

Current major event

MERS cluster in Aseer region, Saudi Arabia

From 20 to 29 January 2020, Saudi Arabia reported a cluster of 6 laboratory-confirmed cases of Middle East respiratory syndrome (MERS) and one associated death (CFR 16.66%) in a hospital in Aseer region (Al-Hayatt outbreak). This is the first hospital outbreak that has occurred in the country since the Al-Khafji outbreak in early 2019 (see graph).

Editorial note

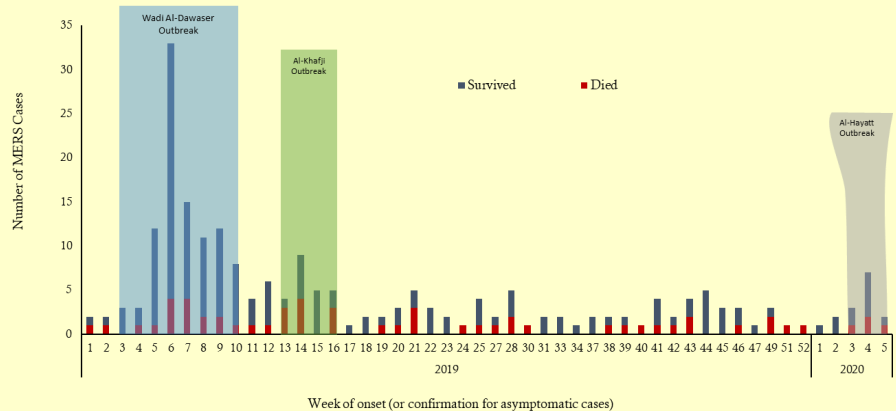
More than 80% of MERS cases reported globally are from Saudi Arabia. The pattern appears to follow multiple introductions from dromedary camels to humans and secondary transmissions in health care settings. Many nosocomial outbreaks have been reported by Saudi Arabia since 2015 (see table), with varying sizes and fatalities.

Between 20 to 29 January 2020, a nosocomial outbreak involving 6 laboratory-confirmed cases of Middle East respiratory syndrome - coronavirus (MERS-CoV) infections, including one death, was reported from Aseer region of Saudi Arabia. The first case reported was a female nurse, with symptom onset on 12 January. She was admitted 6 days later (18 January) to the same hospital and tested positive for MERS-CoV on 20 January. The source of infection is currently unknown and under investigation. Contact tracing has identified two other asymptomatic nurses who tested positive on 22 and 23 January. The fourth case was a 52-year-old female patient who contracted the infection during her stay at the same hospital (admitted since 21 January). Her diagnosis was confirmed on 26 January.

The fifth reported case was a 70-year-old male visitor of the hospital. He developed symptoms on 22 January and was admitted to a different hospital 5 days later. The last case (sixth) reported case so far was a 65-year-old male who visited the affected hospital on 22 January for a check up on his chronic conditions. He developed symptoms on 26 January and was admitted to a different hospital on 27 January. He was in critical condition in the ICU and passed away on 4 February.

Investigation of household and health care contacts of all the cases was completed and no further secondary cases were identified.

MERS cases reported in Saudi Arabia during 2019 to week 5-2020



Cases and deaths from hospital outbreaks in Saudi Arabia, 2015-2020

Year	Hospital outbreaks	Total Cases	Survived	Died	HCW
2015	4	138	71	67	19
2016	6	60	46	14	26
2017	8	91	79	12	41
2018	2	10	6	4	3
2019	2	74	60	14	19
2020*	1	6	5	1	3

* till 18 February 2020

The outbreak seems to have halted, however health authorities continues to remain vigilant for the detection of any other cases. The country's experience in controlling hospital outbreaks of MERS is a notable best practice.

Infection prevention and control measures are critical to prevent the possible spread of MERS-CoV in health care facilities. It is not always possible to identify patients with MERS-CoV infections early because, like other respiratory infections, the early symptoms of MERS are non-specific. Therefore, health care workers should always apply standard precautions consistently with all patients, regardless of their diagnosis. Precautions against droplet exposure should become standard when providing care to patients with symptoms of acute respiratory infection. Contact precautions and eye protection should be added when caring for probable or confirmed cases of MERS-CoV infection. Precautions against airborne exposure should also be applied when performing aerosol generating procedures.

Early identification, isolation and case management, along with appropriate infection prevention and control measures, can prevent human-to-human transmission of MERS-CoV.

Update on outbreaks

in the Eastern Mediterranean Region

COVID-19 in UAE, Egypt, Lebanon and Iran; **MERS** in Saudi Arabia; **cholera** in Somalia; **cholera** in Yemen; **multidrug-resistant typhoid fever** in Pakistan.

Current public health events of concern

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

Avian influenza: 2006-2017

Egypt (A/H5N1) [359 (122), 33.98%]
 Egypt (A/H9N2) [4 (0)]

Ebola virus disease (EVD): 2018-2020

Democratic Republic of Congo [3432 (2 253), 65.65%]

Coronavirus disease 2019 (COVID-19): 2019-2020

United Arab Emirates [13 (0)]
 Egypt [1 (0)]
 Iran (Islamic republic of) [28 (5), 17.86%]
 Lebanon [1 (0)]

Cholera: 2017-2020

Somalia [11 092 (56), 0.51%]
 Yemen [2 263 304 (3 767), 0.17%]

Diphtheria: 2017-2020

Yemen [5151 (304), 5.9%]
 Sudan 114 (14), 12.28%

MERS: 2012-2020

Saudi Arabia [2122 (788), 37.13%]

Multidrug-resistant typhoid fever: 2016-2020

Pakistan [15 913 (0)]