

### What is dengue fever?

Dengue fever (commonly referred to as dengue) is a mosquito-borne disease caused by any of four closely related dengue viruses. It is found mostly in the tropics and subtropics.

### How is dengue spread?

Dengue is spread to people by the bite of an *Aedes* mosquito that is infected with a dengue virus. The mosquito becomes infected with dengue virus when it bites a person who has dengue virus in their blood. After about one week, the mosquito can transmit the virus when biting a healthy person. Dengue cannot be spread directly from person to person.

### What are the signs and symptoms of dengue?

Up to 50% of infected people will have no symptoms. Those who do have symptoms may experience:

- High fever
- Severe headache
- Severe pain behind the eyes
- Joint pain
- Muscle and bone pain
- Rash
- Mild bleeding

### How long after infection do symptoms appear?

Dengue may occur from three to fourteen days after exposure to an infected mosquito. It most commonly occurs within four to seven days after being bitten.

### Who is most at risk?

Since the mosquitos that spread dengue live in tropical and subtropical environments, people in these areas have a higher risk of developing dengue, especially those in urban and suburban areas. The elderly, children, and those with weakened immune systems (such as those with HIV/AIDS, cancer, diabetes, kidney disease, and transplant patients) are most at risk for complications.

### What type of health problems are caused by dengue?

Some individuals infected with dengue will develop a more severe type of dengue known as dengue hemorrhagic fever (DHF). Symptoms of DHF include the typical symptoms of dengue along with loss of appetite, abdominal pain, vomiting, and internal bleeding. If untreated, DHF can lead to heart failure and shock. Without treatment, about 50% of people with DHF die. With treatment, less than 1% of those with DHF die.

## How is dengue diagnosed?

Dengue is diagnosed by a blood test. A physician may also test patients for other similar diseases, such as West Nile virus or yellow fever virus, to determine the true cause of illness.

## How is dengue treated?

There is no specific treatment for dengue. Rest and drink plenty of fluids. You may use pain relievers with acetaminophen. Do not use pain relievers containing aspirin. More severe cases may require hospitalization, intravenous fluids, and oxygen therapy. Contact your doctor if you think you may have dengue.

## How can dengue be prevented?

Most cases of dengue in the United States are imported from other countries. When traveling to affected areas, reduce your exposure to mosquitos. Eliminate places where the mosquito lays her eggs, like

artificial containers that hold water in and around the home. Use mosquito netting and insect repellents. Wear long sleeves and pants for additional protection. Secure window and door screens. If possible, use air conditioning. There is currently no vaccine for preventing dengue.

## Does past infection with dengue virus make a person immune?

Infection with one of the four strains of dengue virus usually produces immunity to the strain with which the person is infected, but does not provide protection against the other strains.

## Where can I get more information?

- Your personal healthcare provider
- Utah Department of Health, Bureau of Epidemiology, 801-538-6191
- [Centers for Disease Control and Prevention](#)

