

**TO:** Vermont Health Care Providers and Health Care Facilities  
**FROM:** Laura Ann Nicolai, MPH, Deputy State Epidemiologist

### **Novel Coronavirus (2019-nCoV)**

**SUMMARY** – A novel coronavirus, first identified in Wuhan, Hubei Province, China, has resulted in an ongoing outbreak of pneumonia. Hundreds of cases have been confirmed to date, primarily in China but spreading to a [growing number of countries](#). This outbreak began in December 2019 and continues to expand. At least 18 deaths have been reported. The first case in the United States was announced on January 21, 2020.

Outbreaks of novel virus infections among people are always of public health concern. Much is still unknown about how the 2019-nCoV virus spreads, severity of illness, and other features of the virus. This outbreak is an emerging and rapidly evolving situation. The Centers for Disease Control (CDC) and the Vermont Department of Health will provide updated information and guidance as it becomes available.

#### **REQUESTED ACTIONS –**

- **Identify and evaluate patients.** Ask all patients who present with illness about recent travel. Give patients with a fever or respiratory illness who traveled to affected locations in the 14 days before onset of symptoms a surgical mask as soon as they are identified. Evaluate patients in a private room with the door closed – ideally an airborne infection isolation room, if available. Manage patients using standard precautions, contact precautions, airborne precautions (e.g., N95 respirator), and eye protection (e.g., goggles or face shield) by all health care personnel entering the room.
- **Report suspect cases immediately to the Health Department by calling 802-863-7240 (24/7).** CDC can perform testing for this novel coronavirus, which should be requested and coordinated through the Health Department. *Epidemiology, recommendations and requested actions are detailed in the following information.*

#### **Background and Epidemiology**

Coronaviruses are a large family of viruses. Some cause illness in people; other coronaviruses circulate among animals, including camels, cats, and bats. Rarely, animal coronaviruses can evolve and infect people and then spread from person to person, such as was previously seen with Middle Eastern Respiratory Syndrome Coronavirus (MERS-CoV) and Severe Acute Respiratory Syndrome Coronavirus (SARS-CoV).

Early cases in the Wuhan City outbreak have been epidemiologically linked to a large seafood and animal market, suggesting a possible zoonotic origin. Person-to-person spread is occurring, although it's unclear how easily the virus is transmitted between people. Patients with confirmed 2019-nCoV infection have had mild to severe respiratory illness. CDC believes at this time that symptoms of 2019-nCoV may appear between 2 and 14 days after exposure.

### **Criteria to Guide Evaluation of Patients Under Investigation (PUI) for 2019-nCoV**

Limited information is available to characterize the spectrum of clinical illness associated with 2019-nCoV. The [CDC clinical criteria](#) for a 2019-nCoV Patient Under Investigation have been developed based on what is known about MERS-CoV and SARS-CoV. These criteria are subject to change as additional information becomes available. All patients should be evaluated and discussed with the Health Department.

*Obtain a detailed travel history for patients being evaluated with fever and acute respiratory illness. Patients in the United States who meet the following criteria should be evaluated as a Patient Under Investigation in association with the outbreak of 2019-nCoV in Wuhan, China:*

- 1) Fever<sup>1</sup> **and** symptoms of lower respiratory illness (e.g. cough, shortness of breath) **and** in the last 14 days before symptom onset,
  - History of travel from Wuhan City, China – **or** –
  - Close contact<sup>2</sup> with a person who is under investigation for 2019-nCoV while that person was ill.
- 2) Fever<sup>1</sup> **or** symptoms of lower respiratory illness (e.g., cough, shortness of breath) **and** in the last 14 days before symptom onset,
  - Close contact<sup>2</sup> with an ill laboratory-confirmed 2019-nCoV patient.

Notes –

<sup>1</sup> Fever may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking fever-lowering medications. Clinical judgment should be used to guide testing patients in such situations.

<sup>2</sup> Close contact is defined as:

- 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 (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** –
- Having direct contact with infectious secretions of a novel coronavirus case (e.g., being coughed on) while not wearing recommended personal protective equipment.

### **RECOMMENDATIONS – for Reporting Cases, Collecting and Testing Specimens, Infection Control and Treating Patients**

**Reporting** – In the event of identifying a Patient Under Investigation for 2019-nCoV, immediately notify both infection control personnel at the facility, and the Health Department by calling 802-863-7240 (24/7).

**Specimen Collection** – Collect specimens as soon as possible once a Patient Under Investigation is identified, regardless of time of symptom onset. To increase the likelihood of detecting 2019-nCoV infection, collecting and testing multiple clinical specimens from different sites is

recommended, including all three specimen types: lower respiratory, upper respiratory, and serum specimens. Additional specimen types (e.g., stool, urine) may be collected and stored. Guidance for collecting, handling, and testing clinical specimens is available [here](#).

**Testing** – At this time, diagnostic testing for 2019-nCoV can be conducted only at CDC. The Health Department will coordinate with CDC to provide guidance for collecting, storing, and shipping specimens appropriately to CDC, including after hours or on weekends/holidays. Testing for other respiratory pathogens should not delay specimen shipping to CDC. If a patient under investigation tests positive for another respiratory pathogen, after clinical evaluation and consultation with the Health Department, they may no longer be considered a Patient Under Investigation. This may evolve as more information becomes available.

*For biosafety reasons, it is not recommended to perform virus isolation in cell culture or initial characterization of viral agents recovered in cultures of specimens from a Patient Under Investigation for 2019-nCoV.*

**Interim Health Care Infection Prevention and Control Recommendations** – Use standard precautions, contact precautions, airborne precautions (e.g., N95 respirator), and eye protection (e.g., goggles or a face shield).

**Treatment** – At this time treatment is limited to supportive care. Remdesivir may be considered under an investigational drug protocol in consultation with CDC.

**Additional Resources and Information** – Recommendations are likely to change as the situation develops. Providers are encouraged to consult the resources below for additional information.

- [2019 Novel Coronavirus](#) (CDC)
- [Interim guidance on clinical management of severe acute respiratory infection when novel coronavirus \(nCoV\) infection is suspected](#) (WHO)
- [Guideline for Isolation Precautions: Preventing Transmission of Infectious Agents in Healthcare Settings](#) (CDC)
- [Interim Guidance for Collecting, Handling and Testing Clinical Specimens from PUIs for 2019-nCoV](#) (CDC)

If you have any questions, contact the HAN Coordinator at 802-859-5900 or [vthan@vermont.gov](mailto:vthan@vermont.gov).

#### **HAN Message Type Definitions**

*Health Alert:* Conveys the highest level of importance; warrants immediate action or attention.

*Health Advisory:* Provides important information for a specific incident or situation may not require immediate action.

*Health Update:* Provides updated information regarding an incident or situation; unlikely to require immediate action.

*Info Service Message:* Provides general correspondence from VDH, which is not necessarily considered to be of an emergent nature.