

Current major event

MERS-CoV in Saudi Arabia

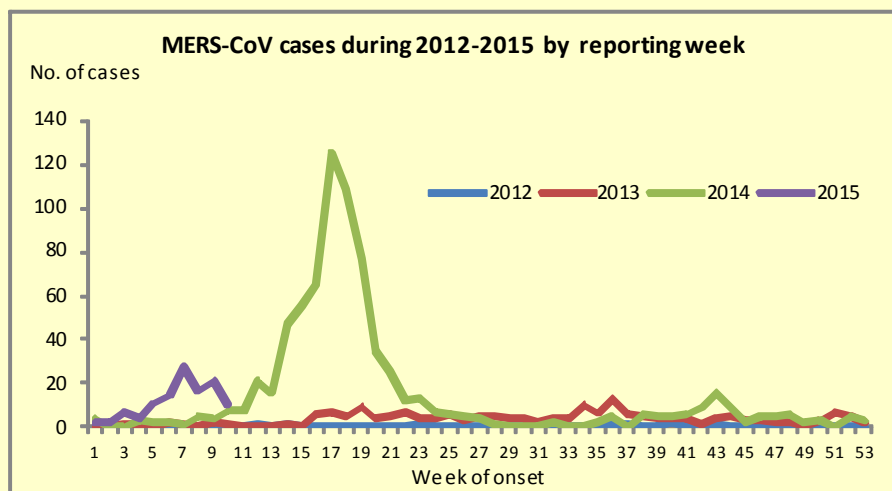
Since June 2012, Saudi Arabia reported 946 laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) including at least 370 related deaths (CFR 39%). This represents over 88% of all MERS-CoV cases reported globally. During the current year since 01 January till date, a total of 117 laboratory-confirmed cases including 48 related deaths (CFR: 41%) were reported from Saudi Arabia. At least four small scale hospital outbreaks have also been reported from MERS-CoV in Saudi Arabia during the first two months of the current year.

Editorial note

This year, there has been substantial increase in the number of reported cases of MERS-CoV in Saudi Arabia since the beginning of epidemiological week no 3 (*Please see the table*). Although the number of community acquired infection from MERS-CoV increased during this period, the biggest increase was, however, observed in the number of secondary infections, reported during the same period. This surge in secondary infections resulted, mostly, due to hospital outbreaks which were, however, smaller in size compared to what was observed last year in the country.

The seasonality of the disease caused by the MERS-CoV is yet to be determined. Although for the last three years between 2012 to 2014 (*Please see the graph above*), an increase in the number of both community and hospital acquired infections from MERS-CoV was reported during April-May. In case, this surge represents a seasonality of the disease, an increase in the number of laboratory-confirmed cases of MERS-CoV which are community acquired would be observed during the upcoming weeks or months.

In view of this surge in number of reported cases of MERS-CoV, public health preparedness measures specially at the hospital level need to be enhanced since the hospital outbreaks can go undetected as experienced last year for



MERS-CoV cases reported by week of onset, 2013-2015

Week	2013		2014		2015	
	C	D	C	D	C	D
1	0	0	4	3	2	1
2	0	0	0	0	2	1
3	1	1	0	0	7	2
4	0	0	2	1	4	1
5	0	0	2	1	11	3
6	0	0	2	2	15	7
7	1	1	1	1	28	15
8	0	0	5	3	17	7
9	2	1	4	1	21	9
10	0	0	6	5	10	2
Total	4	3	26	17	117	48

C= Case; D= Death

weeks after weeks before a huge spike of cases in hospital signal the onset of a big outbreak.

Until it is known about the mode of transmission of MERS-CoV and how the virus spills over to humans, the only way to prevent a huge upsurge of cases will be to improve hospital infection control measures across all healthcare settings and prevent nosocomial transmission. This will require strong leadership, administrative controls and implementation of infection control measures in a consistent and systematic manner across the country in all healthcare settings. The virus has not changed. The only difference this year would be how lessons are learned from previous outbreaks and applied effectively to prevent any repetition of similar outbreaks.

Update on outbreaks

in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia and Qatar, Avian Influenza A (H5N1) in Egypt

Current public health events of international concern

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

Avian Influenza : 2006-2015

Egypt (A/H5N1) [301 (108), 35.9%]
Egypt (A/H9N2) [1(0), 0%]

MERS-CoV: 2012-2015

Saudi Arabia [946 (370), 39.1%]
Jordan [12 (6), 50%]
Oman [5 (3), 60%]
UAE [71 (9), 12.7%]
Kuwait [3 (1), 33.3%]
Tunisia [3 (1), 33.3%]
Qatar [11 (4), 36.4%]
Yemen [1 (1), 100%]
Egypt [1 (0), 0%]
Lebanon [1 (0), 0%]
Iran [5 (2), 40%]

Ebola Virus Disease: 2014-2015

Guinea [3285 (2170), 66.1%]
Liberia [9343 (4162), 44.5%]
Sierra Leone [11619 (3629), 31.2%]
UK [1(0), 0%]
Nigeria [20 (8), 40%]
Senegal [1(0), 0%]
Spain [1(0), 0%]
USA [4(1), 25%]
Mali [8(6), 75%]

Wild poliovirus: 2014-2015

Pakistan [322 (0), 0%]
Afghanistan [29(0), 0%]