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**CHARACTERISTICS OF THE DENGUE FEVER EPIDEMIC
AT THE PRESENT STAGE**

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Dengue fever is a mosquito-borne tropical disease caused by the dengue virus.

Dengue virus (DENV) is a virus of the Flaviviridae family, Flavivirus genus, which includes viruses such as yellow fever virus, West Nile virus, and tick-borne encephalitis virus. DENV has four serotypes (DENV-1, DENV-2, DENV-3, DENV-4). Infection with one serotype provides long-term immunity to the same serotype and only transient immunity to the other serotypes, after which secondary infections with a different serotype increase the risk for severe dengue. DENV is spreaded to people through the bite of an infected *Aedes* species (*Ae. aegypti* or *Ae. albopictus*) mosquito.

Many people experience no signs or symptoms of a dengue infection. Dengue fever causes a high fever — 104 F (40⁰ C) —and any of the following signs and symptoms: headache, muscle, bone or joint pain, nausea, vomiting, pain behind the eyes, swollen glands, rash. Most people recover within a week or so. In some cases, symptoms worsen and can become life-threatening. This is called severe dengue, dengue hemorrhagic fever or dengue shock syndrome.

Severe dengue happens when your blood vessels become damaged and leaky. And the number of clot-forming cells (platelets) in your bloodstream drops. This can lead to shock, internal bleeding, organ failure and even death.

The incidence of dengue has grown dramatically around the world in recent decades, with cases reported to WHO increased from 505 430 cases in 2000 to 5.2 million in 2019. One modelling estimate indicates 390 million dengue virus infections per year of which 96 million manifest clinically. Another study on the prevalence of dengue estimates that 3.9 billion people are at risk of infection with dengue viruses.

The disease is now endemic in more than 100 countries in the WHO Regions of Africa, the Americas, the Eastern Mediterranean, South-East Asia and the Western Pacific. The Americas, South-East Asia and Western Pacific regions are the most seriously affected, with Asia representing around 70% of the global disease burden.

Dengue is spreading to new areas including Europe, and explosive outbreaks are occurring.

The largest number of dengue cases ever reported globally was in 2019. The American Region reported 3.1 million cases, with more than 25 000 classified as severe. A high number of cases were reported in Bangladesh (101 000), Malaysia (131 000), Philippines (420 000), Vietnam (320 000) in Asia.

The incidence of dengue in India has been on the rise, with reported cases increasing from 6.34 per million population between 1998 and 2009 to 34.81 per million population between 2010 and 2014. In 2022 110 473 dengue cases were documented in India between January and October, a number similar to that reported in 2018 (101 192).

5s for dengue fever prevention: search and destroy breeding sites; self-protection from mosquito bites; seek early medical consultation; support fogging in areas with clustering of cases; and sustain hydration.

Surveillance activities should include the rapid detection of human infection supported by valid clinical and laboratory diagnosis, vector surveillance and monitoring of environmental and social risk factors.