

DO'S AND DO N'TS:

Keep the home and the surroundings clean. Regularly clean the places in the house which remain damp –like the basin, kitchen drains, the place where utensils are washed at the onset of symptoms of dengue like fever, severe headache and muscle pains, paracetamol should be taken and people should consult doctor.

-Water from flower pots should be changed at least once a week. All containers storing water should be covered with a tight lid. Get air coolers and refrigerators cleaned to dispose of stagnant water. Water stored in barrels, drums etc should be replaced by fresh stock (at least) once a week All large water tanks, like those in buildings, should have single piece cast iron, tight fitting cover.

-A suitable ladder should be provided to enable civic staff to climb and examine the tanks at frequent intervals. The overflow pipe should be protected by a net that can keep away mosquitoes. Discarded container-like objects like tyres, coconut shells, bottles, etc or destroyed.

-Water fountains should be kept dry once a week. Surface wells should be well-maintained so that mosquitoes do not breed in the vicinity. Rain water collected on terraces/roofs should be cleared (at least) once a week. Use disinfectants around the human dwellings and avoid being in damp places.

To know more about Microorganisms, visit our website:
<http://dzumervis.nic.in/>

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MICROORGANISMS AND ENVIRONMENT MANAGEMENT



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Know Dengue fever



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Know Dengue fever

Dengue is fast emerging pandemic-prone viral disease in many parts of the world. Dengue fever is an infection caused by dengue viruses, of which there are four different serotypes (extremely closely related microorganisms) known to infect humans. Dengue causing a severe flu-like illness and, sometimes causing a potentially lethal complication called severe dengue. The incidence of dengue has increased 30-fold over the last 50 years. Up to 50-100 million infections are now estimated to occur annually in over 100 endemic countries, including India, putting almost half of the world's population at risk.

Dengue virus is transmitted by a bite from the *Aedes aegypti* mosquito. Only the female mosquito transmits the dengue virus. This mosquito is a daytime biter, and is most active in the hours after sunrise and before sunset. *Aedes aegypti* mosquitoes breed in containers holding water, both inside and outside the home and rarely fly more than 200 metres from the breeding site. They do not breed in creeks, swamps, pools or other bodies of water.

SYMPTOMS

The disease has a sudden onset and symptoms may include:

High fever, rash, severe headache, pain behind the eyes, and muscle and joint pain. The severity of the joint pain has given dengue the name "break bone fever." Nausea, vomiting, bleeding, usually from the nose or gums and loss of appetite are common.

A rash usually appears 3 to 4 days after the start of the fever. The illness can last up to 10 days, but complete recovery can take as long as a month. Older children and adults are usually sicker than young children. Some dengue infections can progress to dengue hemorrhagic fever, and is fatal in about 5 percent of cases, mostly among children and young adults.

DIAGNOSIS

The tests required to diagnose dengue fever are:

- ❖ Complete Blood Count (CBC) : The CBC shows evidence of increase Packed Cell Volume (PCV) and the total count as well as the platelets are depressed.
- ❖ NS-1 antigen: It is a rapid solid phase immunochromatographic test for qualitative detection of dengue NS 1 antigen and normally shows positivity on the first day of fever.
- ❖ Dengue serology or antibodies against dengue virus: This test is done by serum and is a rapid ELISA test and shows positivity on day 2 to day 3.

TREATMENT

There is no specific antiviral treatment available for dengue fever:

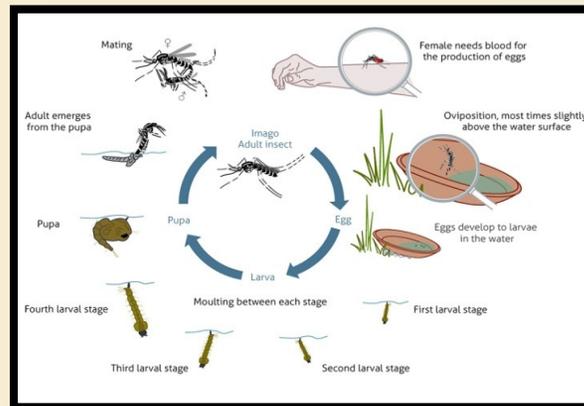
- ✓ According to World Health Organization and the American Academy of Pediatrics “Paracetamol is the first-line treatment for fever and pain in children”. Keep the fever low by taking paracetamol tablet like Crocin. Avoid taking Aspirin, Dispirin and Brufen tablets as it is known to increase the bleeding tendency and also increases the stomach pain.

- ✓ Give plenty of fluids, water, shikanji etc. to the patient.
- ✓ Continue normal feeding. In fever, the body, infant, requires more food.
- ✓ Allow the patient to rest.
- ✓ Use insect repellent. If you have dengue fever, mosquitoes that bite you may pass dengue on to other people.

PREVENTION

There is no vaccine against dengue fever yet. Since the infection is common in our country, take precautions to avoid the disease. Dengue is a completely preventable, all you have to do the following few steps to keep yourself and your family safe.

- Do not have any stagnant water around your home, including pails, buckets, flower pots etc. If the container cannot be emptied, cover it well when not in use.
- If you use a cooler remember to empty out and clean the water tray regularly, even when not in use.



Life cycle of *Aedes aegypti*

- If anyone is already ill due to dengue, try not let mosquitoes bite him/her or others in the house.
- Use mosquito repellents as directed. Choose a repellent with DEET or oil of lemon eucalyptus. Apply it well on all exposed areas, during the day as well as at night.
- Use screens on doors and windows. Repair broken or damaged screens quickly. Keep unscreened doors and windows shut.
- Wear long-sleeved shirts, long pants, shoes, and socks when go outside.
- Limit the amount of time you spend outside during the day, especially in the hours around dawn and dusk, when mosquitoes are most active.
- A natural method to keep mosquitoes at bay is to plant ‘tulsi’ and ‘nochi’ near window/home garden. They have repellent properties.
- Light camphor in a room and close all the doors and windows. Leave it this way for about fifteen to twenty minutes to have a mosquito free environment.



Prevent mosquito breeding ground