Novel Coronavirus (2019-nCoV) Outbreak

Infectious Disease Epidemiology and Outbreak Response Bureau

February 4, 2020
The information in this presentation is current as of February 4, 2020, unless otherwise noted, and subject to change.
Interim events

- Growing number of cases in China and worldwide
- First 2019 Novel Coronavirus-related death outside of China
- Person-to-person transmission identified in the U.S.
- WHO declared global health emergency
- U.S. declared public health emergency
- CDC released new Patients Under Investigation (PUI) criteria
- U.S. issued travel restrictions and quarantine orders
Novel Coronavirus Cases in 28 Countries

Source: [www.cdc.gov](http://www.cdc.gov), accessed January 31, 2020
11 Cases Confirmed in 5 U.S. States

Source: www.cdc.gov, accessed February 3, 2020
# People Under Investigation (PUI) in the United States\(^*\d\)

As of 2/3/2020

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive</td>
<td>11</td>
</tr>
<tr>
<td>Negative</td>
<td>167</td>
</tr>
<tr>
<td>Pending(^*)</td>
<td>82</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>260</strong></td>
</tr>
</tbody>
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\(^*\)Cumulative since January 21, 2020.
\(^\d\)Numbers closed out at 7 p.m. the night before reporting.
\(^*\)Includes specimens received and awaiting testing, as well as specimens in route to CDC.

**Number of states with PUI: 36**

Source: [www.cdc.gov](http://www.cdc.gov), accessed February 3, 2020
## Patients Under Investigation (PUI) Definition

<table>
<thead>
<tr>
<th>Clinical Features</th>
<th>&amp;</th>
<th>Epidemiologic Risk</th>
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<tbody>
<tr>
<td>Fever(^1) or signs/symptoms of lower respiratory illness (e.g. cough or shortness of breath)</td>
<td>AND</td>
<td>Any person, including health care workers, who has had close contact(^2) with a laboratory-confirmed(^3,4) 2019-nCoV patient within 14 days of symptom onset</td>
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<tr>
<td>Fever(^1) and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath)</td>
<td>AND</td>
<td>A history of travel from Hubei Province, China(^5) within 14 days of symptom onset</td>
</tr>
<tr>
<td>Fever(^1) and signs/symptoms of a lower respiratory illness (e.g., cough or shortness of breath) requiring hospitalization(^4)</td>
<td>AND</td>
<td>A history of travel from mainland China(^5) within 14 days of symptom onset</td>
</tr>
</tbody>
</table>

The criteria are intended to serve as guidance for evaluation. Patients should be evaluated and discussed with public health departments on a case-by-case basis if their clinical presentation or exposure history is equivocal (e.g., uncertain travel or exposure).

Source: [www.cdc.gov](http://www.cdc.gov), accessed February 3, 2020
Flowchart to Identify and Assess 2019 Novel Coronavirus

For the evaluation of patients who may be ill with or who may have been exposed to 2019 Novel Coronavirus (2019-nCoV)

A. Identify
   if in the past 14 days since first onset of symptoms a history of either
   Travel to China OR Close contact with a person known to have 2019-nCoV illness*

B. AND the person has
   Fever or symptoms of lower respiratory illness (e.g., cough or shortness of breath)
   if both exposure and illness are present

Isolate
1. Place facemask on patient
   Isolate the patient in a private room or a separate area
   Wear appropriate personal protective equipment (PPE)

Assess clinical status
2. EXAM
   Is fever present?
   Subjective?______
   Measured?______°C/F
   Is respiratory illness present?
   Cough?______
   Shortness of breath?______

Inform
3. Contact health department to report at-risk patients and their clinical status
   Assess need to collect specimens to test for 2019-nCoV
   Decide disposition

If discharged to home

Instruct patient
As needed depending on severity of illness and health department consultation
   Home care guidance
   Home isolation guidance

Advise patient
If the patient develops new or worsening fever or respiratory illness
   Call clinic to determine if reevaluation is needed
   If reevaluation is needed call ahead and wear facemask

* Documentation of laboratory confirmation of 2019-nCoV may not be possible for travelers or persons caring for patients in other countries. For more clarification on the definition for close contact see CDC's Interim Guidance for Healthcare Professional: [www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-criteria.html](https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-criteria.html)

Maryland: 2019-nCoV Cases and PUI

• Number of patients approved for 2019-nCoV testing: 2
• Number of 2019-nCoV tests pending at CDC: 1
• Number of negative 2019-nCoV tests: 1
• Number of laboratory-confirmed 2019-nCoV cases: 0

• Testing and case counts posted at http://health.maryland.gov/coronavirus

Data current as of February 4, 2020
Testing for 2019-nCoV

• Specimens:
  • TWO nasopharyngeal (NP) swabs
  • One oropharyngeal (OP) swab
  • Lower respiratory specimen (e.g. sputum), if available
  • Serum (recommended, but not required)

• Testing for 2019-nCoV is still being performed at CDC.
Testing for 2019-nCoV

2019 Novel Coronavirus Guidance

Maryland Department of Health (MDH) Laboratory

General Background

2019 Novel Coronavirus (2019-nCoV) is a virus (more specifically, a coronavirus) identified as the cause of an outbreak of respiratory illness first detected in Wuhan, China. For more information go to the CDC website at: https://www.cdc.gov/coronavirus/2019-ncov/index.html

What steps to take if you suspect a 2019 Novel Coronavirus Infection

A suspect case is identified as patients with a fever and lower respiratory illness who traveled to Wuhan, China within 14 days of symptom onset or contact with a confirmed case of 2019 Novel Coronavirus (2019-nCoV). To request 2019 Novel Coronavirus testing for a suspect case, health care providers must contact the MDH Infectious Disease Bureau at 410-767-6700 during business hours and after hours call the MDH Emergency Call Center at 410-795-7365 to arrange the initial disease consultation.

2019 Novel Coronavirus testing can only be conducted with prior authorization from MDH physician-epidemiologists and is restricted to patients who meet the current CDC Criteria to Guide Evaluation of Patients Under Investigation (PUI) for 2019-nCoV case definition (CDC link; https://www.cdc.gov/coronavirus/2019-ncov/case-definition.html

https://health.maryland.gov/laboratories/Pages/Novel-Coronavirus.aspx

This interim guidance is effective as of February 3, 2020, and does not apply retrospectively to people who have been in China during the previous 14 days and are already in the United States, or those being managed as part of a contact investigation.

CDC will provide separate guidance for healthcare settings.

Source: www.cdc.gov, accessed February 3, 2020
Overview of Interim CDC Guidance

• Exposure risk categories: High, Medium, Low, No Risk
• CDC recommendations based on risk category and symptoms
• Recommendations include:
  • Movement restrictions
  • Medical evaluation
  • Monitoring recommendations
  • Travel restrictions
Key Points of Interim CDC Guidance

• Travel from Hubei Province
  • High risk
  • Travelers should be quarantined with “daily active monitoring”

• Travel from other parts of mainland China
  • Medium risk
  • Travelers should, to the extent possible, remain at home with “self-monitoring with public health supervision”
Resources


• MDH Laboratories Administration Novel Coronavirus: [https://health.maryland.gov/laboratories/Pages/Novel-Coronavirus.aspx](https://health.maryland.gov/laboratories/Pages/Novel-Coronavirus.aspx)

