

9. When does Dengue develop after getting the infection?

After the entry of the virus into the human body, it multiplies in the lymph glands. The symptoms develop when the virus has multiplied in sufficient numbers. This happens generally about 4-6 days (average) after getting infected with the virus.

10. Can people suffer from Dengue and not appear ill?

Yes. There are many people who are infected with the virus and do not suffer from any signs or symptoms of the disease. For every patient with symptoms and signs, there may be 4-5 persons with no symptoms or with very mild symptoms.

11. Can Dengue Fever be treated at home?

Most patients with dengue fever can be treated at home. They should take rest, drink plenty of fluids that are available at home and eat nutritious food. Whenever available, Oral Rehydration Salt/ORS (commonly used in treating diarrhoea) is preferable. Sufficient fluid intake is very important and particularly if DF progresses into DHF or DSS where loss of body fluid/blood is the most salient feature. It is important to look for danger signs and contact the doctor as soon as any one or more of these are found.

12. What is the treatment for Dengue Fever? Is it curable?

Like most viral diseases there is no specific cure for dengue fever. Antibiotics do not help. Paracetamol (can be purchased without prescription) is the drug of choice to control fever and joint pain. Other medicines such as Aspirin and Brufen should be avoided since they can increase the risk of bleeding. Doctors should be very careful when prescribing medicines. Any medicines that decrease platelets should be avoided.

13. Can Dengue Fever become dangerous?

The infection can become dangerous since it may damage the blood vessels. The damage may range from increased perme-

ability of the blood vessels, causing leakage of blood fluid/plasma into various organs to completely broken blood vessels that cause bleeding. The symptoms and signs of Dengue Haemorrhagic Fever and Dengue Shock Syndrome are related to damage to the blood vessels and derangement in functioning in components of blood that help it to clot.

14. Can people die from Dengue Fever?

People who suffer from dengue fever have no risk of death but some of them develop Dengue Haemorrhagic Fever or Dengue Shock Syndrome. In some of these cases death can occur. With proper treatment, the patients with DHF and DSS can recover fully. Good treatment provided in time can save most lives.

15. When should a patient suffering from Dengue go to the hospital or consult a doctor?

Generally, DHF or DSS occur after 3-5 days of fever. At this time, fever often subsides. This may mislead many to believe that the patient is recovering. In fact, this is the most dangerous period that requires high vigilance from care-givers. The signs and symptoms that should be looked for are severe pain in the abdomen, persistent vomiting, bleeding from any site like, bleeding in the skin appearing as small red or purplish spots, nose bleed, bleeding from gums, passage of black stools like coal tar. The patient should be taken to hospital whenever the first two signs, namely, severe pain in the abdomen and persistent vomiting, are detected. Usually, it is too late if one waits until bleeding has occurred.

The most dangerous type of dengue is DSS. It is recognized by excessive thirst, pale and cold skin (due to very low blood pressure), restlessness and a feeling of weakness.

16. Is there a vaccine to prevent Dengue Fever?

A vaccine has been developed to prevent dengue fever but it is still under trial. It is not yet available in the market.



Scientific progress is likely to help in prevention of dengue fever by vaccination in the years to come.

17. Are there any long-term ill effects of Dengue Fever?

Most people who suffer from dengue fever recover in 1-2 weeks time. Some may feel tired for several weeks. However, if symptoms persist after this period, consult a doctor.

18. Where does the mosquito that spreads Dengue live?

The highly domestic mosquito, *Aedes aegypti*, rests indoors, in closets and other dark places. Outside, it rests where it is cool and shaded. The female mosquito lays her eggs in water containers in and around the homes, and other dwellings. These eggs develop into larvae, and further develop into adults in about 10 days.

19. How can the multiplication of mosquitoes be reduced ?

Dengue mosquitoes breed in stored, exposed water collections. Favoured places for breeding are barrels, drums, jars, pots, buckets, flower vases, plant saucers, tanks, discarded bottles, tins, tyres, water coolers etc.

To prevent the mosquitoes from multiplying, drain out the water from desert coolers/window air coolers (when not in use), tanks, barrels, drums, buckets etc. Remove all objects containing water (e.g. plant saucers etc.) from the house. Collect and destroy discarded containers in which water collects e.g. bottles, plastic bags, tins, used tyres etc.

