For any questions, call the Humboldt County Public Health Communicable Disease Program at (707) 268-2182

HEALTH ADVISORY
January 22, 2020

Novel Coronavirus 2019-nCoV identified in China diagnosed in Washington State

SITUATION The Centers for Disease Control and Prevention (CDC) is closely monitoring an outbreak caused by a novel (new) coronavirus first identified in Wuhan, Hubei Province, China. Chinese authorities identified the new coronavirus, which has resulted in over 540 confirmed cases and 17 deaths in China, including cases outside Wuhan- population 11.9 million. Additional cases are being identified in a growing number of countries internationally among travelers from Wuhan.

The first case of 2019-nCoV in the United States was reported January 21, 2020 in the state of Washington. The patient recently returned from Wuhan, China where this outbreak of pneumonia caused by Coronavirus 2019-nCoV has been ongoing since December 2019. While originally thought to be spreading from animal-to-person, there are growing indications that limited person-to-person spread is happening. It’s unclear how easily this virus is spreading between people.

The patient from Washington with confirmed 2019-nCoV infection returned to the United States from Wuhan on January 15, 2020 and sought care at a medical facility in the state of Washington. Based on the patient’s travel history and symptoms, healthcare professionals suspected this new coronavirus. A clinical specimen was collected and sent to CDC overnight, where laboratory testing confirmed the diagnosis via CDC’s Real time Reverse Transcription-Polymerase Chain Reaction (rRT-PCR) test.

Limited information is available to characterize the spectrum of clinical illness associated with 2019-nCoV. No vaccine or specific treatment for 2019-nCoV infection is available; care is supportive. The CDC clinical criteria for a 2019-nCoV patient under investigation (PUI) have been developed based on what is known about MERS-CoV and SARS-CoV and are subject to change as additional information becomes available.

ACTIONS REQUESTED OF CLINICIANS

1. **Evaluate** - Health care providers should consider the possibility of novel coronavirus in patients with travel history to Wuhan, China and fever\(^1\) OR symptoms of lower respiratory illness (e.g., cough, difficulty breathing), for whom there is not another explanation for their symptoms, and who have done any of the following within 14 days prior to symptom onset:
   a. Traveled to Wuhan, Hubei Province, China
   b. Had close contact\(^2\) with a person who is under investigation for 2019-nCoV while that person was ill
   c. Had close contact with an ill laboratory-confirmed 2019-nCoV patient

2. **Notify** - If a patient meets these criteria (ill and travel history to Wuhan, China), providers should immediately notify their facility’s infection control program and Humboldt County Public Health’s communicable disease program. To reach Humboldt County’s communicable disease program, please call 707-268-2182. If after hours, contact the health officer through Sheriff’s dispatch- 707-445-7251

3. **Infection Control** - Although the transmission dynamics have yet to be determined, CDC currently recommends a cautious approach to [patients under investigation for 2019 Novel Coronavirus](#)
   a) Such patients should:
      i) be asked to wear a surgical mask as soon as they are identified, 
      ii) be evaluated in a private room with the door closed.
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b) Personnel entering the room to evaluate the patient should:
   i) use contact precautions and wear an N95 disposable face piece respirator and eye protection.
   ii) use a PAPR when performing invasive or high risk procedures such as bronchoalveolar lavage.

*For patients admitted for inpatient care, contact and airborne isolation precautions, in addition to standard precautions, are recommended until further information becomes available. For additional information see: https://www.cdc.gov/infectioncontrol/guidelines/isolation/index.html.

c) Post signage in your facility requesting that patients put on a mask if they have travelled to Wuhan.

d) Screen all patients with fever and or respiratory symptoms for travel history to Wuhan, China.

This guidance will be updated as more information becomes available.

Footnotes
1Fever may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain fever-lowering medications. Clinical judgment should be used to guide testing of patients in such situations.
2Close contact is defined as:
   a) being within approximately 6 feet (2 meters), or within the room or care area, of a novel coronavirus case for a prolonged period of time while not wearing recommended personal protective equipment or PPE (e.g., gowns, gloves, NIOSH-certified disposable N95 respirator, eye protection); close contact can include caring for, living with, visiting, or sharing a health care waiting area or room with a novel coronavirus case.— or —
   b) having direct contact with infectious secretions of a novel coronavirus case (e.g., being coughed on) while not wearing recommended personal protective equipment.

   a) Health care providers should contact Humboldt County Public Health at 707-268-2182 to notify them of patients with fever and lower respiratory illness who traveled to Wuhan, China within 14 days of symptom onset.
   b) A public health infectious disease nurse will determine if the patient meets the criteria for a ‘patient under investigation’ (PUI) for 2019 Novel Coronavirus (2019-nCoV).
   c) Testing for other respiratory pathogens by the provider should be done as part of the initial evaluation and should not delay specimen transport to the Humboldt County Public Health Lab.
   d) If a patient being evaluated for 2019-nCoV tests positive for another respiratory pathogen, after clinical evaluation and consultation with public health authorities, they may still be considered under investigation for 2019-nCoV as well.

*Note that clinical laboratories should NOT attempt viral isolation from specimens collected from 2019-nCoV patients.
Specimen Type and Priority
To increase the likelihood of detecting infection, CDC recommends collection of THREE specimen types:
1) lower respiratory 2) upper respiratory and 3) serum specimen collection for testing is recommended.
   a) If possible, additional specimen types (e.g., stool, urine) should be collected and should be stored initially until decision is made by CDC whether additional specimen sources should be tested. Specimens should be collected as soon as possible once 2019-nCoV is suspected regardless of symptom onset.
   b) Maintain proper infection control when collecting specimens.

General Guidelines
   a) Refrigerate specimens at 2-8°C and contact the Humboldt County Public Laboratory at 707-268-2179 to discuss transport of sample. Store specimens at 2-8°C
   b) Label each specimen container with the patient’s ID number (e.g., medical record number), unique specimen ID (e.g., laboratory requisition number), specimen type (e.g., serum) and the date and time the sample was collected.
   c) Fill out the Humboldt County Public Health Laboratory Requisition completely and legibly

Respiratory Specimens
1) Lower respiratory tract
   a) Bronchoalveolar lavage, tracheal aspirate
      Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.
   b) Sputum
      Have the patient rinse the mouth with water and then expectorate deep cough sputum directly into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

2) Upper respiratory tract
   a) Nasopharyngeal swab AND oropharyngeal swab (NP/OP swab)
      i) Use only synthetic fiber swabs with plastic shafts.
      ii) Do not use calcium alginate swabs or swabs with wooden shafts, as they may contain substances that inactivate some viruses and inhibit PCR testing.
      iii) Place swabs immediately into sterile tubes containing 2-3 ml of viral transport media.
      iv) NP and OP specimens should be kept in separate vials.
   b) Nasopharyngeal wash/aspirate or nasal aspirate
      Collect 2-3 mL into a sterile, leak-proof, screw-cap sputum collection cup or sterile dry container.

Serum
Minimum volume required:
Children and adults: Collect 1 tube (5-10 mL) of whole blood in a serum separator tube.
Infant: A minimum of 1 mL of whole blood is needed for testing pediatric patients. If possible, collect 1 mL in a serum separator tube.
*Serum separator tubes should be stored upright for at least 30 minutes, and then centrifuged at 1000–1300 relative centrifugal force (RCF) for 10 minutes before removing the serum and placing it in a separate sterile tube for shipping (such as a cryovial).

For any lab specimen related questions contact the Humboldt County Public Laboratory: 707-268-2179