وزارة الصحة
Ministry of Health

Weekly Monitor MERS-CoV

Volume 2 Issue 11 Tuesday 15 March 2016

Current Event

An Oubreak of MERS in Qassim

A recent outbreak of Middle East Respiratory Syndrome (MERS) occurred in Qassim Region.

Editorial Notes

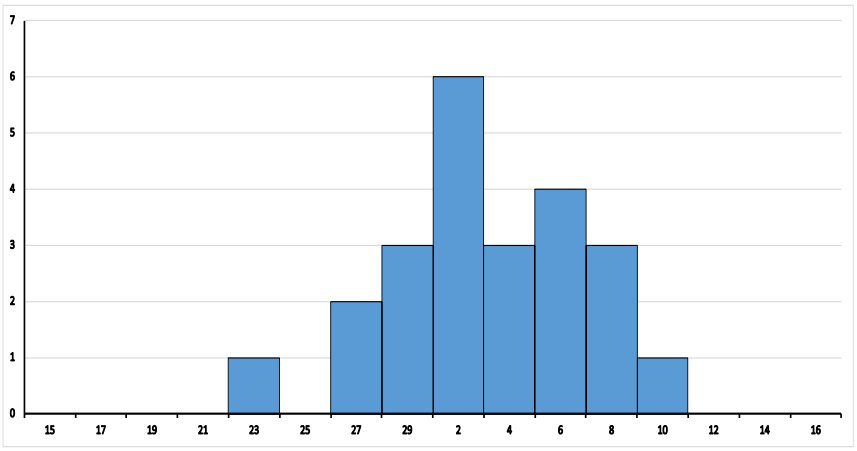
MERS had caused multiple large Health-care Associated Infections (HAIs) and outbreaks. Within about three weeks (22 Feb - 12 Mar 2016), 23 cases of MERS were reported from Qassim Region, predominantly from one hospital *(Figure 1)*. The cases included 5 primary cases, 12 secondary cases and 6 healthcare workers (HCWs). The recent outbreak of MERS in Qassim and occurrence of 18 HAIs, including 6 healthcare workers (HCWs) is an event that raised many issues for reconsideration. Only 4 secondary cases of MERS have been reported from different Ministry of Health (MoH) hospitals since the beginning of 2016. Occurrence of such a relatively large number of secondary cases within one hospital is disturbing.

Preliminary results of an ongoing outbreak investigation indicated that diagnosis of MERS was confirmed rather late; especially for the first few cases of the disease. Some Emergency Room (ER) physicians considered MERS in their differential diagnoses. The overall implementation of Infection Prevention and Control (IPC) within the hospital was probably insufficient.

The concept of visual triaging is very simple but MoH health facilities in Qassim could not implement it properly. This could be due to the difficulties in readjusting the designs of the entrances of the hospitals. The adherence of HCWs to IPC, particularly at the ER should be maintained at all times. ER doctors throughout the kingdom need to be reminded continuously about the case-definitions of MERS. Resuscitation, intubation and suction of MERS patient as well as other aerosol-generating procedures should not be done by HCWs with no Personal Protective Equipment (PPE) at the ER. Likewise, this procedure should not be done in presence of immuno-compromised patients, or in rooms with no negative pressure or a HEPA filter. In addition, the flow of health visitors; especially for immune-compromised patients, needs to be regulated. It has been hypothesized that apparently healthy visitors could transmit MERS-CoV infection to hospitalized patients; especially if they were not wearing masks, had asymptomatic MERS infection, lean to greet the patient or /and shed some droplets of saliva on the patients following religious prayers or recitation of verses of Quran.

Improper collection of nasopharyngeal swabs would result in false negative laboratory results, delays confirmation of diagnosis of MERS, waste resources and may cost lives.

Figure 1: Outbreak of MERS in Qassim Region by Date of Onset (February-March, 2016)



Cases of MERS-CoV: International Week (IW) No. 10: 6 – 12 Mar 2016

Total	**24**
Symptomatic (S)	21
Asymptomatic (AS)	3
Healthcare worker (S)	3
Healthcare Worker (AS)	3

Recent Publications:

Liu S, Chan TC, Chu YT, Wu JT, Geng X, Zhao N, Cheng W, Chen E, King CC. Comparative Epidemiology of Human Infections with Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome Coronaviruses among Healthcare Personnel. PLoS One. 2016 Mar 1;11(3):e0149988. doi: 10.1371/journal.pone.0149988. eCollection 2016.

MERS-CoV in KSA 2016*

Region	*Case*	*Primary*	*Secondary*	*U.C.*
Qassim (16)	22	5	14	3
Riyadh (3)	19	14	4	1
Jeddah (1)	5	4	0	1
Asir	2	2	0	0
Najran	2	2	0	0
Taif (1)	2	2	0	0
Hail (1)	2	2	0	0
Madinah	1	1	0	0
Bisha	1	1	0	0
Eastern Region (1)	1	1	0	0
Al-Baha (1)	1	0	0	1
Makkah	0	0	0	0
Tabuk	0	0	0	0
Al-Ahsaa	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
Hafr Al-Batin	0	0	0	0
Qurayyat	0	0	0	0
Total	*58*	*34*	*18*	*6*

Case: Confirmed Symptomatic. **U.C. :** Unclassified cases
***Period:** Form 3 Jan to 12 Mar 2016
Regions with new cases of this week are highlighted in yellow.

Published by:
The National Command & Control Center (CCC)

مركز القيادة و التحكم
Command & Control Center

For Correspondence please contact us at :
CCC@moh.gov.sa