

Current major event

MERS-CoV in 2015: No major spike

As of 30 April 2015, a total of 1,112 laboratory-confirmed cases of Middle East respiratory syndrome coronavirus (MERS-CoV) were reported to WHO including at-least 422 deaths (CFR: 38%). So far, 23 countries across the world have reported cases of MERS-CoV. Majority of the cases (over 88%) were reported from the countries of the Middle East. In 2015, cases associated with international travel (with direct link to the countries in the Middle East) were reported from Germany and Philippines.

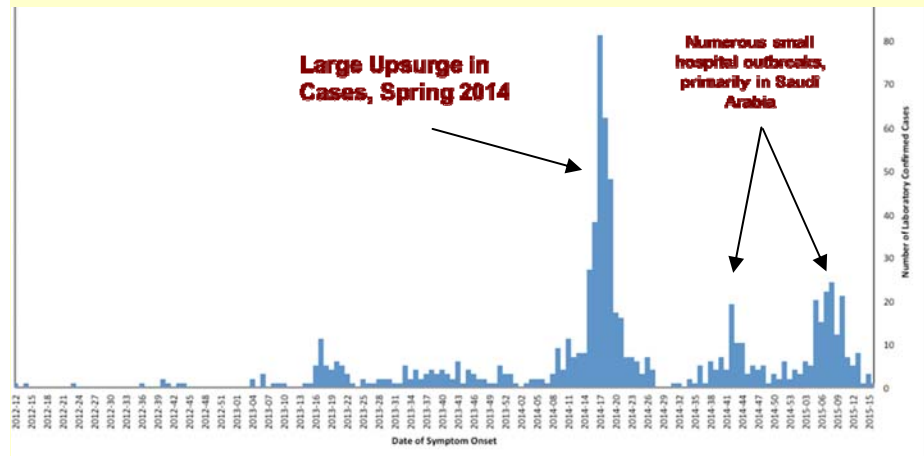
Editorial note

Despite the heightened apprehension of another upsurge of MERS-CoV cases during the first quarter of 2015 as was seen during the past three years, (2012, 2013 and 2014) there has not been any major spike of cases reported during the present quarter of 2015. In 2015, a total of 166 laboratory-confirmed cases of MERS-CoV were reported including 74 deaths (CFR: 45%). During the current period, cases were reported from Iran (Islamic Republic of), Oman, Saudi Arabia, Qatar and the United Arab Emirates. Apart from few small sized hospital outbreaks reported from Saudi Arabia during the first quarter of 2015 (*please see the graph above*), no major outbreak was either detected or reported from any of the countries in the region during the first quarter of 2015.

The seasonality of the disease caused by MERS-CoV has not yet been determined. Being a novel virus and of zoonotic origin, the trend of the disease caused by the virus doesn't show any particular epidemiological pattern and as such is not consistent with any seasonal fluctuation that is often seen with any endemic disease with specific seasonal pattern.

The first reported case of MERS-CoV was detected retrospectively during the spring time of 2012. This was followed by a surge in cases in 2013 which was largely due to an outbreak in healthcare environment (in a renal dialysis unit) in Al-hassa province of Saudi Arabia. The largest outbreak that occurred so far

Laboratory-confirmed cases of MERS-CoV reported over time (2012-April 2015)



Cases of MERS-CoV reported in 2015

Country	Cases	Death
Iran (I.R)	1	0
Saudi Arabia	161	73
Oman	2	0
Qatar	2	0
UAE	0	1

from this virus was reported in 2014 simultaneously from two countries—Saudi Arabia and the United Arab Emirates. These outbreaks occurred in healthcare environments which later on proved to be due to poor infection control practices and measures resulting in nosocomial outbreaks of MERS-CoV. In the history of this virus, this was, so far, the biggest outbreak reported.

In the absence of any surveillance data that can prove the seasonality of the disease, a heightened concern was raised during the first few weeks of 2015 for yet another major spike as cases increased considerably during the first few weeks of 2015 compared to the corresponding period of 2014 which was mostly due to the small scale hospital outbreaks reported during the period. These hospital outbreaks were contained effectively through appropriate hospital infection control measures including some administrative controls. As a result, the first quarter of 2015 passed off without any major surge. However, given the uncertainties associated with a new virus, public health vigilance should not be lowered and a heightened alert should be maintained all time.

Update on outbreaks

MERS-CoV in Saudi Arabia, Avian Influenza A (H5N1) in Egypt

Current public health events of international concern

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

Avian Influenza : 2006-2015

Egypt (A/H5N1)	[342 (115), 33.6%]
Egypt (A/H9N2)	[1(0), 0%]

MERS-CoV: 2012-2015

Saudi Arabia	[976 (376), 38.5%]
Jordan	[12 (6), 50%]
Oman	[5 (3), 60%]
UAE	[71 (9), 12.7%]
Kuwait	[3 (1), 33.3%]
Tunisia	[3 (1), 33.3%]
Qatar	[11 (4), 36.4%]
Yemen	[1 (1), 100%]
Egypt	[1 (0), 0%]
Lebanon	[1 (0), 0%]
Iran	[6 (2), 33%]

Ebola Virus Disease: 2014-2015

Guinea	[3589 (2386), 66.4%]
Liberia	[10564(4716), 44.6%]
Sierra Leone	[12440 (3903), 31.3%]
UK	[1(0), 0%]
Nigeria	[20 (8), 40%]
Senegal	[1(0), 0%]
Spain	[1(0), 0%]
USA	[4(1), 25%]
Mali	[8(6), 75%]

Wild poliovirus: 2014-2015

Pakistan	[325 (0), 0%]
Afghanistan	[29(0), 0%]