

MA Public Health Laboratory Frequently Asked Questions

MERS CoV
updated June 12, 2015

William A. Hinton State Laboratory Institute, 305 South Street, Jamaica Plain, MA

Note: All information in this fact sheet is subject to update at any time. Updates will be posted as new information warrants.

Introduction

In response to recent travel-related importation and transmission of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) infection in South Korea, the CDC has updated its guidance for collection and testing of patients under investigation (PUIs). Clinical laboratories should be aware that the Massachusetts Department of Public Health (MDPH) State Public Health Laboratory (MPHL) performs the CDC MERS rRT-PCR test. **However, all MERS CoV diagnostic test requests must be pre-approved by a MDPH epidemiologist.** For questions regarding testing, management or control measures, contact your local board of health or the MDPH (24/7) at 617-983-6800.

What criteria are currently used for a patient under investigation (PUI) for MERS CoV?

Fever and pneumonia or acute respiratory distress syndrome (based on clinical or radiological evidence)

AND

A history of travel from countries in or near the Arabian Peninsula within 14 days before symptom onset, *or* close contact with a symptomatic traveler who developed fever and acute respiratory illness (not necessarily pneumonia) within 14 days of such travel.

OR

A history of being in a healthcare facility (as a patient, worker, or visitor) in the Republic of Korea within 14 days before symptom onset.

Fever and symptoms of respiratory illness (not necessarily pneumonia; e.g., cough, shortness of breath)

AND

A history of being in a healthcare facility (as a patient, worker, or visitor) within 14 days before symptom onset in a country or territory in or near the Arabian Peninsula or the Republic of Korea in which recent healthcare-associated cases of MERS have been identified.

OR

Close contact with a confirmed MERS case while the case was ill.

What types of specimens should I collect for MERS CoV rRT-PCR testing?

Collect and submit **one each of 3 different specimen types** (upper respiratory, lower respiratory, **and** serum) if possible:

- **Upper respiratory specimen examples:** combined nasopharyngeal/oropharyngeal (NP/OP) swabs placed together in a single viral transport media (VTM) tube (preferred), or nasopharyngeal wash/aspirate, or nasal aspirate in sterile, dry container AND
- **Lower respiratory specimen examples:** sputum, tracheal aspirate, pleural fluid or bronchoalveolar lavage in sterile, dry container AND
- **Serum:** Serum collected within 10-12 days post symptom onset.

Additional specimen types that may be sent to CDC for serologic testing include paired samples (acute- within 1 wk onset and convalescent- ≥ 3 wks after acute collection) or a single serum collected ≥ 14 days after illness onset. Specimen collection guidance is available at <http://www.cdc.gov/coronavirus/mers/guidelines-clinical-specimens.html>.

What specimen submission form should I use to submit a specimen to the HSLI?

Complete one general submission form per specimen (SS-SLI-1-13) <http://www.mass.gov/eohhs/docs/dph/laboratory-sciences/general-submission-form.pdf> **including:** submitting facility, ordering clinician, and patient name, ID (or medical record number), address, travel history (including dates, locations, and mode(s) of travel), signs and symptoms, onset date and current patient status. Maintain specimens at 2-8°C prior to shipping to MDPH SPHL for testing.

Who should I call if I am looking for the status of my specimen or test result?

For results, submission requirements or clinical guidance, call MDPH at 617-983-6800. The TAT for PCR results is <1 day. Following MERS negative results, respiratory specimens may be screened for influenza or other respiratory agents.