

Middle East Respiratory Syndrome Coronavirus (MERS-CoV) PCR

Revision: 11/22/2023

Test Description	Qualitative assay for the detection of Middle East Respiratory Syndrome Coronavirus (MERS-CoV) nucleic acid in clinical specimens
Test Use	To aid in the diagnosis of Middle East Respiratory Syndrome in symptomatic persons
Test Department	Advanced Molecular Diagnostics Phone: (860) 920-6689 FAX: (860) 920-6721
Methodology	Real-time Reverse Transcriptase Polymerase Chain Reaction (rRT-PCR)
Availability	Monday-Friday
Specimen Requirements	To increase the likelihood of detecting infection, collection of all three specimen types is recommended Lower respiratory specimens (preferred), such as bronchoalveolar lavage, tracheal aspirate, pleural fluid, or sputum Nasopharyngeal and oropharyngeal swabs or washes Serum
Collection Kit/Container	Category B shipping box with cold pack To obtain collection kit, refer to Collection Kit Ordering Information
Collection Instructions	Collect lower respiratory specimens within 7 days of symptom onset and before antiviral medications are used. Submit 2-3 mL in a sterile screw capped container. Nasopharyngeal/oropharyngeal swabs submitted in 2-3 mL viral transport media. Use only synthetic fiber swabs with plastic shafts. Do not use calcium alginate swabs or swabs with wooden shafts. NP/OP specimens can be combined, placing both swabs in the same vial. Naso/oropharyngeal or aspirates: 2-3 mL into a sterile screw capped collection container Collect blood by standard venipuncture in a serum separator tube. Submit ≥ 0.5 mL serum, optimally during the first 10-12 days after symptom onset.
Specimen Handling & Transport	Refrigerate specimens at 2-8° C and transport with an ice pack within 3 days of collection. If exceeding 72 hours, freeze at -70°C and ship on dry ice.
Unacceptable Conditions	Unlabeled specimen Specimens that have leaked or containers that have broken in transit Improperly collected or transported specimens
Requisition Form	Clinical Test Requisition, OL-9B
Required Information	Name and address of submitter. Two patient identifiers (ie.name, DOB, Acc.#, MRN), Town of residence (city, state, zip), specimen source/type, date collected, test(s) requested. Please ensure information on the requisition matches that on the specimen.
Limitations	Testing is limited to those patients symptomatic of respiratory infection and who have traveled from the Arabian peninsula or neighboring countries 14 days before illness onset. Physician must contact the CT Department of Public Health Epidemiology Program at 860-509-7994 (Monday-Friday from 8:30 am – 4:30 pm) or 860-509-8000 (after-hours/weekends) and submit a “MERS Patient Under Investigation (PUI) Form”
Additional Comments	Serologic testing on a single serum sample collected 14 or more days after symptom onset is currently available at CDC upon request and pre-approval. MERS-CoV serologic test is for research/surveillance purposes only and not for diagnostic purposes