Department of Navy (DON) Surveillance Advisory: 
Middle East Respiratory Syndrome Coronavirus (MERS-CoV)  
(with DRSi reporting guidance)

Issue

- Severe acute respiratory illness due to MERS-CoV infection, first identified in 2012 in the Kingdom of Saudi Arabia (KSA), has now been reported in 26 countries. Since May 2015, the Republic of Korea (ROK) has been combatting the largest MERS-CoV outbreak outside of the Arabian Peninsula. NAVMED clinicians and public health authorities should maintain a high index of suspicion to consider MERS-CoV infection following travel in or near the Arabian Peninsula or visits to ROK that involve time spent in a health care facility.
- As of 15 June 2015, over 1200 MERS-CoV infections have been reported to the World Health Organization (WHO). The vast majority (>85%) of these cases have occurred in KSA.
- Many reported cases have been linked to hospital-associated outbreaks that can be prevented through application of infection control procedures and protocols. MERS-CoV does not spread easily from person to person without close contact and there currently is no evidence of sustained MERS-CoV transmission in the community.
- No special screenings at points of entry or travel restrictions are recommended by the WHO or the Centers for Disease Control and Prevention (CDC). The CDC published a Travel Watch for ROK and a Travel Alert for the Arabian Peninsula regarding MERS-CoV.
- The National Center for Medical Intelligence (NCMI) reports the risk for DoD personnel, including those operating in affected areas, remains low. No MERS-CoV transmission has been identified in the United States or in the DoD population.
- NMCPHC medical surveillance and reporting strategy includes central analysis of electronic clinical data, local syndromic and case surveillance, and reporting of cases via Disease Reporting System internet (DRSi).

Background

MERS-CoV is a novel coronavirus associated with severe acute lower respiratory illness and a high case fatality rate. While dromedary camels are the suspected virus reservoir, it remains unknown how sporadic infections are acquired and exactly how the virus spreads from person to person. MERS-CoV has a five day median incubation period (range 2-14 days) and a clinical spectrum ranging from asymptomatic infection to severe illness requiring admission to an intensive care unit. Severe disease is usually found in older persons with chronic health conditions. On 16 June 2015, the WHO Emergency Committee concerning MERS-CoV convened and determined that conditions have not been met for a Public Health Emergency of International Concern.
MERS-CoV infection initially was detected among patients in, or with direct links to, countries in the Arabian Peninsula. Cases now have been reported from 26 countries, reinforcing the need for health care providers and facilities to remain alert for MERS-CoV in travelers returning from affected countries. MERS-CoV nosocomial infections have resulted in large outbreaks in hospitals located in KSA and ROK. The largest outbreak to date occurred May through June 2015 in ROK and involved multiple health care facilities, including 70 confirmed cases in a single hospital.

**NMCPHC Surveillance and Reporting Guidance and MERS-CoV Resources**

- DON providers suspecting a case of MERS should immediately notify their Public Health Emergency Officer, local Preventive Medicine staff, and cognizant Navy Environmental and Preventive Medicine Unit (NEPMU). CDC provides case definitions for surveillance and reporting, as well as extensive information for healthcare providers.
  - Navy and Marine Corps units providing patient care should report suspect (*patient under investigation*), probable, or confirmed MERS cases via DRSi immediately.
  - For further information on reporting medical events, visit the DRSi web page or contact the DRSi helpdesk via e-mail or phone (COMM: 757-953-0954, DSN: 377-0954).
- DoD MERS-CoV testing sites and specimen collection recommendations are listed here in guidance from the Armed Forces Health Surveillance Center.
- In accordance with BUMED INST 6220.12C, naval research laboratories should immediately notify the cognizant NEPMU of suspect, probable, or confirmed cases of MERS encountered while providing laboratory support to any MHS beneficiary.
- CDC MERS-CoV resources include infection control recommendations for health care settings as well as guidance for travelers to ROK and countries in the Arabian Peninsula. WHO provides information on the global MERS-CoV situation.
- Syndromic surveillance activities play an integral part in NMCPHC’s routine surveillance and preparedness strategy. Navy MTFs should review their surveillance protocols to ensure they include ongoing ESSENCE monitoring.
- Contact your cognizant NEPMU if you have any questions. NEPMU staff can assist with investigation support, risk assessment and obtaining guidance on laboratory testing.
  - Updated versions of this surveillance advisory and other NMCPHC preventive medicine resources may be found at http://www.med.navy.mil/sites/nmcphc/program-and-policy-support/Pages/default.aspx