

Current major event

MERS-CoV infections in health care

The recent experience from the current epidemic of MERS-CoV infections in the Eastern Mediterranean Region (EMR) indicates that the health care associated transmissions continue to occur despite calls for strengthening appropriate infection prevention and control measures in health facilities. This remains a particular challenge for control of this epidemic.

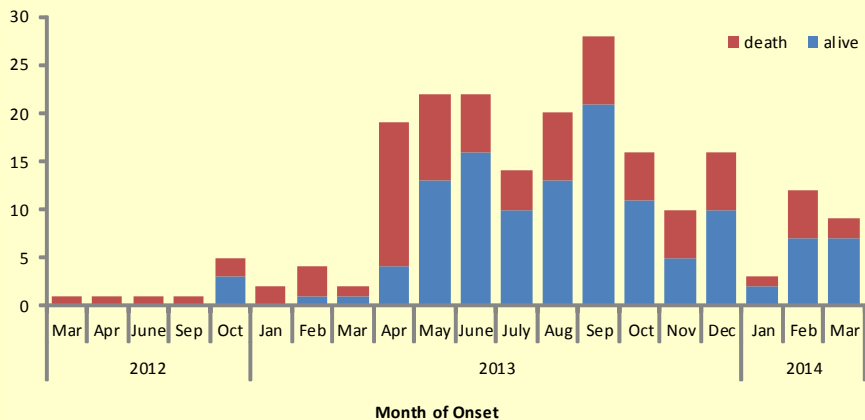
Editorial note

To date, WHO has been informed of a total of 206 laboratory-confirmed cases of Middle East respiratory syndrome (MERS-CoV) infections including 86 deaths. It is not possible to say how many of these cases were as a result of nosocomial transmissions. However, by looking at the case histories of the MERS-CoV infections reported so far, it may be plausible to say that close to half of the laboratory-confirmed secondary cases have been associated with health care settings.

These secondary cases of MERS-CoV infections have included health care workers treating MERS-CoV patients, other patients seeking treatment in hospitals for conditions unrelated to MERS-CoV, and people visiting MERS-CoV patients. The specific types of exposure resulting in transmission of these infections in the health care setting are currently unknown. The majority of health care workers who have been laboratory-confirmed for MERS-CoV have reported mild or no symptoms and were discovered through contact testing around known cases.

The experience from epidemics of emerging infectious diseases, such as severe acute respiratory syndrome (SARS), various viral haemorrhagic fevers, the recent pandemic (H1N1) 2009 and the recent epidemic of MERS-CoV, demonstrates how easily health care facilities can act as amplifiers of new pathogens and diseases in the community if there is no effective infection prevention and control programme in place.

No. of cases **Reported cases and deaths of MERS-CoV, 2012-2014**



MERS-CoV cases and deaths reported from the EMR countries

| Country | Cases | Deaths | CFR (%) |
|--------------|-------|--------|---------|
| Jordan | 4 | 3 | 75 |
| Saudi Arabia | 166 | 64 | 39 |
| Qatar | 10 | 2 | 20 |
| Tunisia | 3 | 1 | 33 |
| UAE | 15 | 6 | 40 |
| Oman | 4 | 4 | 100 |
| Kuwait | 3 | 1 | 33 |

During SARS outbreak, more than 1700 of the cases (21.3%) were health care workers. A case control study result showed that if proper droplet and contact precautions were undertaken by the health care workers, they would have been protected.

Drawing on lessons learned during the SARS and the recent MERS-CoV outbreak, it is important to highlight that appropriate infection prevention and control measures are established and followed rigorously by all health care workers in all health care settings despite the type of care they are providing. The health facilities should act as a place for safe health care and not as an amplifier of infections. Based on the currently available information on transmission risk of MERS-CoV, standard precautions plus other additional measures such as droplet and contact precautions need to be applied based on an assessed risk for providing care to patients with MERS-CoV infection.

Update on outbreaks

in the Eastern Mediterranean Region

Novel Coronavirus in Saudi Arabia, United Arab Emirates & Oman.

Current public health events of international concern

[cumulative N° of cases (deaths), CFR %]

Avian Influenza A (H5N1): 2003-2014

| | |
|--------------|---------------------|
| Egypt | [175 (63), 36%] |
| Indonesia | [195 (163), 83.6 %] |
| Viet Nam | [125 (62), 49.6%] |
| Cambodia | [47 (33), 70.2%] |
| Global total | [652 (386), 59.2%] |

MERS-CoV: 2012-2014

| | |
|--------------|-----------------|
| Saudi Arabia | [166 (64), 39%] |
| Jordan | [4 (3), 75 %] |
| Oman | [4 (4), 100%] |
| UAE | [15 (6), 40%] |
| Kuwait | [3 (1), 33.3%] |
| Tunisia | [3 (1), 33.3%] |
| Qatar | [10 (6), 60%] |

Ebola Hemorrhagic Fever: 2014

| | |
|---------|-------------------|
| Guinea | [112 (70), 62.5%] |
| Liberia | [7 (2), 28.6%] |

Wild poliovirus: 2013-2014

| | |
|-------------|---------------|
| Pakistan | [129 (0), 0%] |
| Afghanistan | [18 (0), 0%] |
| Syria | [37 (0), 0%] |
| Somalia | [194(0), 0%] |
| Iraq | [1 (0), 0%] |

CFR=Case-Fatality Rate; # Suspected cases