

Current major event

Dengue outbreak in Afghanistan

In 2021, the Ministry of Public Health in Afghanistan reported a total of 300 suspected dengue fever cases with no associated deaths from 1 out of the 34 provinces in the country. The cases were reported from 14 districts of Nangarhar province.

Editorial note

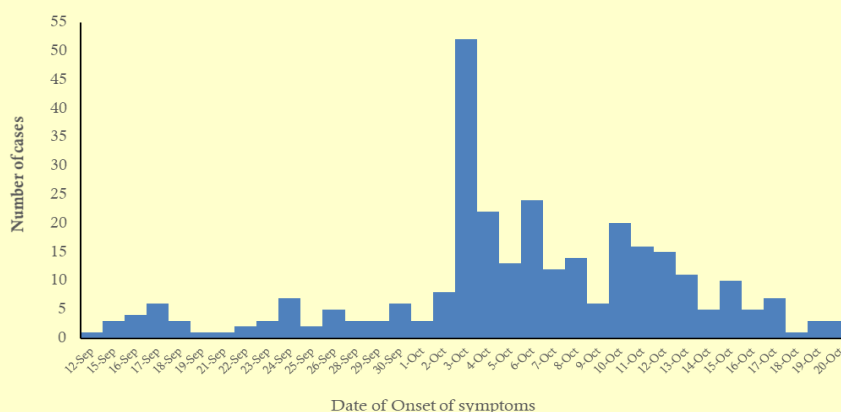
Dengue is a mosquito-borne viral disease transmitted by female mosquitoes mainly of the species *Aedes aegypti*. The dengue virus is of the Flaviviridae family and there are four distinct, but closely related, serotypes of the virus that cause dengue: DENV-1, DENV-2, DENV-3 and DENV-4. Recovery from infection is believed to provide lifelong immunity against that serotype. However, cross-immunity to the other serotypes after recovery is only partial, and temporary. Subsequent secondary infections by other serotypes increase the risk of developing severe dengue.

Afghanistan is endemic to vector-borne diseases such as Crimean-Congo haemorrhagic fever and malaria. Other vector-borne diseases like dengue fever and chikungunya were not reported and the presence of the vector *Aedes aegypti* was not been established before 2018 when, the Ministry of Public Health conducted vector surveillance for the first time and sent six mosquito samples from Khost province to Singapore for molecular confirmation of the species. Four of the samples were identified as *A. albopictus*. Additional *Aedes* mosquito samples were collected from Khost and Nangarhar provinces, which were morphologically identified as *A. albopictus* and *A. aegypti*. There have been no dengue reports by the National Disease Surveillance and Response System in Afghanistan in the past. The central public health laboratory (CPHL) did not test samples for the dengue virus before May 2019. In response to increased cases of dengue fever in Pakistan, health authorities in Afghanistan decided to monitor for the disease and started testing blood samples for dengue. In 2019, the national surveillance and response system in Afghanistan reported the first 15 confirmed cases of dengue.

Since 12 September 2021, Afghanistan has experienced a significant surge in suspected dengue fever cases. Between September and October 2021, a total of 300 suspected cases have been reported from 14 districts within Nangarhar province which borders Pakistan (see table). Out of these total suspected cases, 90 have been confirmed by PCR from the CPHL. No severe clinical cases or deaths have been reported to date.

The trend of reported cases showed a peak on 3 October with 52 suspected cases of dengue fever in a single day and since then the number of reported cases has shown a continuous decline (see graph). Among these reported cases males are more affected (60%), while the most affected age

Dengue fever cases reported between 12 September to 24 October 2021 in Nangarhar, Afghanistan



Dengue fever cases reported from Nangarhar province, till 24 Oct 2021

Province	Districts	Number of cases
Nangarhar	Batikot	10
	Behsood	10
	Chaparhar	3
	Dari Noor	3
	Dor Baba	110
	Jalalabad	8
	Kot	5
	Mohmandara	136
	Rodat	2
	Lalpoora	2
	Sarkhod	7
	Ghani Khil	1
	Hesarak	1
	Achin	2
Total		300

group is the 15–30 years (125, 42%) followed by those older than 30 years (98, 33%) and those 5–14 years (73, 24%).

The response to the outbreak has been challenged by the increasingly shifting security and political situations in the country and the underperforming health system as well as poor vector control capacities. The affected districts are trade hubs between Afghanistan and Pakistan where there is increased movement of goods and people across the border causing recurring and active outbreaks. These factors, in the presence of the vector, aggravated and contributed to the widespread of mosquitoes over many districts and resulted in an upsurge of suspected dengue cases.

The Ministry of Public Health in coordination with other relevant line ministries and partners have enhanced surveillance for early detection of suspected dengue cases, and strengthened entomological surveillance and vector control measures in order to contain the current and ongoing dengue fever outbreak. Case management also needs to be improved and standardized through the distribution of guidelines and training of health workers. Risk communication and the involvement of the communities in source reduction can play a major role to control these outbreaks.

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	[155 985 (7257), 4.7%]
Bahrain	[276 526 (1393), 0.5%]
Djibouti	[13 444 (181), 1.3%]
Egypt	[323 733 (18 242), 5.6%]
Iran (Islamic Republic of)	[5 851 670 (125 052), 2.1%]
Iraq	[2 045 027 (22 937), 1.1%]
Jordan	[849 758 (10 941), 1.3%]
Kuwait	[412 506 (2460), 0.6%]
Lebanon	[637 312 (8449), 1.3%]
Libya	[353 626 (5006), 1.4%]
Morocco	[944 076 (14606), 1.5%]
occupied Palestinian territory (oPt)	[451 189 (4626), 1%]
Oman	[304 145 (4109), 1.4%]
Pakistan	[1 268 536 (28 377), 2.2%]
Qatar	[238 436 (608), 0.3%]
Saudi Arabia	[548 205 (8776), 1.6%]
Somalia	[21 998 (1180), 5.5%]
Sudan	[40 433 (2995), 7.4%]
Syrian Arab Republic	[41 222 (2492), 6%]
Tunisia	[711 821 (25 155), 3.5%]
United Arab Emirates	[739 190 (2129), 0.3%]
Yemen	[9662 (1838), 19%]