

Current Event

Challenges in MERS-CoV Surveillance in Saudi Arabia

MOH witnessed improvement in timeliness, completeness of epidemiological and laboratory surveillance of MERS-CoV. However, certain challenges remain and need to be addressed by all possible means.

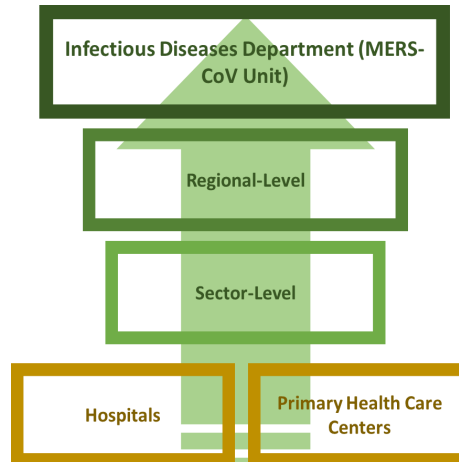
Editorial Notes

Since its emergence, MOH has used four different case definitions for MERS-CoV in the periods of: **October 2012 - May 2013**, **May 2013 - May 2014**, **May 2014 - June 2015**; and from **June 2015 to-date**. The updated case-definitions were distributed to all health facilities in Saudi Arabia, together with some scientific material about the disease. MOH developed special data collection forms for notification, case-investigation, contact tracing and follow-up. All suspected and laboratory-confirmed cases of MERS-CoV should be reported to the respective Public Health Directorate within the region through HESN web-based surveillance system.

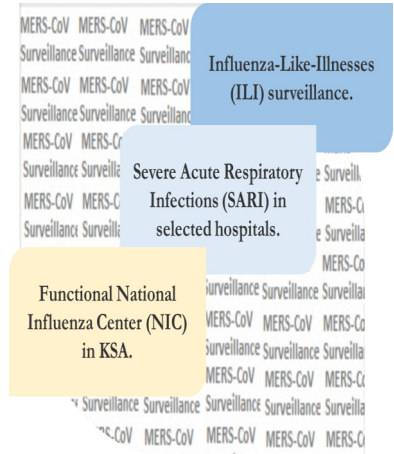
The task of Public Health Teams (PHT) in each health region in Saudi Arabia gather information on new cases, follow up the cases and update the information on a daily basis. The PHT visits the houses of the cases to identify the household contacts, ascertain exposure to animals e.g. camels, and take appropriate samples from symptomatic contacts. During 2015, PHT made 458 field visits and have identified more than 4000 household contacts. Exposed household contacts are followed up daily for 14 consecutive days.

Mild symptoms make it difficult to identify patients in the early stages of MERS infection, health care workers have unknowingly exposed themselves to the infection while treating MERS patients and many major, but limited, outbreaks have been reported at hos-

Reporting system of MERS-CoV



Means to strengthen MERS-CoV Surveillance System



Cases of MERS-CoV: International Week (IW) No. 53: 28 Dec 2015—3 Jan 2016

Total	1
Symptomatic (S)	1
Asymptomatic (AS)	0
Healthcare worker (S)	0
Healthcare Worker (AS)	0

pitals; especially in major hospitals in the Kingdom. In addition to triaging and improved surveillance activities, HCWs particularly those working at emergency departments are continuously reminded to add droplet precautions to their standard infection control procedures. According to MOH guidelines, all exposed HCWs to a laboratory-confirmed MERS-CoV should be screened. Household contacts are screened for MERS-CoV only if they are symptomatic.

Challenges facing MERS-CoV surveillance include shortage in well-trained surveillance officers in some regions, especially during the outbreaks, inadequate resources, work overload and lack of incentives or overtime payments. The coordination between the surveillance activities in MOH and Ministry of Agriculture is still not fully operational.

HCWs exposed to needle-stick injuries have to complete a certain form detailing their exposure and actions taken. Probably MOH need to develop a similar system for HCWs exposed to MERS-CoV patients.

Recent Publications:

Sabir JS, Lam TT, Ahmed MM, Li L, Shen Y, et al. Co-circulation of three camel coronavirus species and recombination of MERS-CoVs in Saudi Arabia. *Science*. 2016 Jan 1;351(6268):81-4. doi:10.1126/science.aac8608. Epub 2015 Dec 17.

Cho SI. A New Measure for Assessing the Public Health Response to a Middle East Respiratory Syndrome Coronavirus Outbreak. *J Prev Med Public Health*. 2015. Nov;48(6):277-9. doi: 10.3961/jpmph.15.069. Epub 2015 Nov 30.

MERS-CoV in KSA 2015*

Region	Case	Primary	Secondary	U.C.
Riyadh	294	102	184	8
Al-Ahasa	56	11	41	4
Eastern Region	21	10	11	0
Jeddah	18	10	7	1
Qassim	18	11	7	0
Najran	15	10	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	458	177	268	13

Case: Confirmed Symptomatic. U.C. : Unclassified cases

*Period: Form 29 Dec 2014 to 3 Jan 2016

