Novel Coronavirus (2019-nCoV) Outbreak

Infectious Disease Epidemiology and Outbreak Response Bureau

January 28, 2020
The information in this presentation is current as of January 28, 2020, unless otherwise noted, and subject to change.
Novel Coronavirus (2019-nCoV)

Background

• In December 2019, first identified as a pneumonia outbreak of unknown etiology, with many cases associated with an animal market in Wuhan, China

• In January 2020, health officials reported that the outbreak was caused by a novel coronavirus, which was later named 2019-nCoV

• Rapidly evolving outbreak
About Coronaviruses

• Common human coronaviruses
  • 229E
  • NL63
  • OC43
  • HKU1

• Sometimes coronaviruses that infect animals can evolve and make people sick and become a new human coronavirus.
  • MERS-CoV
  • SARS-CoV
  • 2019 Novel Coronavirus (2019-nCoV)
About Wuhan

- Capital city of Hubei province in Central China
- Most populous city in Central China
- Population: 11.8 million
- Plays key role in domestic transportation
- Language: Standard Chinese / Mandarin
About the Disease

• **Reservoir**: Suspected animal origin

• **Symptoms:**
  • Fever, cough, shortness of breath
  • Illness ranges from no symptoms to severe illness/death

• **Incubation period**: Thought to be 2-14 days

• **Transmission**: Suspected zoonotic transmission with evidence of person-to-person spread

• **Prevention**: No vaccine

• **Treatment**: Supportive
**Person 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) and symptoms of lower respiratory illness (e.g., cough, difficulty breathing)</td>
<td></td>
<td>In the last 14 days before symptom onset, a history of travel from Wuhan City, China. In the last 14 days before symptom onset, close contact(^2) with a person who is under investigation for 2019-nCoV while that person was ill.</td>
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<tr>
<td>Fever(^1) or symptoms of lower respiratory illness (e.g., cough, difficulty breathing)</td>
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<td>In the last 14 days, close contact(^2) with an ill laboratory-confirmed 2019-nCoV patient.</td>
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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).
Global: Confirmed 2019-nCoV Cases

Confirmed 2019-nCoV cases in China, Hong Kong, Macau, Taiwan, Australia, Cambodia, Canada, France, Japan, Malaysia, Nepal, Singapore, Thailand, South Korea, United States, Vietnam

Source: www.cdc.gov, accessed January 27, 2020
U.S.: 2019-nCoV Cases and PUI

• 5 confirmed cases in 4 states
  - Washington State, Illinois, California, Arizona

• 110 Persons Under Investigation (PUI) in 26 states
  - 5 positive, 32 negative, 73 pending

• All cases imported

• No person-to-person spread in U.S. has been detected

Source: www.cdc.gov, accessed January 27, 2020
Maryland: 2019-nCoV Cases and PUI

• Number of PUI: 1

• Number of laboratory-confirmed cases: 0

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

Data current as of January 28, 2020
Infection Prevention and Control Recs

• Require all PUI to wear a surgical mask as soon as they are identified.

• Evaluate all PUI in a private room with the door closed, ideally an airborne infection isolation room, if available.

• Health care providers entering the room of a PUI should use standard precautions, contact precautions, and airborne precautions with eye protection.

• If airborne isolation room is not available, provider should place patient in private room with door closed.
Patient Assessment

- While assessment is underway, ensure that patient is wearing a surgical mask; standard, contact, and airborne precautions in place (or if airborne isolation is not available, patient in private room with door closed)
- Collect the following information:
  - Traveler’s name, DOB, address, phone number
  - Travel history (dates of travel, location, activities)
  - Occupation/institutional setting
  - Symptoms and onset date
  - Fever? Fever-reducing meds?
  - Chest radiograph findings
  - Other diagnostic test results
  - Contact with a suspected or known case of 2019-nCoV, or other sick contacts
Testing for 2019-nCoV

- At this time, testing for 2019-nCoV is being performed at CDC.
- Testing requires MDH and CDC approval.
- Specimens must be transported first to MDH and MDH will ship to CDC.
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CDC Travel Warning

Novel Coronavirus in China

<table>
<thead>
<tr>
<th>Level</th>
<th>Precaution</th>
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<tbody>
<tr>
<td>Warning</td>
<td>Level 3, Avoid Nonessential Travel</td>
</tr>
<tr>
<td>Alert</td>
<td>Level 2, Practice Enhanced Precautions</td>
</tr>
<tr>
<td>Watch</td>
<td>Level 1, Practice Usual Precautions</td>
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</tbody>
</table>

Key Points

- CDC recommends that travelers avoid all nonessential travel to China.
- There is an ongoing outbreak of respiratory illness caused by a novel (new) coronavirus that can be spread from person to person.
- Chinese officials have closed transport within and out of Wuhan and other cities in Hubei province, including buses, subways, trains, and the international airport. Other locations may be affected.
- Older adults and people with underlying health conditions may be at increased risk for severe disease.
- The situation is evolving. This notice will be updated as more information becomes available.
Recommendations for Travelers from China to U.S.

- There are currently no recommendations regarding isolation or quarantine of asymptomatic travelers.
- Enhanced screening at some airports
- All travelers from China should take the following steps:
  - Watch for any changes in your health for 14 days after leaving China.
  - If you get a fever or develop a cough or difficulty breathing during this 14-day period, avoid contact with others. Call your healthcare provider to tell them about your symptoms and your recent travel.
  - Don’t travel while you are sick.
What MDH is Doing

• Monitoring and disseminating CDC data and recommendations

• Fielding calls and providing guidance to health care providers, the public, schools, and other organizations

• Working with LHDs to assess PUI, coordinate testing

• Preparing electronic surveillance and monitoring systems
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Resources

• MDH Novel Coronavirus Page:  
  http://health.maryland.gov/coronavirus

• CDC Outbreak Page:  

• CDC Guidance for Healthcare Professionals:  

• CDC Guidance for Infection Control:  
Questions?