February 11, 2020

HEALTH ALERT: Recommendations for Healthcare Personnel Evaluating Patients for Possible 2019 Novel Coronavirus (2019-nCoV) Infection

Major Points Covered in this Health Alert:

- To help facilitate the rapid identification and testing of suspect 2019-nCoV cases, and ensure the safety of healthcare personnel and the public, the Texas Department of State Health Services (DSHS) recommends that healthcare personnel:
  1. Triage and implement infection control for patients seeking medical care for symptoms associated with 2019-nCoV infection.
  2. Assess patients using specified criteria to determine who meets the definition of persons under investigation (PUI) for 2019-nCoV.
  3. Report immediately to your local health department (LHD) any patients who meet the PUI criteria for 2019-nCoV.
  4. Collect specimens for testing after consulting with your LHD, who will help determine if the patient meets the criteria for a PUI for 2019-nCoV.
  5. Evaluate the patient’s disposition and decide, in conjunction with the LHD, whether home isolation is appropriate.

- Diagnostic testing for 2019-nCoV is still limited to the Centers for Disease Control and Prevention (CDC). DSHS and certain Texas Laboratory Response Network (LRN) labs will acquire the capacity to test in the coming weeks.

- The World Health Organization (WHO) has warned of a global personal protective equipment (PPE) shortage. The CDC and DSHS only recommend the use of full 2019-nCoV PPE (standard, contact and airborne precautions, and eye protection) with patients with confirmed or possible 2019-nCoV infection. Otherwise standard hospital infection control practices should be followed. The general public should take everyday preventive actions like washing hands, covering cough, and staying home when sick.

Background:
In December 2019, a cluster of pneumonia cases of unknown etiology emerged in Wuhan City, Hubei Province, China. Genetic sequencing of isolates obtained from patients with pneumonia identified a novel coronavirus, referred to as 2019-nCoV. According to the WHO, as of February 11, 2020, over 42,708 confirmed cases of 2019-nCoV (17% severe and 2% fatal) have been identified in China and an additional 395 cases in 24 other countries, including 13 2019-nCoV cases (11 travel-related and 2 close contacts with a confirmed case) in the United States. As of February 11, 2020, there are no confirmed cases in Texas. There is no evidence of 2019-nCoV circulating in the US and risk of infection is currently low.
On 1/30/2020, the WHO declared the outbreak of 2019-nCoV a Public Health Emergency of International Concern (PHEIC). The CDC has issued a Level 3 travel warning, recommending that individuals avoid all nonessential travel to China. The Health and Human Services Secretary Alex Azar announced on 1/31/2020 that the coronavirus has been declared a public health emergency in the U.S. Beginning at 5 p.m. on 2/2/2020, U.S. citizens and permanent residents who have traveled to Hubei Province, China will be subject to a mandatory 14-day quarantine after last potential exposure. Those returning from other parts of China will be asked to stay at home, self-monitor for symptoms, and report to public health officials daily for 14 days after the last potential exposure. All flights from China to the U.S. will be funneled through 11 airports that are equipped to screen passengers for symptoms and risk of exposure to 2019-nCoV. Dallas-Fort Worth International Airport (DFW) is among those airports.

**Recommendations to Healthcare Personnel:**

*Early recognition is critical to limiting the spread of 2019-nCoV in the United States. The following steps will help facilitate the rapid identification and testing of suspect 2019-nCoV cases and ensure the safety of healthcare personnel and the public.*

1. **Triage and implement infection control for patients seeking medical care for symptoms associated with 2019-nCoV infection**
   - Ask patients presenting with fever and respiratory complaints (e.g., cough or shortness of breath) about travel to China within 14 days of symptom onset or exposure to anyone diagnosed with 2019-nCoV infection.
     - Obtaining a detailed travel history with locations and corresponding dates will help guide the decision to test a person for 2019-nCoV.
   - Patients with a fever, cough, or shortness of breath and travel history to mainland China, especially Wuhan City or another city in Hubei Province, should be provided with a facemask and placed in a negative pressure room (or private room with the door closed if negative pressure room is not available).
   - Healthcare personnel (HCP) should adhere to recommended infection control measures, including standard, contact, and airborne precautions, as well as the use of eye protection (e.g., goggles or a face shield) when caring for patients with suspected 2019-nCoV infection. These precautions include use of the following PPE: NIOSH-approved N95 respirators, gowns, gloves, and face shield/eye protection. The CDC guidance on 2019-nCoV infection control in healthcare settings can be found at [https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html](https://www.cdc.gov/coronavirus/2019-nCoV/hcp/infection-control.html).

2. **Assess** patients using the following criteria to determine who meets the definition of PUI for 2019-nCoV. The criteria are current as of 2/11/2020.
Table 1. DSHS 2019-nCoV PUI Criteria (as of 2/11/2020)

<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 <strong>Hubei Province</strong>, China(^5) 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) requiring hospitalization for severe acute lower respiratory illness(^4)</td>
<td>AND</td>
<td>A history of travel from mainland China(^6) within 14 days of symptom onset</td>
</tr>
</tbody>
</table>

This situation is rapidly evolving and the criteria for PUIs may change as more information becomes available. For the most current criteria, please visit [https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html](https://www.cdc.gov/coronavirus/2019-nCoV/hcp/clinical-criteria.html).

