Current major event

Rapid Response Team training for MERS

Since the emergence of Middle East respiratory syndrome coronavirus (MERS-Cov) in September 2013, Saudi Arabia has reported over 80% of the cases. Current scientific evidence suggests that dromedary camels are a major reservoir for MERS-Cov and an animal source of infection in humans has been implicated. Although there is no evidence of sustained human-to-human transmission, sporadic outbreaks and clusters of cases have been reported mainly in health care settings. This signifies the need for having a trained Rapid Response Team (RRT) on stand by for investigation of any suspected cluster in the community or in healthcare settings. Recently, the ministry of health of Saudi Arabia and WHO jointly organized two rounds of training for its RRTs specially focussing on investigation of cluster of Middle East respiratory syndrome (MERS).
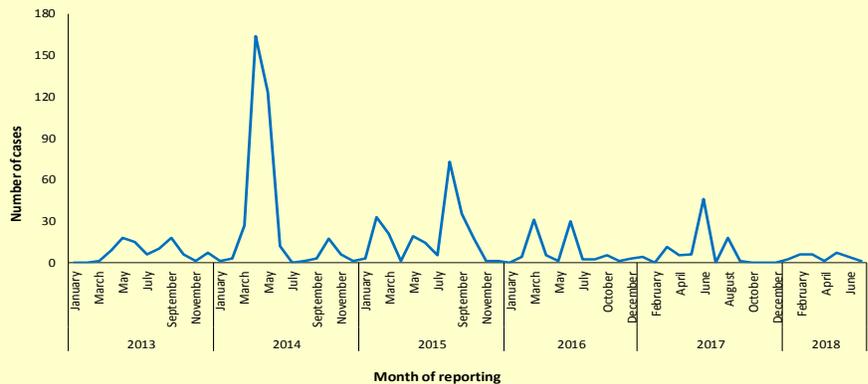
Editorial note

Middle East respiratory syndrome (MERS) is a viral respiratory disease caused by a novel coronavirus (MERS-Cov) that emerged in September 2012. It causes severe human infections resulting in high mortality in about 40% of reported cases. By end of September 2018, more than 2,200 laboratory-confirmed MERS cases were reported globally including 800 deaths (Case fatality rate is 36%). More than 90% of these cases that have been reported, globally, are from 12 countries in the WHO Eastern Mediterranean Region. *(Please see the table).*

MERS is an emerging zoonotic infection. The current scientific evidence suggests that dromedary camels are major reservoir for MERS-Cov. However, currently it remains unknown how the virus spills over to humans from camels. Although no efficient human-to-human transmission has been seen or documented to be associated with MERS-Cov, clusters of infection have repeatedly occurred in health care settings amongst the unprotected close contacts of a case who had documented animal exposure. So far, 877 confirmed cases of MERS were reported to be part of clusters, mainly in health care settings. *(Please see the chart).*

As MERS is a zoonotic infection, any field investigation of a cluster *(defined as two or more persons with onset of symptoms within the same 14 day period, and who are associated with a specific setting such as a classroom, workplace, household, extended family, hospital, or other residential institution)* has to be multi-disciplinary in nature in order to identify the source of infection and also to prevent its geographic spread.

The WHO Regional Office for Eastern Mediterranean (EMRO) in collaboration with ministry of health of Saudi Arabia, recently conducted a training workshop for national rapid response teams. The overall goal of the training was to build the functional skills of national and sub-national rapid response teams for detection and response to MERS outbreaks and clusters. A scenario-based simulation component on a hospital cluster of MERS that triggered from an index case with animal exposure was used to test the functional skills of the participants.

Having a trained multi-disciplinary team capable of conducting a proper field investigation at the animal-human interface is the key to early detect and rapidly respond to MERS outbreaks in the community.

Distribution of reported MERS cases related to clusters, Saudi Arabia, 2013 to September 2018

Laboratory-confirmed cases of MERS reported from the countries of EMR

Country Reporting	Total
Saudi Arabia	1878
United Arab Emirates	87
Jordan	28
Qatar	19
Oman	11
Iran (Islamic Republic Of)	6
Kuwait	4
Tunisia	3
Lebanon	2
Bahrain	1
Egypt	1
Yemen	1
Grand Total	**2041**

Update on outbreaks in the Eastern Mediterranean Region

MERS in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **Diphtheria** in Yemen.

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

Avian influenza: 2006-2017	
Egypt (A/H5N1)	[359 (122), 34%]
Egypt (A/H9N2)	[4 (0)]
Ebola virus disease (EVD): 2018	
Democratic Republic of Congo (DRC)	[237 (153), 64.6%]
Rift Valley fever : 2018	
Kenya	[95 (11), 11.6%]
Uganda	[23 (8), 34.8%]
Cholera: 2017-2018	
Somalia	[6 446 (43), 0.7%]
Yemen	[1 236 028 (2 556), 0.2%]
Tanzania	[4 236 (82), 1.9%]
Diphtheria: 2018	
Yemen	[2 639 (147), 5.6%]
Bangladesh	[8 251 (44), 0.5%]
MERS: 2012-2018	
Saudi Arabia	[1 886 (729), 38.6%]
Yellow Fever: 2017-2018	
Brazil	[1 266 (415), 32.7%]