

Current Event

A new cluster of MERS-CoV in Riyadh

A cluster of MERS-CoV cases occurred among inhabitants of a residential compound for expatriate workers in Northeast Riyadh city.

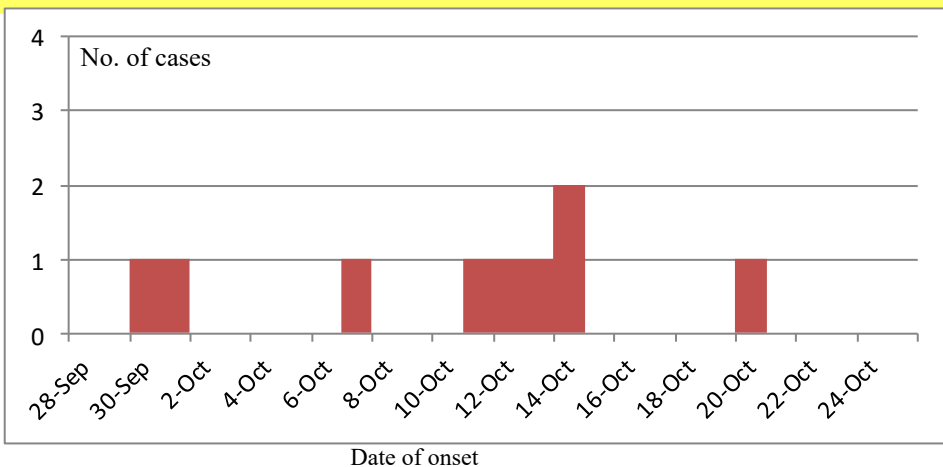
Editorial Notes

The cluster of MERS-CoV cases occurred in a compound housing 640 female janitorial workers recruited by a private maintenance and operation company. The compound is composed of 12 buildings; each building has two-story villas; and each villa houses 23-40 persons. There is a common kitchen shared by all inhabitants in each villa. About half of the workers serve at an all-female University; whereas the majority of the rest work at a military hospital.

The first case (27-yr) started experiencing symptoms on the 1st of Oct. She sought medical advice at a private polyclinic on the 7th of Oct. and was admitted to King Saud Medical City in Riyadh on the 8th of Oct. as a case of pneumonia that was positive for MERS-CoV by PCR. The case worked exclusively at the all-female University with no evidence of contact with symptomatic individuals at her place of residence or elsewhere. The co-inhabitants of the villa (N=25) were quarantined in a different location. Some of the case's roommates were admitted to hospital suffering from mild respiratory symptoms; and later, two of these roommates tested positive for MERS-CoV by PCR. Two days later, another janitor from the neighboring villa reported symptoms and she tested positive for MERS-CoV. Her 11 roommates were screened and 3 tested positive for MERS-CoV. Likewise, the other 34 contacts living in the same villa were quarantined and put under surveillance.

On the 21st of Oct. another janitor living in a building facing the building where the first cases occurred, and a nurse who cared for the first case at the

MERS-CoV in a residential compound for expatriate workers, Riyadh city, October 2015



Cases of MERS-CoV: International Week (IW) No. 44: 28 Oct -1 Nov 2015

Total	7
Symptomatic (S)	6
Asymptomatic (AS)	1
Healthcare worker (S)	2
Healthcare worker (AS)	1

private polyclinic developed mild symptoms and tested positive for MERS-CoV by PCR.

This outbreak is unique as it occurred in a closed community. Serological testing is being conducted to find asymptomatic infections that might have been missed by nasopharyngeal PCR testing. Up-to-date the role of asymptomatic infections in spreading the disease; especially at healthcare facilities is not fully understood.

MOH has already initiated the outbreak investigation. Preliminary data suggest that the source of the cluster was a janitor who acquired an asymptomatic infection when she visited a healthcare facility. The timely institution of the public health measures were sufficient to interrupt further transmission of the virus.

MERS-CoV Cases that occurred in Saudi Arabia in 2015: International Weeks 1-44 (29 Dec 2014 - 1 Nov 2015)

Laboratory Confirmed: N = 449;
Deceased: N = 187;
Case-Fatality Rate Percent = 41.6% .

Recent Publications:

Memish ZA, Al-Tawfiq JA, Alhakeem RF, Assiri A, Alharby KD, Almahallawi MS, Alkhalawi M. Middle East respiratory syndrome coronavirus (MERS-CoV): A cluster analysis with implications for global management of suspected cases. *Travel Med Infect Dis.* 2015 Jul-Aug;13(4):311-4. doi: 10.1016/j.tmaid.2015.06.012. Epub 2015 Jul 15.

MERS-CoV in KSA 2015*

Region	Case	Primary	Secondary	U.C.
Riyadh	290	98	183	9
Al-Ahassa	56	11	41	4
Eastern Region	21	10	11	0
Jeddah	17	9	7	1
Qassim	15	9	6	0
Najran	14	9	5	0
Taif	11	8	3	0
Madinah	7	1	6	0
Asir	4	2	2	0
Tabuk	4	4	0	0
Makkah	3	3	0	0
Hail	2	1	1	0
Al-Joaf	2	2	0	0
Jazan	1	1	0	0
Northern Borders	1	1	0	0
Qunfotha	1	1	0	0
Al-Baha	0	0	0	0
Bisha	0	0	0	0
Hafr Al-Batin	0	0	0	0
Qurayyat	0	0	0	0
Total	449	170	265	14

Case: Confirmed Symptomatic. U.C.: Unclassified cases
*Period: Form 29 Dec 2014 to 1 Nov 2015

