

Middle East Respiratory Syndrome Coronavirus (MERS – CoV)

Situational Update

Irshad Shaikh, MD, MPH, PhD
Regional Advisor,
International Health Regulations
Eastern Mediterranean Regional Office, Cairo, EGYPT

Presentation Outline

- Disease Burden
- Epidemiological Profile
- Transmission Risks
- Situational Assessment



Disease Burden

A total of **920** laboratory confirmed cases reported to WHO since the start of this outbreak in 2012.

- 9 cases in 2012
- 168 cases in 2013
- 743 cases in 2014

At least 313 deaths



Epidemiological situation

- In total, 920 laboratory-confirmed cases have been reported to WHO since September 2012. These include asymptomatic cases.
- Median age 47 years (range 3 months–94 years)
- 63% of cases are male (n=920)
- 26% (236/920) reported as healthcare workers
- Severity:
 - 46.1% (425) severe/ fatal
 - 20.3% (187) moderate
 - 26.4% (243) asymptomatic /mild
 - 7.2% (66) not reported
- 313 deaths



Cases by Country

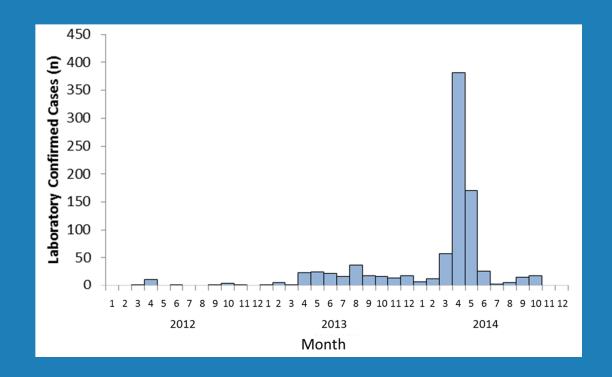
| Country reporting | n |
|-------------------|--------|
| Algeria | 2 |
| Austria | 1 |
| Egypt | 1 |
| France | 2 |
| Germany | 2 |
| Greece | 1 |
| Iran | 5 |
| Italy | 1 |
| Jordan | 1 1 |
| Kuwait | 3 |
| Lebanon | 1 |

| Malaysia | 1 |
|--------------------------|-----|
| Netherlands | 2 |
| Oman | 2 |
| Qatar | 9 |
| Saudi Arabia | 796 |
| Tunisia | 3 |
| Turkey | 1 |
| United Arab Emirates | 69 |
| United Kingdom | 4 |
| United States of America | 2 |
| Yemen | 1 |
| Total | 920 |

Total deaths: at least 331



Weekly Incidence of MERS-CoV Cases



Transmission of MERS-CoV

- Person-to-person transmission well documented
- 29 spatiotemporal clusters reported Household and healthcare settings
- Median incubation period just over 5 days, range (2-14 days)
- Routes of transmission unknown
- No clear evidence of sustained community transmission



Event Based Surveillance For MERS-CoV: Data Collection

- Three Nosocomial outbreaks on-going in Kingdom of Saudi Arabia – 2 in Taif and 1 in Riyadh
- Investigations on going
- One exported case from KSA to Turkey, two to Qatar and one suspected to Austria
- Many of suspected Hajj pilgrims testing –ve for MERS



Assessment - 1

- Overall, the epidemiology of MERS-CoV remains unchanged
- There remains no evidence of sustained human-tohuman transmission in the community nor is there evidence of airborne transmission under general circumstances
- Therefore, the overall transmission patterns previously observed remain unchanged



Assessment - 2

WHO bases this assessment on the evidence that:

- The clinical picture appears to be similar to what was observed previously; secondary cases tend to present with a milder disease than primary cases, and many of the recently reported secondary cases have been mild;
- The recently exported cases to Algeria, Greece, Lebanon, Iran, Malaysia, the Netherlands, the Philippines, and USA have <u>not</u> resulted in sustained onward transmission to persons in close contact on airplanes or in their respective countries;
- Intensive screening of MERS-CoV contacts revealed very few instances of household transmission; and
- There has been no increase in the size or number of observed household clusters.

