

Current major event

Hospital outbreak of MERS in Saudi Arabia

During the months of February and March 2017, one hospital outbreak of MERS-CoV was reported from the Riyadh region in Saudi Arabia. There were 10 cases and no deaths in this hospital cluster. Since the beginning of 2017, Saudi Arabia has reported 48 laboratory-confirmed cases, including, 15 deaths (CFR: 31.3%) (Please see the table).

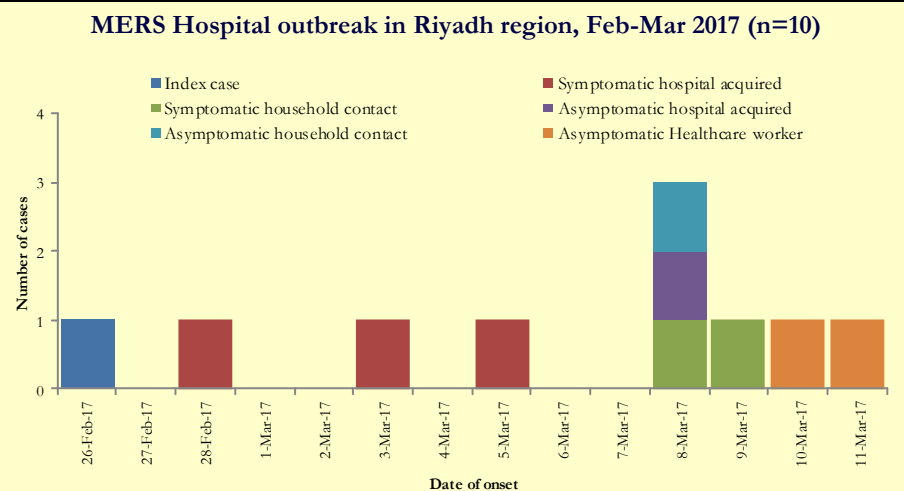
Editorial note

From April 2012 to March 2017, a total of 1936 laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV), including 713 deaths (Case-fatality rate: 36.8%) were reported globally. Among these cases, 1575 (81.4%) were reported from Saudi Arabia including 639 deaths (Case-fatality rate: 40.6%).

The hospital outbreak reported in February and March was the first health care setting outbreak of MERS-CoV to be reported from Saudi Arabia this year. The outbreak occurred in a hemodialysis unit inside a hospital in Riyadh region during the epidemiological weeks 9 and 10, 2017. The index case was a 32-year-old female with end stage renal disease who was on regular hemodialysis. On 3rd of March, she required hospital admission and tested positive for MERS-CoV at the hospital while she was admitted for other cause.

Contact tracing inside the hospital revealed more cases who received hemodialysis in the same unit and possibly shared same nursing staff. Furthermore, contact tracing in the hospital revealed more patients in the hospital who were diagnosed with MERS-CoV; Aggressive contact tracing was also extended in the community and two asymptomatic healthcare workers were also identified in the same hospital. In addition, two household contacts of the index case were also tested positive for MERS-CoV; both had minimal symptoms.

In response to this outbreak, the rapid response (RRT) and outbreak management teams of the Ministry of Health were activated. Intensive infection con-



MERS cases (Survived/death) in Saudi Arabia since the beginning of 2017

Month	Survived	Death	CFR (%)
January	12	6	33.3
February	12	8	40
March	9	1	10
Total	33	15	31.3

trol training to all the hospital staff and strict monitoring of infection control measures were conducted; and active triage of all hemodialysis patients prior to initiation of dialysis was enforced.

Triaging, early detection including aggressive contact tracing; effective infection prevention and control (IPC) measures in health care settings and high quality case management remain the key components of preventing hospital outbreak from MERS. Transmission in health care settings has been the main driver of the outbreak in the affected countries since the emergence of MERS -Cov in 2012. Owing to improved IPC measures in hospitals, there have been significant drop in frequency and magnitude of hospital outbreaks from MERS compared to when the outbreak started in 2012. Such improvement in IPC measures need to be continued and sustained in order to prevent and contain any outbreak from MERS. The current outbreak has demonstrated that the MERS-CoV is an “opportunistic” virus and there is no room for any complacency in dealing with this virus.

Update on outbreaks in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia; **Cholera** in Somalia; **Cholera** in Yemen; **Chikungunya** in Pakistan.

Current public health events of international concern [cumulative N° of cases (deaths), CFR %]

Avian Influenza: 2006-2017

Egypt (A/H5N1) [358 (122), 34.08%]
Egypt (A/H9N2) [3 (0)]

Chikungunya: 2016-2017

Pakistan [1227 (0)]

MERS-CoV: 2012-2017

Saudi Arabia [1,575 (639), 40.6%]

Cholera: 2016-2017

Somalia [20,942 (483), 2.3%]
Yemen [23,506 (108), 0.5%]

Meningococcal disease: 2017

Nigeria [1407 (211), 15%]

Avian Influenza A (H7N9): 2013-2017

China [1,320 (492), 37.3%]

Yellow fever

Brazil [1,561 (264), 16.9%]

Wild poliovirus: 2014-2017

Pakistan [382 (0)]
Afghanistan [64 (0)]

Zika Virus Infection: 2015-2017

84 countries and territories have reported transmission so far.