

Current major event

Dengue fever in Pakistan

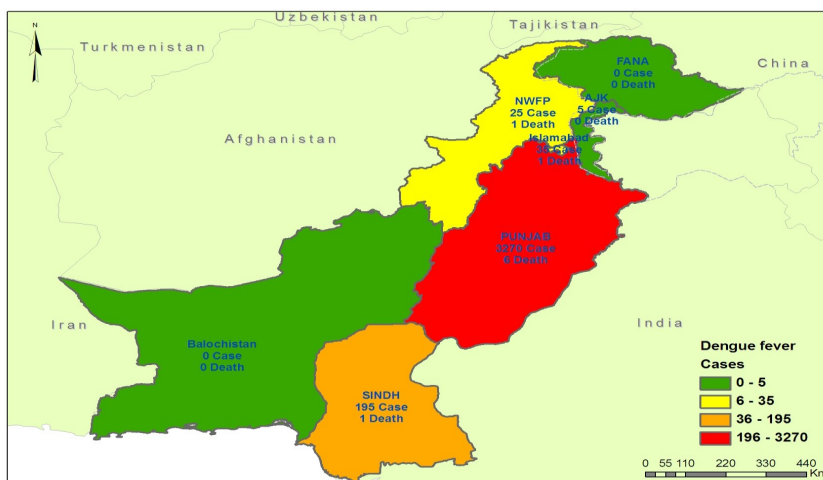
From January to 14th September 2011, a total of 5,200 suspected cases including 4,630 confirmed cases of dengue were reported from four provinces in Pakistan (see map). Eleven related deaths were also reported. The recent rains and floods may have contributed to this upsurge. Punjab is the most severely affected province and Lahore is the worst affected city. The Ministry of Health, in collaboration with WHO and other partners are responding to control the outbreak. WHO is also providing technical support to the government in mitigating this Dengue outbreak.

Editorial note

The current upsurge in cases of dengue fever has not come as a surprise. Pakistan is facing yet another major flooding this year. This has come at a time when the country has not fully recovered from last year's massive floods that had denuded large parts of the country. Last year's flooding caused large outbreak of dengue and other vector-borne diseases including Congo-Crimean haemorrhagic fever (CCHF) in a number of provinces. Compared to last year, the upsurge this year has come too early and seem to be more intense. As of September 12, this year, over 5000 suspected cases including 4630 confirmed cases have been reported compared to 3908 suspected and 2336 confirmed cases reported by November 2010 in Pakistan.

Both dengue fever and CCHF are endemic in Pakistan with seasonal spikes. However, in recent times, dengue transmission has intensified in the country with increased incidence and geographic expansion. The frequent flooding in the country (2007, 2010, 2011) might have contributed to this upsurge as a result of changes in the risk factors as well as changes in behavioral practices of the affected communities.

Dengue fever in Pakistan—distribution of cases and deaths by province



Province/territory	No of cases	No of Deaths
Islamabad/Rawalpindi	133	1
Punjab	4271	8
Sindh	195	1
Khyber Pakhtunkhwa	26	1
Balochistan	0	0
AJK	5	0
Total	4630	11

Before the 1990s, DF was not known in Pakistan. The first outbreak was detected in Karachi during 1994-1995 followed by 2003, 2005, 2006, 2010 and now the 2011 outbreak. *Aedes Aegypti* is the known vector in urban settings and *A. Albopictus* is also known to exist in rainy forest areas in the northern part of the country. Pakistan developed its National Strategy for the prevention and control of DF/DHF in 2006. One of the identified challenges is strengthening both epidemiological and entomological surveillance for vector-borne diseases. The available opportunities like decentralization/devolution of health services delivery management to the provinces, availability of strong malaria control programs, presence of functional DEWS and functioning DHIS, community involvement and media's participation can be considered for dengue outbreak control and prevention in the longer run.

The main challenge for Pakistan, now, is how to make use of the lessons learned from the previous flooding and use the national strategy to plan, prepare and respond early and adequately.

Update on outbreaks

in the Eastern Mediterranean Region

Cholera in Afghanistan, Pakistan, Djibouti, Somalia and Yemen; **Wild polio type 3** in Pakistan; **Dengue** in Somalia and Pakistan

Current public health events of international concern

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

Avian influenza

Egypt	[151 (52), 34.4%]
Indonesia	[178 (146), 82.0 %]
Viet Nam	[119(59), 49.6%
Cambodia	[18(16), 88.9%]
Global total	[565 (331), 58.6%]

Dengue

Pakistan	[4630(11) , 0.2%]
Somalia	
	[4(1), 25.0%]

Brucellosis & Q fever

Afghanistan	[147(0), 0%]
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AWD (Cholera)

Afghanistan	[1093(11), 1 %]#
Pakistan	[4506(35), 0.8%]
Somalia	[4686(192), 4.1%]

CFR=Case-Fatality Rate; * Number of hospital visits; # Suspected cases only