Summary

- **Surveillance:** CHDs should apply the definition of person under investigation (PUI) for COVID-19 to determine if laboratory testing and public health investigation is needed.
- **Investigations:** Investigations should occur for individuals meeting the definition of PUI for COVID-19 within the same day of CHD notification, including weekends and holidays.
  - County epidemiology staff should alert their regional epidemiologist and laboratory liaison, or BOE on-call epidemiologist if after-hours, of all PUIs for COVID-19.
- **Reporting PUIs and Cases:** PUIs or persons meeting the confirmed or probable case definition for COVID-19 should be entered into Merlin the same day of report (including weekends and holidays).
- **CHD Laboratory Results Notification Process for COVID-19:** Emailed from Bureau of Public Health Laboratories until test results are available through Labware and Merlin.
- **Documents on this topic dated after the version date, supersede this one.**

Background

On January 11, 2020, Chinese health authorities preliminarily identified more than 40 human infections with a novel coronavirus during an outbreak of pneumonia under investigation in Wuhan City, Hubei Province, China. Chinese health authorities subsequently posted the full genome of the COVID-19 in GenBank®, the National Institutes of Health genetic sequence database.

The Centers for Disease Control and Prevention (CDC) continues to monitor this outbreak, which includes over 80,000 confirmed human cases and over 2,700 deaths worldwide. COVID-19 cases have been reported in >45 countries. Many cases have been associated with travel to or from China; however, community spread is being detected in growing number of locations across the globe.

Coronaviruses are a large family of viruses, some causing illness in people and others that circulate among animals, including camels, cats, and bats. Rarely, animal coronaviruses can evolve and infect people and then spread between people, as seen with Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome.

There is an ongoing investigation to determine more about this outbreak. This is a rapidly evolving situation. This document may become outdated as situations change.

Surveillance for COVID-19

A PUI is a person with the following characteristics:

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>Risk Criteria</th>
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<tbody>
<tr>
<td>Fever or signs/symptoms of lower respiratory illness (e.g., cough or shortness of breath) AND</td>
<td>Any person, including health care workers, who has had close contact with a laboratory-confirmed COVID-19 patient within 14 days of symptom onset</td>
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<tr>
<td>Fever and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) AND</td>
<td>A history of travel from an affected geographic area with sustained community transmission within 14 days of symptom onset</td>
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<tr>
<td>Fever with severe acute lower respiratory illness (e.g., pneumonia, ARDS) requiring hospitalization and without alternative explanatory diagnosis (e.g., influenza) AND</td>
<td>No source of exposure has been identified</td>
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Patients with lower respiratory illness should also be evaluated for common causes of community-acquired pneumonia, guided by clinical presentation and epidemiologic and surveillance information. For these patients, testing for COVID-19 and other respiratory pathogens should be done simultaneously. Positive results for another respiratory pathogen (e.g., influenza) should not preclude testing for COVID-19 because co-infection may occur.

1Fever may be subjective or confirmed.

2For healthcare personnel, testing may be considered if there has been exposure to a person with suspected COVID-19 without laboratory confirmation.

3Close contact is defined as:

A. being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period of time; close contact can occur while caring for, living with, visiting, or sharing a healthcare waiting area or room with a COVID-19 case

OR

B. having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on)

If such contact occurs while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection), criteria for PUI consideration are met.

See CDC’s updated Interim Infection Prevention and Control Recommendations for Patients with Confirmed COVID-19 or Persons Under Investigation for COVID-19 in Healthcare Settings.
to healthcare personnel exposed in healthcare settings as described in CDC’s Interim U.S.
Guidance for Risk Assessment and Public Health Management of Healthcare Personnel with
Potential Exposure in a Healthcare Setting to Patients with COVID-19.

4Documentation of laboratory-confirmation of COVID-19 may not be possible for travelers or
persons caring for patients in other countries.

