

Current major event

New Dengue outbreak in Khartoum, Sudan

On 14 February 2023, State Ministry of Health of Khartoum officially declared dengue outbreak in Khartoum State for the first time in recent years. A total of 1,356 suspected cases and 716 confirmed cases have been reported in Khartoum (positivity rate of 53%) with two dengue related deaths (CFR 0.14%, as for 6 March 2023).

Editorial note

Dengue is a viral infection transmitted to humans through the bite of female mosquitoes mainly of the species *Aedes aegypti* and, to a lesser extent, *Ae. albopictus*. These mosquitoes are also vectors of chikungunya, yellow fever and Zika viruses.

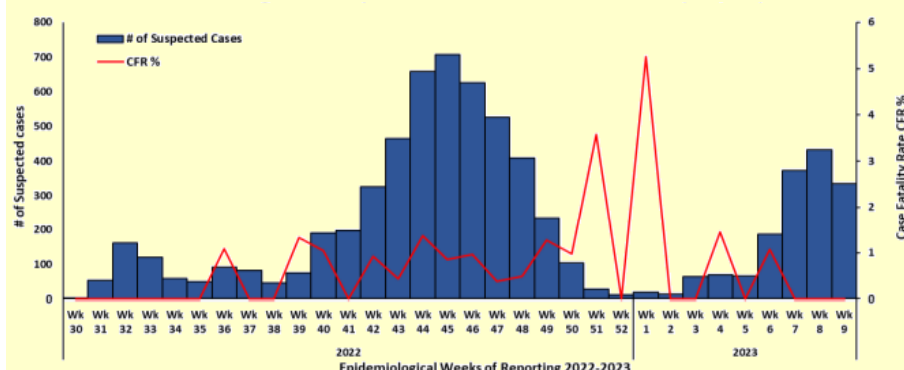
There are four serotypes of dengue virus (DENV). Recovery from infection can provide lifelong immunity against that specific serotype with partial immunity to other serotypes. Subsequent infections by other serotypes increase the risk of developing severe dengue.

Dengue Fever is endemic in Sudan. Several outbreaks have been documented in 2010, 2013 and 2017. However, there is no information regarding the circulating dengue virus serotypes in Sudan.

Between 28 July 2022 till 6 March 2023, a total of 6,799 suspected cases and 1,730 confirmed cases through RDTs have been reported with an attack rate of 3.5/10,000 population, affecting 82 localities (43%) across 12 States (67%). Among the total suspected case reported, 43 associated deaths have been reported with a case fatality ratio (CFR) of 0.7% across 7 States. A total of 3,461 samples were collected for testing and among those samples, 1,730 (50%) were positive. Since epidemiological week 30-2022 till week 9-2023 the highest number of cases were reported during the week 45-2022. Although this new increase in number of cases during 2023 is seem to be the contribution of the Khartoum state outbreak (See graph). All age groups were affected by dengue in Sudan from zero to >70 years old. However, those aged (10-29) years old represented 43% of all cases. The majority of cases (57%) were females.

This is the first time that Khartoum State has reported a dengue outbreak and this is clear evidence of existence of local transmission in the state. The outbreak in Khartoum was detected during an investigation and response to multiple high fever alerts in Umbadda locality when thirteen tested samples were confirmed positive by PCR (100% positivity rate) for dengue fever, this was followed with

Trend of dengue fever suspected cases week 30-2022 to week 9-2023, Sudan



further reports of similar cases and alerts from sentinel sites. Seven localities in Khartoum State are affected; 73% of suspected cases and 79% of confirmed cases were reported from Umbadda locality followed by 23% of suspected cases and 20% of confirmed cases from Karrari locality; 2% of suspected cases and 1% of confirmed cases from Khartoum locality; 1% of suspected cases and 1% of confirmed cases from Ombdurman locality while 1% of suspected and confirmed cases reported from other states. The age distribution of the cases shows that, there were 49% of confirmed cases reported among the age group of >30 years and 29% of cases were among the < 20 years of age groups. The male to female ratio is 0.99.

In response to the new outbreak in Khartoum, clinical case management workshops were conducted to train HCWs on proper sample taking techniques and clinical management skills. Case management protocols and RCCE IEC materials were printed and distributed in health facilities. Home care brochure is under printing too in collaboration with FMOH. WHO also started initiating series of RCCE TOT workshops integrated with vector control activities and orientation sessions for community leaders. Vector Surveillance is also being supported in all Khartoum localities and the diagnostic and testing capacities of Khartoum Public Health Laboratory is being increased.

The WHO teams in all outbreak affected States are providing technical and operational support in coordination and collaboration with SMOH and other stakeholders. The response activities are being monitored from WCO Sudan to track the progress of field interventions and to provide additional support for States. The WHO is also providing support to properly equip the dengue fever dedicated isolation and treatment center in tropical hospital, and operating of mobile clinics in affected areas due to broad HCW strike.

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	[209 538 (7881), 3.8%]
Bahrain	[696 614 (1536), 0.2%]
Djibouti	[15 690 (189), 1.2%]
Egypt	[515 823 (24 817), 4.8%]
Iran (Islamic Republic of)	[7 573 328 (144 956) 1.9%]
Iraq	[2 465 545 (25 375), 1%]
Jordan	[1 746 997 (14 122), 0.8%]
Kuwait	[664 402 (2570), 0.4%]
Lebanon	[1 233 021 (10 843), 0.9%]
Libya	[507 201 (6437), 1.3%]
Morocco	[1 272 526 (16 296), 1.3%]
occupied Palestinian territory (oPt)	[703 228 (5708), 0.8%]
Oman	[399 449 (4628), 1.2%]
Pakistan	[1 577 163 (30 643), 1.9%]
Qatar	[495 090 (688), 0.1%]
Saudi Arabia	[830 293 (9621) 1.2%]
Somalia	[27 334 (1361), 5%]
Sudan	[63 853 (5023), 7.9%]
Syrian Arab Republic	[57 423 (3163), 5.5%]
Tunisia	[1 151 333 (29 345), 2.5%]
United Arab Emirates	[1 053 586 (2349), 0.2%]
Yemen	[11 945 (2159), 18.1%]