**DPHHS Coronavirus Disease 2019 (COVID-19) Investigation Guidelines**

For lab-confirmed cases of COVID-19, certain steps will help to limit the spread of disease and identify potentially exposed individuals. Namely, (1) we will isolate the case, and (2) conduct a contact investigation. Specific guidance documents are linked below with all recommendations based upon CDC guidance. Please call the DPHHS Communicable Disease Epidemiology Section with any questions: 406-444-0273.

**Table of Contents**

[LHJ COVID-19 reporting: 2](#_Toc36644182)

[State COVID-19 reporting: 2](#_Toc36644183)

[Isolation of COVID-19 Case: 2](#_Toc36644184)

[**Hospitalized Cases** 2](#_Toc36644185)

[**Cases not requiring hospitalization** 3](#_Toc36644186)

[Discontinuation of home isolation for COVID-19 cases 3](#_Toc36644187)

[Contact Investigation: 4](#_Toc36644188)

[1. Interviewing and assessing persons with COVID-19. 4](#_Toc36644189)

[2. Establish the jurisdiction and hospitalization: 4](#_Toc36644190)

[3. Investigate the source of COVID-19 exposure: 4](#_Toc36644191)

[4. Identify close contacts of case and possible sites of transmission. 5](#_Toc36644192)

[5. Guidance to assess community exposures for asymptomatic persons exposed to persons with known or suspected COVID-19. 5](#_Toc36644193)

[TABLE 1. Community-related exposures to persons with known or suspected COVID-19 5](#_Toc36644194)

[6. Guidance for all travelers. 6](#_Toc36644195)

[TABLE 2. Travel-related exposures to persons with known or suspected COVID-19 7](#_Toc36644196)

[7. Identify healthcare personnel caring for the COVID-19 case 7](#_Toc36644197)

[**Resources:** 8](#_Toc36644198)

[**CDC Case Definitions:** 8](#_Toc36644199)

[Case Investigation Tools: 8](#_Toc36644200)

[**1.** **Tool to Identify Sources of Infection** 8](#_Toc36644201)

[**2.** **Tool to Identify Exposed Contacts and Sites of Transmission** 10](#_Toc36644202)

## **LHJ COVID-19 reporting:**

1. Call CDEpi to notify them of the results immediately, 24/7: 406-444-0273
2. Securely fax or ePass the [CDC case report form](https://www.cdc.gov/coronavirus/2019-ncov/downloads/pui-form.pdf) to CDEpi (this is a pdf fillable form)
3. Enter COVID-19 investigation into MIDIS

**Information to collect and send to CDEpi as soon as possible:**

* Jurisdiction
* Hospitalization status
* Onset date
* Likely transmission (travel associated, community acquired, contact, household contact, cluster, healthcare-associated infection or under investigation)
* Number of contacts

## **State COVID-19 reporting:**

If a confirmed case of COVID-19 is identified at MTPHL or by a private lab, refer to the CDC guidance providing [Information for Health Departments on Reporting a Person Under Investigation (PUI), or Presumptive Positive and Laboratory-Confirmed Cases of COVID-19](https://www.cdc.gov/coronavirus/2019-ncov/php/reporting-pui.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fphp%2Fcase-report-form.html), including the case report form and instructions.

1. CDEpi will notify CDC of the case via DCIPHER
2. The state will issue a COVID-19 ID to complete a PUI and Case Report Form in DCIPHER.
3. The specimen will be considered a confirmed positive through the MTPHL
4. The state will work closely with the case county of residence and the healthcare facility where the case is located to coordinate isolation of the case and to conduct a contact investigation.

## **Isolation of COVID-19 Case:**

### **Hospitalized Cases**

Transmission of the COVID-19 virus is presumed to occur via respiratory droplets.