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\(^1\) Fever may be subjective or confirmed.

\(^2\) Close contact is defined as:

  a) being within approximately 6 feet (2 meters) of a 2019-nCoV case for a prolonged period of time (for healthcare providers prolonged exposure could be considered more than 1-2 minutes) while not wearing recommended personal protective equipment or PPE (e.g., gowns gloves, NIOSH-certified disposable N95 respirator, eye protection); close contact can include while caring for, living with, visiting, or sharing a health care waiting area or room with a 2019-nCoV case.

  -or-

  b) having direct contact with infectious secretions of a 2019-nCoV case (e.g., being coughed on) while not wearing recommended personal protective equipment.


Data to inform the definition of close contact are limited. Considerations when assessing close contact include the duration of exposure (e.g., longer exposure time likely increases exposure risk) and the clinical symptoms of the person with 2019-nCoV (e.g., coughing likely increases exposure risk as does exposure to a severely ill patient). Special consideration should be given to those exposed in health care settings.

\(^3\) Documentation of laboratory-confirmation of 2019-nCoV may not be possible for travelers or persons caring for patient in other countries.

\(^4\) Category also includes any member of a cluster of patients with severe acute lower respiratory illness (e.g., pneumonia, ARDS) of unknown etiology in which 2019-nCoV is being considered that requires hospitalization. Such persons should be evaluated in consultation with state and local health departments regardless of travel history.

\(^5\) For persons with travel to China within 14 days that are being regularly monitored by local health departments or referred for evaluation from border screening, testing for 2019-nCoV can be considered at the discretion of the health officials for all persons with illnesses with fever and lower respiratory symptoms (those hospitalized or those not hospitalized).
3. **Report immediately to your local health department** any patients who meet the PUI criteria for 2019-nCoV. If there are questions regarding the PUI criteria or there is uncertainty whether a patient meets the PUI criteria, please contact your LHD for a consultation. You can find your LHD at [https://dshs.texas.gov/regions/2019-nCoV-Local-Health-Entities/](https://dshs.texas.gov/regions/2019-nCoV-Local-Health-Entities/).

4. **Collect specimens for testing** after consulting with your LHD, who will help determine if the patient meets the criteria for a PUI for 2019-nCoV. For initial diagnostic testing, the CDC recommends collecting upper respiratory specimens (nasopharyngeal **AND** oropharyngeal swabs) and lower respiratory specimens (e.g., sputum) for those with productive coughs. Once specimens have been collected, the healthcare facility should coordinate with the LHD to facilitate shipping to the area’s LRN lab.
   - Proper infection control should be maintained when collecting specimens.
   - Specimens should be stored at 2-8°C.
   - Once specimens have been collected, the facility should coordinate with the LHD to facilitate shipping to the area’s LRN lab.

5. **Evaluate the patient’s disposition** and decide, in conjunction with the LHD, whether home isolation is appropriate. If discharged for home isolation, HCP should provide the patient with the CDC’s home care and isolation guidance. This guidance is available at [https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-home-care.html](https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-home-care.html).

**Testing for 2019 Novel Coronavirus (2019-nCoV):**
At this time, diagnostic testing for 2019-nCoV can only be conducted at the CDC. Healthcare facilities should coordinate with their LHD to facilitate shipping of specimens to their area’s LRN lab for shipment to the CDC. In the coming weeks, the DSHS lab in Austin and certain Texas LRN labs will acquire the capacity to test for 2019-nCoV. Specimens must meet PUI criteria for testing and must be approved to be tested. The current 2019-nCoV testing process is available on DSHS’s 2019-nCoV webpage (https://dshs.texas.gov/coronavirus/).

**Notice of Global Personal Protective Equipment (PPE) Shortage**
On February 7, 2020, the WHO warned of a global shortage of PPE supplies. According to the WHO’s assessment, demand for PPE is up to 100 times higher than normal and prices are up to 20 times higher. The situation is further exacerbated by widespread inappropriate use outside of patient care. There are now depleted stockpiles and a four- to six-month backlog on orders. The CDC and DSHS only recommend the use of full 2019-nCoV PPE (standard, contact and airborne precautions, and eye protection) with patients with confirmed or possible 2019-nCoV infection. Otherwise standard hospital infection control practices should be followed.
Use of facemasks by the general public is not recommended. Instead, the CDC and DSHS recommend taking everyday preventive actions, such as washing your hands, covering your cough, and staying home when you are sick. The CDC has released guidance regarding 2019-nCoV PPE for healthcare personnel, including utilization of N95 Respirators, which is available online at:

- Healthcare Supply of Personal Protective Equipment  
- Strategies for Optimizing Supply of N95 Respirators  
- Frequently Asked Questions About Respirators and Their Use  

For additional resources about 2019 novel coronavirus please visit the following websites:

- DSHS Novel Coronavirus Website: https://dshs.texas.gov/coronavirus/
- WHO Coronavirus Website: https://www.who.int/emergencies/diseases/novel-coronavirus-2019

The best point-of-contact for questions about 2019-nCoV is your LHD. DSHS has also set up a hotline and email box for the general public, which can be reached at 1-877-570-9779 or coronavirus@dshs.texas.gov.