




Interim Laboratory Biosafety Guidelines for Handling and Processing Specimens Associated with Middle East Respiratory Syndrome Coronavirus (MERS-CoV)


To date, little is known about pathogenic potential and transmission dynamics of Middle East Respiratory Syndrome Coronavirus (MERS-CoV). Until more information becomes available, precautions should be taken in collecting and handling specimens that may contain MERS-CoV.

Timely communication between clinical and laboratory staff is essential to minimize the risk incurred in handling specimens from patients with possible MERS-CoV infection. Such specimens should be labeled accordingly, and the laboratory should be alerted to ensure proper specimen handling. General and specific biosafety guidelines for handling MERS-CoV specimens are provided below.

For additional detailed instructions please refer to the following:


[Biosafety in Microbiological and Biomedical Laboratories \(BMBL\) - Fifth Edition](http://www.cdc.gov/biosafety/publications/bmb15/)
(<http://www.cdc.gov/biosafety/publications/bmb15/>)

[Laboratory Biosafety Manual - Third Edition](http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_CSR_LYO_2004_11/en/)
(http://www.who.int/csr/resources/publications/biosafety/WHO_CDS_CSR_LYO_2004_11/en/) 
(<http://www.cdc.gov/Other/disclaimer.html>)

[Universal Precautions](http://www.osha.gov/SLTC/bloodborne pathogens/index.html#revised_standard)
(http://www.osha.gov/SLTC/bloodborne pathogens/index.html#revised_standard) 
(<http://www.cdc.gov/Other/disclaimer.html>)

General Guidelines (for working with potentially infectious materials)

Laboratory workers should wear personal protective equipment (PPE) which includes disposable gloves, laboratory coat/gown, mask, and eye protection when handling potentially infectious specimens.

Acceptable methods of respiratory protection include: a properly fit-tested, NIOSH-approved filter respirator (N-95 or higher level) or a powered air-purifying respirator (PAPR) equipped with high-efficiency particulate air (HEPA) filters. Accurate fit-testing is a key component of effective respirator use. This includes training, fit-testing, and fit-checking to ensure appropriate respiratory selection and use. To be effective, respirators must provide a proper sealing surface on the wearer's face. Personnel who cannot wear fitted respirators because of facial hair or other fit limitations should wear loose-fitting hooded or helmeted PAPRs. See [detailed information on a respiratory protection program](http://www.osha.gov/SLTC/etools/respiratory/)
(<http://www.osha.gov/SLTC/etools/respiratory/>)  (<http://www.cdc.gov/Other/disclaimer.html>)