* Patients with COVID-19 should be placed under standard and transmission-based precautions.
* Patients with known or suspected COVID-19 should be cared for in a single-person room with the door closed. Airborne Infection Isolation Rooms (AIIRs) should be reserved for patients undergoing aerosol-generating procedures.
* Healthcare personnel (HCP) who enter the room of a patient with known or suspected COVID-19 should adhere to Standard Precautions and use a respirator or facemask, gown, gloves, and eye protection. When available, respirators (instead of facemasks) are preferred; they should be prioritized for situations where respiratory protection is most important and the care of patients with pathogens requiring Airborne Precautions (e.g., tuberculosis, measles, varicella).

For full details, CDC released [Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 (COVID-19) or Persons Under Investigation for COVID-19 in Healthcare Settings](https://www.cdc.gov/coronavirus/2019-ncov/infection-control/control-recommendations.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fhcp%2Finfection-control.html). Persons Under Investigation (PUIs) or COVID-19 cases who do not require hospitalization should isolate themselves at home except to receive medical care (more information below).

*Discontinuation of Transmission-Based Precautions*

CDC has released [Interim Guidance for Discontinuation of Transmission-Based Precautions Among Hospitalized Patients with COVID-19](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-hospitalized-patients.html) for when transmission-based precautions can be lifted for hospitalized PUIs or COVID-19 cases.

### **Cases not requiring hospitalization**

PUIs or COVID-19 cases who do not require hospitalization should isolate themselves at home except to receive medical care. In consultation with state or local health department staff, a healthcare professional should assess whether the residential setting is appropriate for home care.

As much as possible, cases should stay in a specific room and away from other people in the home, also using a separate bathroom, if available. Cases in home isolation should follow these precautions:

* Wear a facemask – You should wear a facemask when you are around other people (e.g., sharing a room or vehicle) or pets and before you enter a healthcare provider’s office
* Cover your coughs and sneezes
* Clean your hands often with soap and water for at least 20 seconds
* Avoid sharing personal household items (e.g., dishes, eating utensils, towels, or bedding)
* Clean all “high-touch” surfaces everyday
* Monitor your symptoms and call ahead before visiting your doctor

Refer to the [Interim Guidance for Preventing the Spread of Coronavirus 2019 (COVID-19) in Homes and Residential Communities](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fguidance-prevent-spread.html) for comprehensive guidance. This also includes [recommended precautions for household members caring for the individual](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-prevent-spread.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fguidance-prevent-spread.html#precautions) at home.

## **Discontinuation of home isolation for COVID-19 cases**

**People with COVID-19 who have symptoms:** The decision to discontinue home isolation should be made in the context of local circumstances. Options now include both 1) a time-since-illness-onset and time-since-recovery (non-test-based) strategy, and 2) a test-based strategy. Refer to the [CDC Discontinuation of Home Isolation for Persons with COVID-19 for the complete guidance](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html). Please also see the algorithms at the end of this document.

1. **Non-test-based strategy** [**\***](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html#st1)  
   **Persons with COVID-19 who have symptoms** and were directed to care for themselves at home may discontinue home isolation under the following conditions:

* At least 3 days (72 hours) have passed since recovery defined as resolution of fever without the use of fever-reducing medications **and** improvement in respiratory symptoms (e.g., cough, shortness of breath); **and,**
* At least 7 days have passed since symptoms first appeared

1. **Test-based strategy** (simplified from initial protocol). Previous recommendations for a test-based strategy remain applicable; however, a test-based strategy is contingent on the availability of ample testing supplies and laboratory capacity as well as convenient access to testing. For jurisdictions that choose to use a test-based strategy, the recommended protocol has been simplified so that only one swab is needed at every sampling.

**Persons who have COVID-19 who have symptoms** and were directed to care for themselves at home may discontinue home isolation under the following conditions:

* Resolution of fever without the use of fever-reducing medications **and**
* Improvement in respiratory symptoms (e.g., cough, shortness of breath) **and**
* Negative results of an FDA Emergency Use Authorized molecular assay for COVID-19 from at least two consecutive nasopharyngeal swab specimens collected ≥24 hours apart[\*\*](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html#st2) (total of two negative specimens). See [Interim Guidelines for Collecting, Handling, and Testing Clinical Specimens from Persons Under Investigation (PUIs) for 2019 Novel Coronavirus (2019-nCoV)](https://www.cdc.gov/coronavirus/2019-nCoV/lab/guidelines-clinical-specimens.html)for specimen collection guidance.

