

Current Event

Referral of MERS Cases

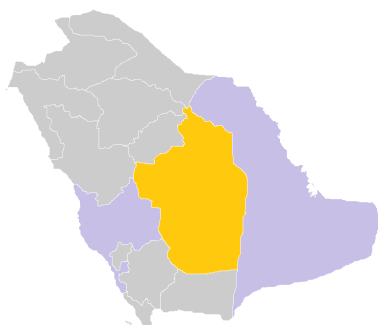
The Command and Control Centre (CCC) discussed the referrals of MERS between hospitals.

Editorial Notes

It has been observed that the referral of cases of MERS, especially during outbreaks, could result in the spread of MERS between hospitals. Ministry of Health (MoH) has assigned at least one hospital in every region in Saudi Arabia to act as a referral hospital for MERS in its respective region. These hospitals receive MERS cases from other hospitals affiliated to MoH or to the private sector. In addition, MoH designated three hospitals as Centers of Excellence (CoE) for MERS, and equipped them with ECMO facilities and more rooms with negative pressure. The CoE would accept the referral of patients from other hospitals from all over the kingdom should they fulfil certain criteria. This system has helped standardize case management and in the establishment of recommended infection prevention and control measures. Other governmental non-MOH hospitals, e.g. the universities, the military, the Security Forces and the National Guards hospitals, have their own parallel referral systems.

Some hospitals managed to redirect their suspected MERS patients to a CoE by informing their patients verbally without proper referral papers or arrangements. Numerous cases of MERS had been referred to other hospitals as cardiac diseases. Self and improper referral of MERS patients over-flooded the patient waiting areas at Prince Mohammed bin AbdulAziz Hospital (PMAH), especially at the emergency room respiratory zone (Figure 1). A total of eleven secondary cases of MERS occurred among

Figure 1: CoE and the Referral of MERS Cases (Riyadh, PMAH)



Regions of the three centers of excellence for MERS in Saudi Arabia

Riyadh, 2015

Total number of MERS cases	321
MERS cases admitted to PMAH	192
Referred by hospitals in the region	126
Diagnosed at PMAH emergency room	66

65.6% (for Referred by hospitals in the region)
34.3% (for Diagnosed at PMAH emergency room)

A proper referral mechanism means notification of the receiving hospital in advance to make necessary arrangements; and therefore guard against hospital-acquired infections.

Cases of MERS-CoV: International Week (IW) No. 6: 7 – 13 Feb 2016

Total	2
Symptomatic (S)	2
Asymptomatic (AS)	0
Healthcare worker (S)	0
Healthcare Worker (AS)	0

Healthcare Workers (HCWs) at PMAH in 2015, a CoE that has been known to have almost zero secondary cases among its HCWs for almost two years. Simple interviews with patients could help in identifying gaps and flaws in the referral mechanisms and assess the diagnostic capacities of the referring hospitals. Conversely, some of the patients who are referred as severe cases of MERS were actually patients with some other chronic diseases that needed expensive medical care. During the recent outbreaks of MERS in 2015, more than one of the non-MOH governmental hospitals partially suspended its services at the Emergency Room or all of its admissions for 2-3 weeks. MoH hospitals had to accept their patients, including those who needed hospitalization for quite long periods. MoH would need to train HCWs in other hospitals on intensive care unit management of MERS to minimize referrals of MERS cases among hospitals.

Recent Publications:

Lessler J, Salje H, Van Kerkhove MD, Ferguson NM, Cauchemez S, Rodriguez-Barraquer I, Hakeem R, Jombart T, Aguas R, Al-Barrak A, Cummings DA; MERS-CoV Scenario and Modeling Working Group. Estimating the Severity and Subclinical Burden of Middle East Respiratory Syndrome Coronavirus Infection in the Kingdom of Saudi Arabia. *Am J Epidemiol.* 2016 Feb 4. pii: kww452.

MERS-CoV in KSA 2016*

Region	Case	Primary	Secondary	U.C.
Riyadh (1)	3	2	1	0
Al-Ahsaa	0	0	0	0
Eastern Region	0	0	0	0
Jeddah	3	3	0	0
Qassim	1	1	0	0
Najran (1)	1	1	0	0
Taif	1	1	0	0
Madinah	1	1	0	0
Asir	0	0	0	0
Tabuk	0	0	0	0
Makkah	0	0	0	0
Hail	0	0	0	0
Al-Joaf	0	0	0	0
Jazan	0	0	0	0
Northern Borders	0	0	0	0
Qunfotha	0	0	0	0
Al-Baha	0	0	0	0
Bisha	1	1	0	0
Hafr Al-Batin	0	0	0	0
Qurayyat	0	0	0	0
Total	11	10	1	0

Case: Confirmed Symptomatic. U.C.: Unclassified cases
*Period: Form 3 Jan to 13 Feb 2016
Regions with new cases of this week are highlighted in yellow.