HEALTH ADVISORY:

Respiratory Illness Associated with 2019 Novel Coronavirus

SUMMARY: To date hundreds of cases of novel coronavirus associated with fever and respiratory illness have been confirmed worldwide with an original link to Wuhan, Hubei Province, China. Many cases have been characterized by pneumonia. Chinese authorities report most of the initial cases in the Wuhan City outbreak were epidemiologically linked to a large seafood and animal market, suggesting a zoonotic origin to the outbreak. However, a growing number of patients reportedly have not had exposure to animal markets, suggesting person-to-person spread is occurring. CDC has provided updated guidelines for the evaluation and management of persons who may be infected with this novel pathogen (Criteria to Guide Evaluation of Patients under Investigation for 2019-nCoV). Healthcare providers should be on the alert for individuals who develop fever and acute lower respiratory illness within 14 days after traveling from Wuhan.

Human infections with 2019-nCoV have been confirmed in Taiwan, Thailand, Japan, and South Korea. The United States announced its first infection with 2019-nCoV on January 21, 2020 detected in a traveler from Wuhan.

CLINICAL EVALUATION

Persons presenting with fever (greater or equal to 100.4°F (38°C)), lower respiratory tract symptoms (such as shortness of breath and cough or an abnormal chest examination or chest x-ray), and recent travel to Wuhan and/or contact with a confirmed novel coronavirus patient. The incubation period is to be considered 2-14 days post exposure. Healthcare providers should obtain a detailed travel history for patients being evaluated with fever and acute respiratory illness including any exposure to animals.

Massachusetts, including Boston, are experiencing high influenza activity. Consider influenza as more likely in the differential diagnosis, and test as needed. If a person tests positive for another respiratory pathogen, after clinical evaluation and consultation with MDPH and/or BPHC, the person may no longer be considered for 2019-nCoV investigation.

DIAGNOSIS AND TESTING

BPHC recommends that you contact BPHC or MDPH to discuss the patient before collecting specimens for novel coronavirus testing.

To increase the likelihood of detecting 2019-nCoV infection, CDC recommends collecting and testing multiple clinical specimens from different sites, including all three respiratory specimen types—lower respiratory, upper respiratory (nasopharyngeal and oropharyngeal synthetic fiber swabs), and serum specimens. Additional specimen types (e.g., stool, urine) may be submitted. Specimens should be collected as soon as possible once an individual is identified regardless of time of symptom onset. Specimens should be sent to MDPH for coordination of shipping.

INFECTION CONTROL
Patients who present to any facility or provider with a fever, lower respiratory tract symptoms (such as shortness of breath and cough), and/or contact with a known novel coronavirus patient should be asked to wear a surgical mask and be evaluated in a private room with the door closed, ideally an airborne infection isolation (negative pressure) room, if available.

Healthcare personnel entering the room should use contact precautions, including eye protection (e.g., goggles or a face shield) and respiratory protection using an N-95 respirator level of respiratory protection. Patients requiring hospitalization for confirmed 2019-nCoV should be admitted to an airborne isolation room until asymptomatic. This may change as additional information becomes available.

Use a diluted bleach solution or household disinfectant with a label that says “EPA-Approved” to clean all high touch surfaces.

General Community
Pending test results, healthcare providers in consultation with MDPH or BPHC for Boston residents will assess whether the residential setting is suitable and the patient is capable of adhering to precautions. These include:

- Staying home except to get medical care and call ahead before any appointments. Do not travel using public transportation, taxis or ride shares.
- Separating from other people in the home. This includes a separate bathroom if possible
- Wearing a facemask when near other people
- Covering coughs and sneezes
- Washing hands
- Avoiding sharing household items
- Monitoring your symptoms and seeking medical care if symptoms worsen
- Evaluating care giver capacity to support the patient (food, shopping, etc.)

University/College Students

Pending test results, clinically stable students will need a private living space including a bathroom. Meals must be delivered. Restrict activities except for medical care. In addition, prevention education should include covering cough, washing hands, and symptom monitoring.

REPORTING
If not already done prior to evaluation, following the evaluation, healthcare providers in Boston should report all suspect or confirmed cases immediately to BPHC at 617-534-5611. Healthcare providers outside of Boston must contact MDPH at 617-983-6800.

Information is still evolving rapidly and BPHC will update this information on an as needed basis.