

Current major event

MERS situation update in the Region, 2021

In 2021, a total of 17 cases of Middle East respiratory syndrome (MERS) and six associated deaths were reported to WHO, all reported from the Eastern Mediterranean Region. Efforts to strengthen MERS surveillance and maintain vigilance during the ongoing COVID-19 pandemic are a priority for the Region.

Editorial note

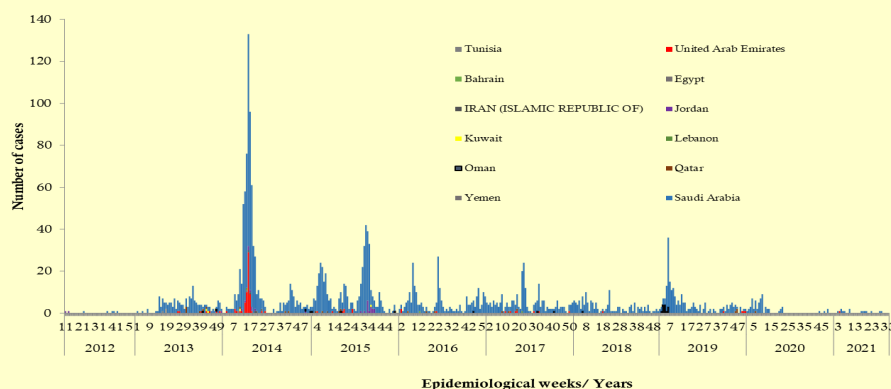
Since the start of the outbreak and until the end of 2021, 2583 MERS cases and 889 associated deaths were recorded from 27 countries worldwide (case-fatality ratio of 34.4%). The majority of the cases and deaths (85%) continue to be recorded in Saudi Arabia. The age distribution among all confirmed cases of MERS globally continues to vary among primary and secondary cases. The highest percentage of primary cases was reported among the elders, while middle age groups were highly reported among the secondary cases. The difference in age groups might be linked to the type of exposure. The age group of 50 and above represent 67% and 41% among primary and secondary cases respectively (see table).

The lowest number of cases reported in a year was in 2021, when only 17 cases and six deaths were reported from two countries in the Region. No cluster of cases was reported this year and most cases were confirmed to be primary cases. The current COVID-19 pandemic has overwhelmed most health systems globally and has prompted policy changes and the repurposing of resources towards national response. As a result, surveillance and laboratory testing for other pathogens such as MERS has suffered in 2020 and 2021 (see graph). Changes in healthcare-seeking behaviours and health service delivery may also have impacted the detection of cases during this period. Nevertheless, response to the COVID-19 pandemic has continued to strengthen countries' capacities in the Region, particularly in the areas of epidemiological surveillance, laboratory testing and sequencing, contact tracing and risk communication.

Two virtual meetings were organized by WHO in 2021 to review the MERS situation before and during the pandemic, and to identify priority actions moving forward. The first regional meeting was organized on 16 August by the WHO Regional Office for the Eastern Mediterranean, followed by a global meeting organized in collaboration with the Food and Agriculture Organization and the World Organisation for Animal Health on 15 and 16 November to review the global situation of MERS within the context of other coronaviruses and new scientific advances.

The origins of the MERS coronavirus continues to not be fully understood, but according to analysis of different virus genomes, it is still believed that the virus may have originated in bats and transmitted to camels in the distant past. Human-to-human transmission is possible, but only a few transmissions have been found among

Distribution of MERS reported cases from EMR by week of onset, 2012–2021



Age distribution among MERS cases globally, 2012–2021

Age group	Primary	Secondary	Unknown	Total*
0–9	1	8	6	15
10–19	6	27	15	48
20–29	37	159	62	258
30–39	50	230	124	404
40–49	92	221	144	457
50–59	130	166	194	490
60–69	119	124	173	416
70–79	102	108	128	338
80–89	32	46	51	129
≥ 90	6	8	12	26
Total	575	1097	909	2581

*Age of two cases is missing

family members living in the same household. In healthcare settings, however, human-to-human transmission appears to be more frequent, with the highest number of clusters and outbreaks detected in 2014. Since then, the number and magnitude of such clusters declined significantly due to improved prevention and control measures. Healthcare workers continue to be provided with refresher trainings to maintain this momentum, particularly during the COVID-19 pandemic.

Collaboration between human and animal health sectors in the affected countries is essential to understanding the risk of transmission between animals and humans, whether there is any seasonal variation in virus circulation among animals, and the natural of MERS-CoV reservoirs. It is also important to work towards limiting the spread of infection in animal populations, so as to reduce the opportunity for further human exposure.

Strengthening MERS surveillance and maintaining vigilance during the COVID-19 pandemic is essential for the early detection of MERS cases, clusters and any evidence of sustained human-to-human transmission; and to determine risk factors and the geographic risk areas for infection with the virus. Existing guidelines, training materials and tools need to be updated using lessons learned from the COVID-19 response. Increased investment in research on MERS, particularly by conducting multi-site and multi-country epidemiological studies, is also a priority.

Update on outbreaks

in the Eastern Mediterranean Region

COVID-19 in 22 EMR countries

Current public health events of concern

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

Coronavirus disease 2019 (COVID-19): 2019–2021

Afghanistan	[160 708 (7 401), 4.6%]
Bahrain	[338 524 (1399), 0.4%]
Djibouti	[15 372 (189), 1.2%]
Egypt	[413 558 (22 431), 5.4%]
Iran (Islamic Republic of)	[6 279 410 (132 303), 2.1%]
Iraq	[2 167 686 (24 309), 1.1%]
Jordan	[1 177 165 (13 124), 1.3%]
Kuwait	[514 826 (2489), 0.5%]
Lebanon	[874 144 (9513), 1.1%]
Libya	[413 066 (5967), 1.4%]
Morocco	[1 107 525 (15 201), 1.5%]
occupied Palestinian territory (oPt)	[500 444 (5074), 1%]
Oman	[328 326 (4133), 1.3%]
Pakistan	[1 386 348 (29 137), 2.1%]
Qatar	[330 848 (638), 0.2%]
Saudi Arabia	[661 733 (8924), 1.3%]
Somalia	[24 322 (1335), 5.5%]
Sudan	[56 595 (3411), 6.0%]
Syrian Arab Republic	[51 075 (2974), 6.0%]
Tunisia	[866 445 (26 051), 3.0%]
United Arab Emirates	[833 201 (2228), 0.3%]
Yemen	[10 821 (2000), 18.5%]