

FACT SHEET

DENGUE IN ASIA

Asia represents 75% of the global burden of dengue, costing Southeast Asia US\$1 billion annually¹

Across Asia, dengue fever cases reach record highs

Dengue is a major public health concern throughout tropical and sub-tropical regions of the world. Over the past 50 years, incidence of dengue has increased by 30 fold and Asia is the most impacted region representing approximately 75% of the global burden of dengue. It is estimated that among 2.5 billion people at risk globally, about 1.8 billion are in Asia¹.

In Asia Pacific countries affected by the disease, it remains a pervasive and year-round threat to entire populations; exerts both societal and public health burdens; and consistently ranks as a government health priority.

There is currently no specific treatment for the disease and the only method of prevention – controlling the mosquito vector – has proven unable to stem increasingly large outbreaks over increasing geographical areas.

According to the World Health Organization, between 2004 and 2010, Indonesia reported the second highest number of dengue cases among the 30 most highly endemic countries/territories worldwide, while Vietnam reported the third highest. Of the 10 countries with the highest reported dengue burden, five were in Asia-Pacific.

Southeast Asia is the region with highest dengue incidence

The burden of dengue is difficult to estimate because of variable clinical presentations, variable case detection and reporting practices, and the use of different case definitions. However the dengue burden in 2013 was one of the highest in recorded history in many countries of the Southeast Asia region:

- Philippines – 166,107 cases and 457 deaths²
- Thailand – 150,454 cases and 133 deaths³
- Indonesia – 101,218 cases of dengue haemorrhagic fever (DHF): only DHF is reported⁴
- Vietnam – 66,140 cases and 42 deaths²
- Malaysia – 43,346 cases and 92 deaths - more than twice as many cases compared to last year⁵
- Singapore suffered its worst outbreak on record with 22,205 cases and 7 deaths²

Factors influencing dengue epidemic

The increase in cases and geographical expansion of affected countries in Asia can be attributed to several factors⁶:

- Unplanned urban development
- Poor water storage and unsatisfactory sanitary conditions
- Growing population densities
- Higher temperatures and the onset of early rainfall in many parts of the region
- Greater international and domestic travel

All these factors contribute to the proliferation of the mosquito which is most responsible for transmitting the virus, *Aedes aegypti*.

Annual economic burden in Southeast Asia estimated to be US\$1billion

A recent study estimated the annual economic burden of dengue in the Southeast Asia region to be nearly US\$1 billion. To arrive at this estimate, health policy researchers at Brandeis University, Waltham, Massachusetts, USA, analysed World Health Organization (WHO) data, surveillance data, and published studies on Southeast Asia, then adjusted for underreporting⁷.

Over the period from 2001 to 2010, researchers found an annual average of 2.9 million dengue cases and 5,906 deaths reported across 12 countries in Southeast Asia.

This amounts to an annual cost per capita of US\$1.67, a rate higher than that of upper respiratory infections, and hepatitis B⁷.

In Asia, dengue is not limited to children or urban areas

Dengue was considered to be primarily a children's disease in Asian countries but recent data shows an increase in adult dengue cases in Southeast Asia and an extension to rural areas⁸.

The disease is caused by four different viral serotypes of the dengue virus. In Southeast Asian countries, all the serotypes (DENV-1-4) are co-circulating and their geographic and temporal distribution is unpredictable.

ASEAN DENGUE DAY, a common platform for 10 countries

In addition to numerous country-based initiatives, in 2011, the Association of Southeast Asian Nations (ASEAN) Secretariat launched an annual advocacy campaign day for dengue prevention and control.

Held every year on 15 June concurrently in all 10 member countries, ASEAN Dengue Day provides a common platform for cooperation and exchange among all stakeholders to raise dengue prevention and awareness. ASEAN Dengue Day is an advocacy event to increase public awareness of dengue, to mobilize resources for its prevention and control, and to demonstrate the region's commitment to tackling the disease.

2013's theme was: "ASEAN unity for a dengue-free community". ASEAN and the World Health Organization (WHO) Western Pacific Region encouraged the public and private sectors to join forces in the fight against dengue.

The WHO's global strategy aims to reduce the burden of dengue. The specific objectives are to reduce mortality and morbidity from dengue by 2020 by at least 50% and 25% respectively (using 2010 as the baseline). These objectives can be achieved by applying existing knowledge.

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