**Individuals with laboratory-confirmed COVID-19 who have not had any symptoms** may discontinue home isolation when at least 7 days have passed since the date of their first positive COVID-19 diagnostic test and have had no subsequent illness.

#### Footnote

\*This recommendation will prevent most but may not prevent all instances of secondary spread.  The risk of transmission after recovery, is likely very substantially less than that during illness.

\*\*All test results should be final before isolation is ended. Testing guidance is based upon limited information and is subject to change as more information becomes available.

The decision to discontinue isolation of PUIs or COVID-19 cases may be made in consultation with MTDPHHS and the patient’s provider. This decision should consider disease severity, illness signs and symptoms, and results of laboratory testing for COVID-19 in respiratory specimens. CDC released [Interim Guidance for Discontinuation of In-Home Isolation for Patients with COVID-19.](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html)

**Please notify CDEpi when the COVID-19 case is released from isolation**.

## **Contact Investigation:**

## **Interviewing and assessing persons with COVID-19.**

* 1. Make every effort to interview the PUI by telephone, text monitoring system, or video conference.
  2. If public health personnel must interview a PUI in their home, the public health personnel should wear recommended personal protective equipment (PPE), including a gown, gloves, eye protection (e.g., goggles, a disposable face shield that covers the front and sides of the face), and respiratory protection that is at least as protective as a NIOSH-approved N95 filtering facepiece respirator, as recommended in the [Interim Infection Prevention and Control Recommendations for Patients with Confirmed Coronavirus Disease 2019 (COVID-19) or Persons Under Investigation for COVID-19 in Healthcare Settings](https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control.html).

## **Establish the jurisdiction and hospitalization:**

1. Confirm the jurisdiction of patient
2. Determine if the patient is hospitalized – please notify CDEpi if any of your cases becomes hospitalized later in their illness
3. Establish known links to other confirmed cases

## **Investigate the source of COVID-19 exposure:**

Investigating the source of the COVID-19 exposure can help determine where the case contracted their illness. Depending on the potential source’s symptoms it may be useful to test the contact.

* 1. **Use Tool 1 at the end of this document to identify in the previous 14 days prior to symptom onset:**
     1. Location of the case
     2. Domestic and international travel.
     3. Include work, school, social events, medical visits, etc.
     4. Ask about visits to assisted-living facilities and other places with elderly populations, or at-risk populations.
  2. Include dates and times
  3. Be as complete as possible

## **Identify close contacts of case and possible sites of transmission.**

The period of exposure risk begins 48 hours prior to the onset of symptoms through the end of the isolation period. For further guidance on the period of exposure risk, please see CDCs [guidance on community related exposures.](https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-recommendations.html)

* 1. **Use Tool 2 at the end of this document to identify contacts that may include:**
     1. Healthcare workers
     2. Household contacts
     3. School/after school/sports contacts
     4. Work contacts
     5. Social contacts
     6. Ask about visits to assisted-living facilities and other places with elderly populations, schools, or other sensitive sites

**Definition of a close contact**: CDC notes that data are limited to define a close contact. 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 the individual was wearing a facemask (which can efficiently block respiratory secretions from contaminating others and the environment).

Data are insufficient to precisely define the duration of time that constitutes a prolonged exposure. Recommendations vary on the length of time of exposure from 10 minutes or more to 30 minutes or more. In healthcare settings, it is reasonable to define a prolonged exposure as any exposure greater than a few minutes because the contact is someone who is ill. Brief interactions are less likely to result in transmission; however, symptoms and the type of interaction (e.g., did the person cough directly into the face of the individual) remain important.

