**FACT SHEET** 

# **DENGUE**

In recent decades, the global incidence of dengue has grown dramatically.

More than half of the world's population is now at risk.

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According to the World Health Organization, dengue fever is one of the top ten global health threats and the most rapidly spreading mosquito-borne disease in the world. There has been a 30-fold increase in global incidence over the past 50 years with severe dengue being a leading cause of serious illness and death in some Asian and Latin American countries.

Common symptoms of dengue include fever, rash, nausea and aches and pains, lasting up to a week. Some people with dengue develop complications that can result in internal bleeding, shock and even death. Severe dengue requires careful monitoring in hospital.

There are four serotypes of dengue virus, all of which can cause disease. Prior infection with one dengue serotype is a risk factor for developing severe dengue in later infections.

#### Causes

Dengue fever is caused by a virus transmitted primarily by *Aedes aegypti* mosquitoes. These mosquitoes bite during the day, usually just after sunrise and around sunset.

### **Symptoms**



HEADACHE



RASH



VOMITING





MUSCLE AND JOINT ACHES

Symptoms typically last for two to seven days.

### More about dengue

Dengue is a mosquito-borne disease caused by the dengue virus. Here are answers to some frequently asked questions about this disease and its symptoms, treatments and prevention techniques.

#### Where does dengue occur?

Dengue can occur anywhere that *Aedes aegypti* mosquitoes live. The most significant dengue epidemics in recent years have occurred in Southeast Asia, the Americas and the Western Pacific.

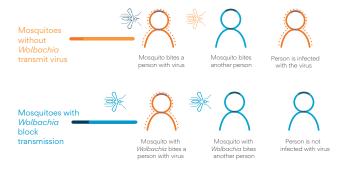
Approximately 141 countries are affected.

## How many people have been affected by dengue?

More than half of the world's population is at risk of dengue infection. Each year, an estimated 390 million dengue infections occur around the world.

#### How does dengue spread?

Dengue can spread wherever *Aedes aegypti* mosquitoes are present. This mosquito is commonly found in and around homes, where it breeds in small water containers. When an Aedes aegypti mosquito bites someone with dengue, it can become infected and transmit the virus to another person when it bites again.



#### How is dengue treated?

There is no specific medical treatment for dengue, which has flu-like symptoms. Monitoring

for warning signs of severe disease is important. Urgent medical intervention is required if indications of shock or bleeding develop, as these complications can be lethal.

#### How can we help prevent dengue?

Conventional strategies for dengue control rely heavily on reducing the number of water-holding containers that support mosquito breeding, and using insecticides to suppress the mosquito population. However, it is challenging to achieve sustained reductions in mosquito numbers, and dengue outbreaks can still occur. Using personal repellents and wearing protective clothing can help to prevent mosquito bites.

In contrast, the World Mosquito Program's *Wolbachia* method doesn't aim to reduce the mosquito population, rather to replace it with *Wolbachia*-carrying mosquitoes. *Wolbachia* helps to block the transmission of dengue, as well as other viruses transmitted by *Aedes aegypti* mosquitoes, such as Zika, chikungunya and yellow fever.

Our research shows that in communities where high levels of *Wolbachia*-carrying mosquitoes are the incidence of dengue and other *Aedes*-borne diseases is significantly reduced.

#### How can I find out more about dengue?

Contact your local health authority for guidance. Or, for general information, read this dengue virus fact sheet from the World Health Organization.

READ THE DENGUE FACT SHEET FROM THE WHO

#### About us

The World Mosquito Program (WMP) is a notfor-profit group of companies owned by Monash University that works to protect the global community from mosquito-borne diseases. The World Mosquito Program uses naturally occurring bacteria called *Wolbachia* to reduce the ability of mosquitoes to transmit viruses to humans.

Following decades of research and successful field trial results, the World Mosquito Program is currently partnering with communities in 11 countries around the world to implement our ground-breaking solution. We have staff working in countries across Oceania, Asia, Europe, and the Americas, and offices established in Australia. Vietnam. France and Panama.

Our approach has widespread support from communities, governments, research institutes and philanthropic partners around the world. Through collaboration and innovation, we are making a difference to millions of lives.



collaboration between:



