

Patient information from BMJ

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Dengue fever

Dengue fever is a viral infection that's spread by mosquitoes in some parts of the world. Most people recover completely but some people have more severe symptoms and need hospital treatment.

What is dengue fever?

Dengue fever is caused by a virus spread by the Aedes mosquito. This mosquito lives in areas with tropical and near-tropical climates, including Southeast Asia, Western Pacific regions, the Caribbean, Latin America, and some parts of the US (such as Texas and Hawaii), Africa, and the Middle East.

You can't catch dengue fever in most western countries. But you can become infected if you travel to a region where dengue fever is 'endemic' (endemic means that it's often found there).

There are four types or 'strains' of dengue fever virus. Infection with any one of them can cause the illness that we call dengue fever.

Preventing dengue fever

Most people who get dengue fever recover with no lasting ill effects. But it's best to avoid getting it in the first place.

There are several things you can do to help prevent dengue fever if you are in an area where it is endemic. It's important to remember that the mosquitoes that carry this virus bite mainly during the day.

- Cover up as much as possible. Wear clothes that don't leave large areas of your skin exposed.
- Use mosquito repellents on areas of your skin not covered by clothes.
- Use mosquito nets on windows and around beds when possible.
- Use plug-in insecticides and other mosquito-killing devices indoors.
- Use mosquito nets and mosquito-killing devices around people who are sick with dengue fever, to prevent mosquitoes biting them and spreading the virus.

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- Stay away from bodies of still water, such as ponds. And make sure water doesn't collect in pots and other containers near where you are living.

What are the symptoms?

The symptoms of dengue fever are similar to those of many bacterial and viral infections, which makes an exact diagnosis difficult without testing your blood. So if you have been in an area in the last two weeks where dengue is endemic and you then become ill with symptoms of a fever, it's important to tell your doctor.

The most common symptoms of dengue fever are:

- A fever, which usually lasts between 5 and 7 days
- A rash or flushing of the skin
- Backache and other types of pain, such as a headache at the front of your head or sore bones
- Symptoms in your digestive system, such as loss of appetite, nausea, vomiting, and stomach pain.

Most people recover from dengue fever with no special treatment. But some people have more severe symptoms and need treatment in hospital. Symptoms that may need treatment in the hospital include:

- Tiredness and restlessness
- Fainting
- Bleeding from the nose or gums
- Small red spots on the skin caused by bleeding into the skin
- Vaginal bleeding or bleeding in the stomach.

And it's important for the medical staff to make sure that you get a correct diagnosis so that you're not given treatments for another condition that you don't have, which might be harmful.

What treatments work?

There is no specific drug treatment for dengue fever. But some people may need medical treatments such as fluids given by intravenous (IV) drip. The treatments for dengue fever are the same for adults as for children.

Any treatment that you need will be based on how severe your symptoms are.

Mild infection

If your doctor is satisfied that your symptoms are mild, you should be able to recover at home. But your doctor might still want to keep a close eye on you and test your blood regularly.

Your doctor will recommend that you drink plenty of fluids. Clear soups, fruit juices, and special rehydration products are better than plain water, as they contain nutrition as well as just fluid.

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But avoid liquids that are red or brown in colour. This is because, if you vomit, your doctor will want to know if there is blood in your vomit. Red and brown fluids can be mistaken for blood or disguise the presence of blood.

Apart from drinking plenty of fluids, the best advice is to:

- Rest until you feel well again
- Ease your fever by sponging with cool (not cold) water
- Take paracetamol for pain or fever if you need to, but
- Don't take aspirin, ibuprofen, or similar drugs (these are called non-steroidal anti-inflammatory drugs, or NSAIDs for short), as they can cause internal bleeding
- Go to hospital straight away if your symptoms get worse or if you get new symptoms.

More severe infection

If your symptoms are more severe, you will need to be treated in hospital. You will probably be given fluids by an intravenous (IV) drip, and you will need to have regular blood and urine tests to check how well your body is fighting the infection.

People with the most severe infections may need a blood transfusion.

Infection in pregnancy

Dengue fever during pregnancy can cause serious problems. For example, it can lead to your baby having a low birth weight. If you get dengue fever while pregnant you will need to be treated in hospital.

If you are visiting an area where dengue is endemic while pregnant, it is especially important to take all the precautions you possibly can against mosquito bites. The mosquitoes that carry dengue fever are the same ones that carry Zika and an infection called chikungunya.

What will happen?

Most people recover from dengue fever without any long-term effects. Some people get a rash as they recover. But this doesn't last.

Your doctor might want to test your blood in the first few weeks after you have recovered. It's also a good idea to avoid strenuous exercise and alcohol for a few weeks after you get better. This avoids putting too much pressure on organs such as your liver, which may have been weakened by the illness.

It is rare for anyone to die from dengue fever unless they have a severe infection. Up to 3 in 100 people with a severe infection die from dengue fever. Severe infection is more common in children.

As there are four types of dengue virus it's possible to get the infection more than once. And dengue fever is not the only disease that mosquitoes spread. So it's important to keep taking precautions against mosquito bites if you are in an area where dengue fever is endemic.

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