5Affected regions will change over time so review the most up-to-date information at such
sources as:
www.cdc.gov/coronavirus/2019-
n cov/travelers/index.htmlwww.who.int/emergencies/diseases/novel-coronavirus-2019/situation-
reports/
www.promedmail.org/coronavirus/
www.healthmap.org/en/

6Category includes single or clusters of patients with severe acute lower respiratory illness (e.g.,
pneumonia, ARDS) of unknown etiology in which COVID-19 is being considered.

COVID-19 Case Definition:

Confirmed: A confirmed case is a person with laboratory confirmation of COVID-19 infection.

Probable: A probable case is a PUI with absent or inconclusive laboratory results for COVID-19
who is a close contact⁵ of a laboratory-confirmed COVID-19 case.

Suspect: A suspect case is a PUI with COVID-19 laboratory tests pending.
**Investigations of PUI for COVID-19**

- County epidemiology staff should investigate each report of possible COVID-19 to determine if the PUI for COVID-19 criteria are met.
- County epidemiology staff should contact their Regional Epidemiologist and Laboratory Liaison, or Bureau of Epidemiology (BOE) on-call epidemiologist (if after hours), if a county is investigating a potential PUI or if they have any questions.
- Conduct patient/proxy or health care provider interviews and record reviews to obtain essential information, which includes history of present illness, medical history, travel dates, flight information, risk factors, differential diagnoses, and microbiology test results.
- Enter the PUI into Merlin (see ‘Reporting COVID-19 PUI and Cases in Merlin’) and complete extended data within 24 hours of receipt of information.

**Infection Control Considerations**

- PUIs 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.
- While a PUI for COVID-19 is receiving health care, it is important that standard, contact, and airborne precautions are used.

**Management of Cases and PUIs**

- A PUI may be discharged before COVID-19 is ruled out. The decision to discharge a PUI for COVID-19 is up to the treating physician.
  - PUIs should be provided surgical masks and asked to isolate themselves at home until fever and symptom-free for 24 hours without antipyretic medication (acetaminophen, ibuprofen).
  - Close contacts of confirmed or probable cases who develop compatible symptoms should also be managed as COVID-19 PUIs. Specimens should be collected, and PUIs should be isolated at home or while seeking health care until COVID-19 testing is completed.
- For **confirmed** COVID-19 cases, the decision to discharge is based on public health and medical assessment with the BOE, including presence of symptoms and multiple negative specimens.

**Laboratory Testing and Specimen Collection**

- Specimens should be collected as soon as possible once a PUI is identified regardless of symptom onset.
To increase the likelihood of detecting COVID-19, CDC recommends collecting both lower and upper respiratory specimens:

- Upper respiratory: nasopharyngeal and oropharyngeal swabs in viral transport media, each in a separate container; nasopharyngeal wash/aspirate or nasal aspirate may be used as well.
- Lower respiratory: sputum, bronchial alveolar lavage/tracheal aspirate, in a sterile container

If additional specimen types such as stool, urine, or whole blood are collected, they can be stored for potential future use.

Ship specimens overnight for arrival to BPHL in Jacksonville, Miami, or Tampa following notification to the appropriate BPHL location.

Include a completed DH-1847 form with the specimens.

- Merlin case number must be on the form for specimens to be tested (Please note that if it’s missing, testing could be delayed.)
- All specimens can be listed on a single form

Shipments arriving on the weekend must be pre-authorized by BPHL and BOE.

Ship specimens using category B shipping containers.

Notification Process of Laboratory Results: Emailed from Bureau of Public Health Laboratories until test results are available through Labware and Merlin.

**Reporting COVID-19 PUIs and Cases in Merlin**

- Individuals meeting the confirmed, probable, or PUI (suspect) case definition for COVID-19 should be entered into Merlin immediately
  - Use the disease code "**Coronavirus, Novel 2019 (COVID-19) – 00342**" when entering PUIs in Merlin.

  Disease

  ![](Coronavirus_Novel_2019_(2019-nCoV)_00342.png)

- PUI will be listed as suspect DX status until laboratory results have been returned.
- Attach all available medical records, laboratory results, and paper PUI form to the Merlin case.
- Ensure laboratory results are attached to the case and submit.