



BOSTON PUBLIC HEALTH COMMISSION  
**Communicable Disease Control Division**  
1010 Massachusetts Avenue • Boston, MA 02118  
PHONE: (617) 534-5611 • FAX: (617) 534-5905  
WWW.BPHC.ORG/CDC

---

**HEALTH ADVISORY:**  
**Severe Respiratory Illness**  
**Associated with Novel Coronavirus**

**SUMMARY:** To date, 14 cases of a novel coronavirus associated with severe respiratory illness have been reported worldwide with most cases having a direct linkage to the Middle East. However, recent person to person transmission in the United Kingdom has been documented. The Centers for Disease Control and Prevention (CDC) has provided updated guidelines for the evaluation and management of persons who may be infected with this novel pathogen (<http://www.cdc.gov/coronavirus/ncv/case-def.html>). Healthcare providers should be on the alert for individuals who develop severe acute lower respiratory illness within 10 days after traveling from the Arabian Peninsula or neighboring countries. Patients who meet criteria below as a potential case should be reported to the Boston Public Health Commission (BPHC).

---

**BACKGROUND**

Novel coronavirus is a beta coronavirus that was first described in September 2012, when it was reported to have caused fatal acute lower respiratory illness in a man in Saudi Arabia. As of March 8, 2013, 14 laboratory-confirmed cases have been reported to the World Health Organization (WHO) - seven from Saudi Arabia, two from Qatar, two from Jordan, and three from the United Kingdom (UK). The onsets of illness were between April 2012 and February 2013. Among the 14 cases, eight were fatal. Severe acute respiratory infection occurred in 13 of the 14 cases, while one case experienced a mild respiratory illness and fully recovered.

To date, no cases have been reported in the United States. However, because Boston is a hub for new arrivals from all parts of the world, BPHC is asking healthcare providers to be on the alert for possible cases. Those who meet the criteria below should be reported to BPHC:

- A person with an acute respiratory infection, which may include fever ( $\geq 38^{\circ}\text{C}$ ,  $100.4^{\circ}\text{F}$ ) and cough; AND
- Suspicion of pulmonary parenchymal disease (e.g. pneumonia or acute respiratory distress syndrome based on clinical or radiological evidence of consolidation); AND
- History of travel from the Arabian Peninsula or neighboring countries including Bahrain, Iraq, Iran, Israel, Jordan, Kuwait, Lebanon, Oman, Palestinian Territories, Qatar, Saudi Arabia, Syria, the United Arab Emirates (UAE), and Yemen within 10 days; AND
- Illness not already explained by any other infection or etiology, including all clinically indicated tests for community-acquired pneumonia.

In addition, the following persons may be considered for evaluation for novel coronavirus infection:

- Patients who develop severe acute lower respiratory illness of unknown etiology within 10 days after traveling from one of the countries listed above who do not respond to appropriate therapy; OR
- Persons who develop severe acute lower respiratory illness who are close contacts of a symptomatic traveler who developed fever and acute respiratory illness within 10 days of traveling from one of the countries above. Close contact is defined as 1) any person who provided care for the patient, including a healthcare worker or family member, or who had other similarly close physical contact, or 2) any person who stayed at the same place (e.g., lived with or visited) as the patient while the patient was ill.

## **DIAGNOSIS AND TESTING**

Persons meeting the criteria above are candidates for novel coronavirus testing at the CDC. It is recommended that multiple specimens from different sites at different times after symptom onset be collected to increase the likelihood of obtaining a positive result. Information on testing and shipping of samples is available at <http://www.cdc.gov/coronavirus/ncv/downloads/Interim-Guidelines-NCV-Collection-Processing-Transport.pdf>.

## **PREVENTION**

Until the transmission characteristics of the novel coronavirus are better understood, patients under investigation and probable and confirmed cases should be managed according to CDC's infection control recommendations for the coronavirus that caused SARS. This information is available on the web at:

<http://www.cdc.gov/hicpac/pdf/isolation/Isolation2007.pdf>. Infection prevention recommendations may be updated as information about transmission and the severity of clinical illness caused by this novel coronavirus becomes available.

Information on biosafety practices for collecting samples and processing and handling samples in laboratories is available at <http://www.cdc.gov/coronavirus/ncv/downloads/Interim-NCV-Lab-Biosafety-Guidelines.pdf>.

## **REPORTING**

Healthcare providers in Boston are required by city regulations to report all suspect or confirmed cases immediately to BPHC at 617-534-5611.

Additional information is available at the CDC coronavirus website at: <http://www.cdc.gov/coronavirus/ncv>.