

Current major event

Viral haemorrhagic fever viruses in the Eastern Mediterranean Region

Many countries in the Eastern Mediterranean Region (EMR) are either endemic or have previously reported the circulation of one or more viral haemorrhagic fever viruses (VHF). In 2021 and 2022, 6 countries reported outbreaks of Crimean-Congo haemorrhagic fever (CCHF) and Dengue, resulting in around 400 000 suspected cases, of which nearly 50 000 were laboratory confirmed, and 624 associated deaths.

Editorial note

Several zoonotic agents can cause VHF, with varying transmission routes depending on each pathogen. More than 12 Member States of the EMR have previously reported the circulation of either sporadic cases of VHF or endemicity of VHFs with waves of cases, depending on several conditions, such as environmental, social and religious factors. Previous outbreaks reported in Member States of the EMR included: Alkhurma haemorrhagic fever (AHFV), Crimean-Congo haemorrhagic fever (CCHF), Ebola virus (EBOV), Rift Valley fever (RVF), severe dengue (DEN) and yellow fever (See table).

Over the past two years, most of the reported cases peaked during the summer season in 2021. Three Member States reported suspected cases of CCHF (Afghanistan 87 with 5 deaths, Pakistan 28 cases and Iraq 33 cases), while five Member States reported suspected cases of DEN (Afghanistan 761 with 1 death, Pakistan 293 579 with 326 deaths, Sudan 783 with 4 deaths, and Yemen 1061 with 66 deaths). In 2022, reported CCHF cases increased in Afghanistan to 389 cases with 15 deaths and Iraq 1355 with 113 associated deaths, whereas six Member States reported nearly 100 000 Dengue fever cases in 2022 (Afghanistan 1246, Pakistan 62 995, Somalia 5350, Sudan 5264, and Yemen 24 978). In total, both CCHF and DEN were associated with nearly 400 000 suspected cases, of which only near 50 000 were laboratory-confirmed, with 624 reported deaths, in 2021 and 2022.

It is estimated that the disease burden in the above countries, and beyond, is underestimated and under reported due to weak VHF surveillance and laboratory diagnostic capacities, in addition to the weak and fragmented health systems, and weak vector control programmes in many of the complex emergency countries. Risk factors for emerging and re-emerging epidemic-prone diseases, especially viral haemorrhagic fever viruses include many contributing factors such as

Viral hemorrhagic fever (VHF) disease outbreaks reported in the Eastern Mediterranean Region

VHF outbreaks reported in EMR	Countries previously reported outbreaks
Alkhurma haemorrhagic fever	Saudi Arabia
Crimean-Congo haemorrhagic fever	Afghanistan, Iraq, Islamic Republic of Iran, Kuwait, Oman, Pakistan, Saudi-Arabia, Sudan, United Arab of Emirates
Dengue fever	Afghanistan, Djibouti, Egypt, Oman, Pakistan, Saudi Arabia, Somalia, Sudan, Yemen
Ebolavirus	Sudan
Rift Valley fever	Egypt, Saudi Arabia, Sudan, Yemen
Yellow fever	Sudan

transboundary mass population and livestock movement, climate change effects, major religious mass gatherings, late detection of the cases, poor infection prevention and control measures and practices in healthcare facilities.

Vaccination and specific antiviral therapy are not readily available for VHF viruses, except for yellow fever, and its management is usually by providing supportive medications to alleviate symptoms. Hence it's important to implement multisectoral public health prevention and control measures through VHF preparedness and readiness programmes.

WHO is advocating for Member States to strengthen coordination between animal, environmental, and human sectors using the One Health approach and to augment vector control programmes by implementing integrated vector control measures that limit vector breeding and vector biting. Member States are also urged to capitalize on the SARS-CoV-2 laboratory expanded capacities, such as laboratory infrastructure, testing platforms and trained personnel, to expand laboratory diagnostic capacities allowing them to screen for and identify VHF priority pathogens, in a quality and timely manner.

It's also advisable to practice active surveillance for VHF priority pathogens whenever feasible to ensure early detection, and to provide refresher trainings to rapid response teams on sample and case management. Lastly, it is important to continue and establish disease specific prevention and control measures, such as sustained animal vaccination policy for RVF and conducting yellow fever vaccination campaigns for vulnerable human populations.

The WHO Office for the Eastern Mediterranean Region continues to provide technical support to all countries in the Region, specifically to countries affected by complex emergencies, to apply appropriate prevention and control measures for VHFs, including implementation of Integrated Vector Management practices.

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): 2019–2023

Afghanistan	[208 704 (7874), 3.8%]
Bahrain	[696 614 (1536), 0.2%]
Djibouti	[15 690 (189), 1.2%]
Egypt	[515 666 (24 807), 4.8%]
Iran (Islamic Republic of)	[7 564 663 (144 756) 1.9%]
Iraq	[2 465 545 (25 375), 1%]
Jordan	[1 746 997 (14 122), 0.8%]
Kuwait	[663 146 (2570), 0.4%]
Lebanon	[1 229 390 (10 795), 0.9%]
Libya	[507 166 (6437), 1.3%]
Morocco	[1 272 276 (16 296), 1.3%]
occupied Palestinian territory (oPt)	[703 228 (5708), 0.8%]
Oman	[399 449 (4628), 1.2%]
Pakistan	[1 576 378 (30 640), 1.9%]
Qatar	[492 595 (686), 0.1%]
Saudi Arabia	[828 131 (9579) 1.2%]
Somalia	[27 322 (1361), 5%]
Sudan	[63 759 (5008), 7.9%]
Syrian Arab Republic	[57 423 (3163), 5.5%]
Tunisia	[1 150 477 (29 312), 2.5%]
United Arab Emirates	[1 049 729 (2348), 0.2%]
Yemen	[11 945 (2159), 18.1%]