In case it is not possible to drain out various water containers or to fully cover them, use TEMEPHOS, an insecticide, 1 part per million according to the local guidelines to prevent larvae from developing into adults.

20. How can I prevent mosquito bites to prevent Dengue?

There is no way to tell if a mosquito is carrying the dengue virus. Therefore, people must protect themselves from all mosquito bites.

Dengue infected mosquitoes bite throughout the day with highest biting intensity about 2 hours after sunrise and before sunset.

Wear full sleeves and long dresses to cover as much part of your body as possible.

Use repellents - be careful in using them in young children and old people.

Use mosquito coils and electric vapor mats during the daytime also to prevent dengue.

Use mosquito nets to protect children, old people and others who may rest during the day. The effectiveness of these nets can be improved by treating them with permethrin (pyrethroid insecticide). These bed-nets are called Insecticide Treated Nets and are widely used in the prevention of malaria.

21. Is there any advice for the patient with Dengue Fever to prevent the spread of the disease to others?

The spread of dengue from a patient to others is possible. The patient should be protected from contact with the mosquito. This can be achieved by ensuring that the patient sleeps under a bed-net. Effective mosquito repellents are used where the patient is being provided care. This will prevent the mosquito from biting the patient and from getting infected and spreading it to others.

22. What is your advice on travel if there is an outbreak of Dengue?

There is no travel restriction. However, you should be aware of what to do if you are travelling into an area with a dengue epidemic. This includes observing preventive measures described in these frequently asked questions and answers and reporting to the doctor if you have fever and are worried that it might be dengue.

23. What should the doctors treating Dengue do?

Patients suspected to be suffering from DHF or DSS should be admitted to a hospital without delay.



The progress of these patients should be monitored regularly at 1-2 hour intervals.

Platelet counts and haematocrits should be monitored repeatedly to review the progress of patients.

If the haematocrit levels fall dangerously then a blood transfusion should be considered. A fall of more than 20 % as compared to previous levels may be an indication for transfusion.

If the haematocrit values rise the patient should be given fluids intravenously and the fluids carefully monitored to ensure that the patient does not get excess fluids. A rise of more than 20 % as compared to previous levels may be an indication for IV fluids. The doctor should decide based on best judgement of patient's condition.

24. What should the doctors treating Dengue avoid?

Do not prescribe aspirin and brufen or any other medicine that reduces the platelets or increases the tendency to bleed.

Avoid giving IV fluids unless the patient is bleeding or the haematocrit level is rising progressively.

Avoid rushing into giving blood transfusion unless the haematocrit is falling dangerously.

Do not give platelet transfusion unless the platelet count is very low or unless there is bleeding.

25. What is the advice regarding reporting of Dengue?

All suspected or probable dengue cases should be reported to the health authorities. Further confirmation of the cases is done by the health authorities. Seek their guidance on blood collection and transportation of samples from suspected/probable cases of dengue.

26. What can the community do to prevent Dengue?

In fact, the community is the key to

dengue prevention. As elaborated above, prevention of dengue relies heavily on preventing the mosquito (*Aedes aegypti*) that transmits dengue from breeding inside and in the vicinity of dwellings. Every household can undertake very simple measures to prevent existing water collections from becoming places for breeding of *A.aegypti* by draining out water from various containers, by regular changing of water plus cleaning flower vases and other items or, in the case of unused items, by discarding/destroying them.

Since the mosquito does not travel far, "house cleaning" by all members of a community will ensure that no breeding places exist, preventing dengue from occurring.

The main strategy in the prevention and control of dengue is "source reduction", or prevention of breeding places, mentioned above.

27. In the case of a Dengue outbreak or epidemic, what should be adopted?

Prevention of mosquito breeding places remains the mainstay. However, to stop or to slow down the transmission it may be supplemented by "thermal fogging", using fogging machines. In fogging, an insecticide is used that has an immediate knock-down effect on adult mosquitoes, thus reducing the number of infective mosquitoes. Unfortunately, this is not a one-time action. It has to be repeated because in one session of fogging all adults mosquitoes are not destroyed. Besides, there are "newcomers" coming from the larval stage that were not affected by the previous fogging.

Fogging is expensive and time consuming, therefore prevention of breeding places undertaken by the community, for the community themselves, is far more cost-effective than containment measures once an outbreak occurs.

