

## Current major event

### MERS: epidemiological characteristics remain unchanged

Middle East respiratory syndrome coronavirus (MERS) continue to be reported sporadically. However, the epidemiological characteristics of the disease has not changed since the virus was detected in 2012.

### Editorial note

Middle East respiratory syndrome (MERS) continues to remain a global health security threat. During the first eight months of 2016, Bahrain (1 death), Jordan (2 cases), Saudi Arabia (171 cases, including 49 deaths), Qatar (3 cases, including 1 death) and United Arab Emirates (2 cases) from the Eastern Mediterranean Region reported laboratory-confirmed cases of MERS. Compared to a similar time period in 2015 (January–August), there has been a 56% decline in the number of MERS cases reported during the same corresponding period in 2016.

The median age of those at higher risk of acquiring the infection remain above 50 years and this characteristic has not changed (*please see above*) when compared amongst the case reported during the same period of 2013, 2014, 2015 and 2016. Males predominantly remain at high risk group. However, what is important to note is that number of secondary cases is continuing to decline (from 70% of reported cases in 2013 to 44% reported during the same corresponding period in 2016) and case-fatality rate is also decreasing from 49% reported in 2013 to 29% reported during the same corresponding period in 2016 signifying an improved clinical outcome. However, nosocomial transmission amongst healthcare workers remain a persistent threat. During January to August this year, 17% of all cases reported as MERS was healthcare worker signifying that more works need to be done to improve infection prevention and control practice in healthcare settings.

The age group of those aged 50–59 years continues to be the group at highest risk for acquiring infection as primary cases,

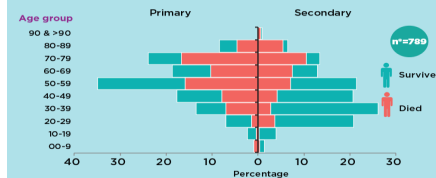
### Epidemiological characteristics of MERS cases reported globally between Jan-August in 2013 and in 2016

Characteristic	Jan-Aug 2013	Jan-Aug 2014	Jan-Aug 2015	Jan-Aug 2016
Number	91	535	389	171
Median age in years	50	48	55	52
Gender (% male)	60	63	68	68
% of primary cases	13	12	20	52
% of secondary cases	70	43	47	44
(%) unknown contact history	12	13	7	1
% HCW	14	24	12	17
% Fatal	49	40	46	29

### Outcome of MERS cases reported globally, 2012-2016

Year	2012	2013	2014	2015	2016	Grand Total
Died	6	97	276	236	53	668
Survived	3	78	399	520	132	1132
CFR(%)	66	55	41	31	29	37

Age and gender distribution of primary and secondary cases of MERS cases reported from Saudi Arabia, 2012-August 2016 (n= 789)



while the group at highest risk for acquiring infection as secondary cases is those aged 30–39 years (*Please see the box*). The majority of deaths among primary and secondary cases have occurred in the age groups of 50–59 and 70–79 years, respectively.

The MERS remains a perpetual threat ever since the virus was detected in 2012. Although the virus has not since changed to make it more transmissible amongst humans, cases continue to be reported sporadically. Owing to its ability to cause hospital outbreaks, the world remains on heightened alert regarding the possibilities that the virus may change and be more transmissible. Although cases have declined in 2016 compared to previous year but this doesn't minimize the public health risk associated with this virus.

As the threat continues, enhanced vigilance must be continued in order to detect any change in the virus as well as changes that can be discernible by observing a shift in the epidemiological characteristics of the diseases caused by the virus. We need to keep ourselves ahead of the curve.

## Update on outbreaks

### in the Eastern Mediterranean Region

MERS-CoV in Saudi Arabia;; Cholera in Somalia.

### Current public health events of international concern [cumulative N° of cases (deaths), CFR %]

<b>Avian Influenza : 2006-2016</b>	
Egypt (A/H5N1)	[356 (121), 33.9%]
Egypt (A/H9N2)	[3 (0) ]
<b>MERS-CoV: 2012-2016</b>	
Saudi Arabia	[1414 (601), 42.5%]
Bahrain	[1 (1), 100%]
<b>Cholera : 2016</b>	
Somalia	[8838 (433), 4.9%]
<b>Yellow fever: 2015-2016</b>	
Angola	[3867 (369), 9.5%]
DRC	[2269 (16), 0.7%]
<b>Lassa fever : 2015-2016</b>	
Nigeria	[273(149), 54.5%]
Benin	[54( 28),51.8%]
<b>Avian Influenza A (H7N9) : 2013-2016</b>	
China	[775 (307),36%]
<b>Avian Influenza A (H5N6) : 2016</b>	
China	[4 (0) ]
<b>Wild poliovirus: 2014-2016</b>	
Pakistan	[371(0) ]
Afghanistan	[54(0)]
<b>Zika Virus Infection: 2007-2016</b>	
70 countries and territories have reported transmission so far	