## **Guidance to assess community exposures for asymptomatic persons exposed to persons with known or suspected COVID-19.**

|  |  |  |
| --- | --- | --- |
| TABLE 1. Community-related exposures to persons with known or suspected COVID-19  **Note**: [Travelers](https://www.cdc.gov/coronavirus/2019-ncov/php/risk-assessment.html), [health care workers](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html) and critical infrastructure workers should follow guidance that include special consideration for these groups. CDC’s recommendations for community-related exposures are provided below. Individuals should always follow guidance of the state and local authorities. | | |
| **Person** | **Exposure to:** | **Recommended precautions for the public** |
| * Household member * Intimate partner * Individual providing care in a household without using recommended [infection control precautions](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-home-care.html) * Individual who has had close contact (< 6 feet) \*\* for a prolonged period \*\*\* | * Person with symptomatic COVID-19 during period from 48 hours before symptoms onset until meets criteria for [discontinuing home isolation](https://www.cdc.gov/coronavirus/2019-ncov/hcp/disposition-in-home-patients.html) (can be a laboratory-confirmed disease or a clinically compatible illness [in a state or territory with widespread community transmission](https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/cases-in-us.html#reporting-cases)) | * Stay home until 14 days after last exposure and maintain social distance (at least 6 feet) from others at all times * Self-monitor for symptoms   + Check temperature twice a day   + Watch for fever\*, cough, or shortness of breath * Avoid contact with [people at higher risk for severe illness](https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/high-risk-complications.html) (unless they live in the same home and had same exposure) * Follow [CDC guidance](https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html) if symptoms develop |
| All U.S. residents, other than those with a known risk exposure | Possible unrecognized COVID-19 exposures in U.S. communities | * Be alert for symptoms   + Watch for fever\*, cough, or shortness of breath   + Take temperature if symptoms develop * Practice social distancing   + Maintain 6 feet of distance from others   + Stay out of crowded places * Follow [CDC guidance](https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html) if symptoms develop |

\*For the purpose of this guidance, fever is defined as subjective fever (feeling feverish) or a measured temperature of 100.4oF (38oC) or higher. Note that fever may be intermittent or may not be present in some people, such as those who are elderly, immunosuppressed, or taking certain medications (e.g., NSAIDs).

\*\* Data are limited to define close contact. 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 the individual was wearing a facemask (which can efficiently block respiratory secretions from contaminating others and the environment).

\*\*\*Data are insufficient to precisely define the duration of time that constitutes a prolonged exposure. Recommendations vary on the length of time of exposure from 10 minutes or more to 30 minutes or more. In healthcare settings, it is reasonable to define a prolonged exposure as any exposure greater than a few minutes because the contact is someone who is ill. Brief interactions are less likely to result in transmission; however, symptoms and the type of interaction (e.g., did the person cough directly into the face of the individual) remain important.

## **Guidance for all travelers.**

|  |  |
| --- | --- |
| TABLE 2. Travel-related exposures to persons with known or suspected COVID-19  Montana’s requirements for travel-associated exposures are provided below. Please note that these differ from CDC recommendations for travelers. | |
| **Exposure** | **Recommended precautions** |
| * All international travel * All domestic travel outside Montana for a non-work-related purpose. Quarantine restrictions do not apply to: * Persons traveling through Montana in route to another destination; or * Public health, public safety, or healthcare workers * Travel on cruise ship or river boat * These restrictions apply to both Montana and non-Montana residents | * Stay home until 14 days after arrival and maintain a distance of at least 6 feet (2 meters) from others   + Self-monitor for symptoms   + Check temperature twice a day * Watch for fever, cough, shortness of breath * Avoid contact with [people at higher risk for severe illness](https://www.cdc.gov/coronavirus/2019-ncov/specific-groups/high-risk-complications.html) (unless they live in the same home and had same exposure) * Follow [CDC guidance](https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html) if symptoms develop |

## **Identify healthcare personnel caring for the COVID-19 case**

To monitor and manage ill and exposed healthcare personnel, please refer to [Interim U.S. Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with Potential Exposure in a Healthcare Setting to Patients with Coronavirus Disease 2019 (COVID-19)](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html).

