand sanitizer (such as by chewing the bottle) or is showing signs of illness after use, contact your veterinarian or pet poison control immediately.

What is known about COVID-19 and mink?
- SARS-CoV-2 has been reported in mink on farms in the Netherlands, Denmark, Spain, Italy, Sweden, and the United States.
- Because some workers on these farms had COVID-19, it is likely that infected farm workers were the initial source of the mink infections.
- Currently, there is no evidence that animals play a significant role in the spread of SARS-CoV-2 to people.