

Current major event

MERS-CoV in the EMR

In recent time, two new developments related to the Middle East Respiratory Syndrome Coronavirus (MERS-CoV) have occurred in the Eastern Mediterranean Region (EMR) of WHO that may potentially be of significant public health importance. The first is that the MERS-CoV outbreak infection seems to be spreading geographically. Recently two more countries in the EMR (Oman and Kuwait) have reported laboratory confirmed cases. The second development is that the MERS-CoV has been detected in camels linked to two recent confirmed human infections in Qatar.

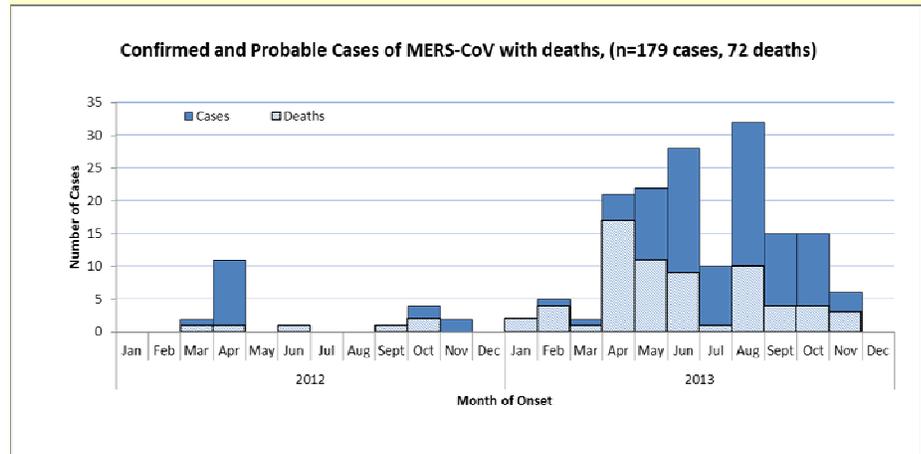
Editorial note

Since April 2012, 169 laboratory-confirmed cases of human infection with MERS-CoV including 71 deaths have been reported to WHO. To date, the affected countries in the EMR include Jordan, Kingdom of Saudi Arabia (KSA), Kuwait, Oman, Qatar, Tunisia and the United Arab Emirates (UAE).

Of the total global cases, majority of laboratory-confirmed cases of MERS-CoV (132/169; 78%) have been reported from KSA. In recent time, two new countries - Oman and Kuwait have reported cases. In addition, the UAE, in recent weeks, has reported a family cluster (Father, mother and son). The situation raises concerns about possible expansion of virus in hitherto unknown reservoir.

The recent findings on detection of MERS-CoV virus in camels is consistent with previously published reports of MERS-CoV reactive antibodies in camels, and adds another important piece of information to the understanding of MERS-CoV ecology. However, this finding does not necessarily implicate camels directly in the chain of transmission to humans, as a large proportion of sporadic cases did not have any contacts with animals, including camels. The critical remaining question about this virus is the route by which humans are infected.

Occurrence of MERS-CoV cases over time, April, 2012–November 2013



Specifically, the specific behaviours and exposures that bring humans into contact with sources of the virus, whether camels are a part of the chain of transmission to humans or whether they are coincidentally infected, and whether other animals also play a role in transmission or act as a reservoir remain unknown till date.

Following this discovery in camels and two additional countries in the region reporting laboratory-confirmed cases, it is ominous that the virus is circulating in the region in both animal and/or environmental sources. The situation may trigger further spread of infection and accelerate transmission opportunities. The present situation also provides an ideal opportunity for investigation to known the “unknowns”.

In order to stay ahead of the curve and taking advantage of current opportunity, a multi-national case-control study involving the affected countries in the region need to be implemented as soon as possible to better understand and identify risk factors and types of exposure that result in infection. In addition, further animal studies will be required to identify the animal reservoir of the virus. Other studies of importance could be sero-epidemiological investigation to know the extent of infection in humans. This will require intense international research collaboration between the countries, WHO, FAO and OIE to counter and win this menacing threat to public health.

Update on outbreaks

in the Eastern Mediterranean Region

Novel Coronavirus in Qatar, Kuwait and United Arab Emirates; **Wild poliovirus** in Syria; **Yellow fever** in Sudan.

Current public health events of international concern

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

Avian influenza

Egypt	[173 (63), 36.4%]
Indonesia	[192 (160), 83.3 %]
Viet Nam	[125 (62), 49.6%]
Cambodia	[31 (27), 87.1%]
Global total	[629 (375), 59.6%]

Hepatitis E

South Sudan	[12,718 (251), 1.9%]#
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Novel Coronavirus (MERS-CoV)

Saudi Arabia	[132 (55), 41%]
Kuwait	[2 (0)]
Qatar	[10 (2), 20%]
UAE	[10 (3), 30 %]

Yellow fever

Sudan	[44 (14), 32%]
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Crimen-Congo haemorrhagic fever

Pakistan	[88 (18), 20%]
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Wild poliovirus

Syria	[17 (0)]
Somalia	[180 (0)]
Cameroon	[2 (0)]

CFR=Case-Fatality Rate; # Suspected cases