This guidance describes exposure risk categories (low-medium-high) with a handy [table](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html#table1) of risk factors that can be used to determine what monitoring should place and any possible work restrictions needed based on the type of exposure.

### **Resources:**

1. DPHHS Technical Guidance for COVID-19: Specimen Collection



1. Governor Bullock’s providing mandatory quarantine for certain travelers arriving in Montana from another state or country.



1. DPHHS Algorithm and Guidance for Release from Isolation:
   1. Persons with Lab Confirmed COVID-19 Under Home Isolation



* 1. **Hospitalized Patients with COVID-19 Under Transmission-Based Precautions**

****

1. DPHHS Return to Work Criteria for Health Care Workers with Confirmed or Suspected COVID-19



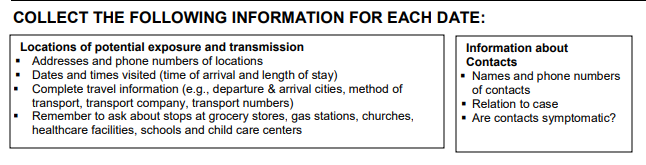
1. [CDC Resources for State, Local, Territorial and Tribal Health Departments](https://www.cdc.gov/coronavirus/2019-ncov/php/index.html)
2. [Preventing COVID-19 Spread in Communities](https://www.cdc.gov/coronavirus/2019-ncov/community/index.html)
   1. Resources for schools, colleges, at home, the workplace, community organizations, mass gatherings, healthcare setting and first responders.
3. DPHHS Isolation/Quarantine sample orders and sample quarantine card  
   

### **CDC Case Definitions:**

* **Person Under Investigation (PUI):** Any person who is currently under investigation for having the virus that causes COVID-19, or who was under investigation but tested negative for the virus.
* **Laboratory-confirmed case of COVID-19**: Individual who has tested positive for the virus that causes COVID-19 in at least one respiratory specimen at the CDC laboratory.
* **Isolation**: separates sick people with a contagious disease from people who are not sick.
* **Quarantine**: separates and restricts the movement of people who were exposed to a contagious disease to see if they become sick.

## **Case Investigation Tools:**

### **Tool to Identify Sources of Infection**



**Patient Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** **Date of Birth:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**History of travel?**

**Potential healthcare worker exposure?**

**Any high-risk contacts or contact to known COVID case?**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Exposure Period | Date | Day | Locations (with times) | Potential source of infection |
| Earliest Exposure Date |  | -14 |  |  |
|  |  | -13 |  |  |
|  |  | -12 |  |  |
|  |  | -11 |  |  |
|  |  | -10 |  |  |
|  |  | -9 |  |  |
|  |  | -8 |  |  |
|  |  | -7 |  |  |
|  |  | -6 |  |  |
|  |  | -5 |  |  |
|  |  | -4 |  |  |
|  |  | -3 |  |  |
|  |  | -2 |  |  |
|  |  | -1 |  |  |
| Symptom Onset |  | 0 |  |  |

### **Tool to Identify Exposed Contacts and Sites of Transmission**

Note: The start of the exposure risk is 48 hours before symptom onset.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Contagious Period | Date | Day | Locations (with times) | Contacts |
| Asymptomatic  Day 1 |  |  |  |  |
| Asymptomatic  Day 2 |  |  |  |  |
| Symptom Onset |  | 0 |  |  |
|  |  | 1 |  |  |
|  |  | 2 |  |  |
|  |  | 3 |  |  |
|  |  | 4 |  |  |
|  |  | 5 |  |  |
|  |  | 6 |  |  |
|  |  | 7 |  |  |
|  |  | 8 |  |  |
|  |  | 9 |  |  |
|  |  | 10 |  |  |
|  |  | 11 |  |  |
|  |  | 12 |  |  |
|  |  | 13 |  |  |
|  |  | 14 |  |  |

Total number of close contacts: \_\_\_\_\_\_\_\_\_\_