

Dengue

Frequently Asked Questions

Q: What is dengue fever?

A: Dengue fever is a disease caused by one of four closely related viruses. These viruses are transmitted to humans through the bite of an infected *Aedes* mosquito. It is estimated that 40% of the world's population is at risk for dengue, and it is estimated there are over 100 million cases of dengue worldwide each year.

Q: What is dengue hemorrhagic fever (DHF)?

A: DHF is a more severe form of dengue fever. It is usually a result of a second infection with a different virus in the dengue group. It can lead to symptoms including cardiac failure, shock and even death. With early detection and proper medical management, mortality due to DHF can be less than 1%.

Q: How is dengue transmitted?

A: The dengue viruses are spread through the bite of an infected *Aedes* mosquito. The most important vectors of dengue are *Aedes aegypti* and *Aedes albopictus*. The mosquito becomes infected after feeding on a person with the dengue virus in their blood. It takes around one week for the mosquito to be able to pass the virus on to another person after infection. The mosquito will remain infected for the rest of its lifespan. Humans are the only hosts for the dengue viruses and the virus cannot be spread from person to person.

Q: What are the symptoms of dengue fever?

A: Dengue fever is characterized by high fever, severe headache, retro-orbital pain (pain behind the eyes), joint pain, muscle and bone pain, easy bruising and mild bleeding from the nose or gums.

Dengue hemorrhagic fever initially has symptoms similar to classical dengue fever, only the fever lasts from 2 to 7 days. After the fever declines vomiting, severe abdominal pain and difficulty breathing may develop. During the next 24 to 48 hours the patient's capillaries become excessively permeable, allowing fluid to be released into the body cavity. This can lead to circulatory system failure, shock and even death. A person with DHF may also exhibit more severe hemorrhagic symptoms, such as severe bruising, nosebleed and internal bleeding.

Q: Who is at risk for dengue fever?

A: Anyone can get dengue fever. People who live in or visit countries where dengue fever is present are at risk for catching the disease. Symptoms tend to be milder in younger children and in people who are experiencing their first dengue infection.

Q: Where in the world does dengue occur?

A: Dengue outbreaks can occur anywhere the vector that transmits dengue is present. Dengue is endemic (has consistent ongoing transmission) in at least 100 countries in the Americas, Asia, The Pacific, Africa, and the Caribbean. Transmission usually occurs during the rainy season when *Aedes* mosquito populations are high. The Federal CDC and HealthMap have collaborated to create a map showing global dengue activity which can be found at <http://www.healthmap.org/dengue/index.php>.

Q: Are there medications for the treatment of dengue?

A: There are no specific medications to treat dengue fever. All medications are supportive. If one thinks that they have dengue, they should use analgesics containing acetaminophen and avoid those containing aspirin. The patient should also rest and drink plenty of fluids. If you suspect that you have dengue fever, you should consult a physician immediately. Similarly to dengue fever, there is no specific medication for DHF. DHF frequently requires hospitalization, but it can be treated effectively with fluid replacement therapy if an early clinical diagnosis is made.

Q: Is there a vaccine to prevent dengue?

A: No. Currently there is no vaccine to protect against dengue fever.

Q: How can I reduce my risk of acquiring dengue?

A: The best way to prevent dengue fever is to avoid being bitten by *Aedes* mosquitoes. The best way to avoid being bitten is to eliminate the areas where the mosquitoes lay their eggs, primarily artificial containers, such as plastic jugs, tires, and buckets, that hold water. Frequently emptying water-holding containers will reduce the numbers of eggs, larvae, and adult mosquitoes in the area.

Other preventive measures for those traveling to or living in dengue endemic areas are:

- Properly applying an EPA recommended insect repellent, such as DEET, on exposed skin and clothing
- Using air conditioning or screening windows and doors to reduce the risk of mosquitoes coming indoors
- Wearing clothing with long sleeves and pant legs

Q: Where can I find more information on dengue?

A: The Federal Centers for Disease Control and Prevention have an extensive dengue information website. It can be found at <http://www.cdc.gov/dengue/>