



Middle East Respiratory Syndrome

Middle East Respiratory Syndrome (MERS) is an emerging, viral respiratory disease first identified in Saudi Arabia in 2012. It is caused by a novel coronavirus named MERS-CoV. According to the Armed Forces Health Surveillance Center (AFHSC), as of 19 May 2014, 641 cases and 191 deaths due to MERS have been identified. Most cases have been identified in the Arabian Peninsula and neighboring countries. However, in May 2014 two imported cases have been identified in the U.S. The purpose of this document is to provide general MERS guidance to occupational health providers.

What are the symptoms of MERS?

Symptoms of MERS typically include fever, cough, and shortness of breath. Most people with MERS develop severe respiratory illness including pneumonia or adult respiratory distress syndrome. Both the World Health Organization (WHO) and the U.S. Centers for Disease Control and Prevention (CDC) have published case definitions.

How is MERS transmitted?

It is not yet known how people become infected with MERS. Current studies indicate that camels are a likely source of infections in humans. However, MERS-CoV can pass from an infected person to another person in close contact. According to the WHO, there have been clusters of cases in healthcare facilities, where human-to-human transmission appears to be more efficient, especially when infection prevention and control practices are inadequate. Thus far, no sustained community transmission has been documented.

Are healthcare workers at risk from MERS-CoV?

Yes. According to the WHO, transmission from patients to healthcare providers has occurred in healthcare facilities in several countries. It is not always possible to identify patients with MERS-CoV early or without testing because symptoms and other clinical features may be non-specific. For this reason, it is important that healthcare workers apply standard precautions consistently with all patients.

The CDC has developed preparedness checklists for healthcare providers and facilities. View these checklists at <http://www.cdc.gov/coronavirus/mers/preparedness/index.html>

What should I do as an occupational health provider?

Raise awareness of MERS to employees who are travelling to the Middle East and advise traveling employees of everyday actions to take to prevent illness, such as, hand

Ways to Prevent the Spread of MERS in Healthcare Facilities

- Enhance infection prevention and control awareness and implementation measures
- Use standard precautions with all patients, regardless of their diagnosis
- Add droplet precautions when providing care to any patient with symptoms of acute respiratory infection
- Use contact precautions and eye protection when caring for probable or confirmed cases of MERS-CoV infection
- Apply airborne precautions when performing aerosol-generating procedures



NAVY AND MARINE CORPS PUBLIC HEALTH CENTER

PREVENTION AND PROTECTION START HERE

washing. Be vigilant for employees returning from travel to the Middle East who are ill. Take precautions to reduce contact between any patients seeking care for symptoms consistent with MERS-CoV infection and other patients and staff. Be familiar with MERS-CoV testing guidelines available from the AFHSC and reporting guidelines available from the CDC.

Occupational health providers working with service members redeploying from the Arabian Peninsula and neighboring countries should ensure that routine measures are in place for assessing ill service members at processing points. Measures to safely transport symptomatic personnel to treatment facilities should be in place. Air crews should monitor guidance for airline crews from the CDC.

Is it safe for employees to travel to the Middle East?

At the time of writing, neither the WHO nor the CDC has recommended restricting travel. However, both organizations have published travel guidance including frequent hand washing with soap and water. The WHO recommends, as a general precaution, anyone visiting farms, markets, barns, or other places where animals are present should practice general hygiene measures, including regular hand washing before and after touching animals, and avoid contact with sick animals. The WHO further recommends avoiding the consumption of raw or

undercooked animal products, including milk and meat.

Traveling Employees Should

- Wash your hands often with soap and water, or use an alcohol-based hand sanitizer
- Avoid spreading germs by touching your eyes, nose, and mouth
- Show caution around other sick people
- A few weeks before planned travel, be sure you are up-to-date with all of your shots

Where can I find more detailed information?

The WHO:

http://www.who.int/csr/disease/coronavirus_infections/en/

The CDC:

<http://www.cdc.gov/coronavirus/MERS/index.html>

The AFHSC:

<http://www.afhsc.mil/home>



This Technical Guidance was prepared by the Occupational and Environmental Medicine Department, Navy & Marine Corps Public Health Center, Portsmouth, Virginia. Email us

occmed@mncphc.med.navy.mil. Visit us online at <http://www.med.navy.mil/sites/nmcphc/occupational-and-environmental-medicine>