

5 Mosquito breeding places:

What we can do to prevent mosquito breeding...

1) Discarded non-degradable items

(Eg - tyres, plastic containers)



- ◆ destroy/remove/sell/bury

2) Discarded degradable items



- ◆ store to prevent accumulation of water/destroy/sell

3) Places where rain water can collect

(Eg- roof, gutters, concrete slabs)



- ◆ regular cleaning-up to prevent water logging

4) Uncovered water storage containers and tanks



- ◆ Keep them closed with a lid or a net
- ◆ Do not allow water to be remained in the container / tank for more than 7 days
- ◆ Rub and clean inside of the container/ tank at least once a week

5) Ornamental and fancy items where water can be collected



- ◆ rub and clean thoroughly

6) Special home appliances

(Eg- trays of refrigerator)



- ◆ Remove water, rub and clean

7) Places or parts of plants which could collect water (Eg- Bromelia sp)



- ◆ Remove unnecessary plants
- ◆ Bamboo stumps should be filled with cement or concrete

Potential mosquito breeding sites should be removed/destroyed to prevent dengue,

It is your prime responsibility.



National Dengue Control Unit
Ministry of Health



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Let us learn about dengue
Contribute to its prevention
It is our duty and the responsibility

Dengue fever

1. Caused by a virus
2. There are 4 sub-types of dengue virus.



Transmission

Infected female *Aedes aegypti* and *Aedes albopictus* mosquitoes transmit the virus to humans while taking blood meal.

Treatment

There is no vaccine against dengue yet. Early diagnosis and prompt treatment could result in complete cure

How dengue virus is spread?

Around 90% of the people infected with dengue virus for the first time do not show any symptom. (This means that you could contract dengue fever for the first time without your knowledge).

When a female *Aedes* mosquito bites a person who has virus in blood (an infected person), the virus gets into the mosquito's body and multiply there. These mosquitoes which are infected with the virus can spread the virus to other humans.

2 There are 4 sub-types of dengue virus and if a person is infected with one type of dengue virus, he/she will be protected for that subtype but not protected for remaining 3 subtypes. Therefore a person can contract dengue infection 4 times during life time.

Clinical features

The dengue virus enters the blood with the mosquito bite. The virus remain in the blood for 5-7 days. Some of the infected people may not show any symptom. Some may develop following illness.

1. Viral fever like illness
2. Dengue fever
3. Dengue haemorrhagic fever

Of these, Dengue fever & Dengue haemorrhagic fever need due attention.

Dengue fever

- ◆ Sudden rise of temperature (39-40°C) lasting up to 5-7 days
- ◆ Vomiting
- ◆ Muscle pain
- ◆ Joint pain
- ◆ Rash (on face, neck, chest in first 1-3 days)

There may be sore throat, loss of appetite and abdominal pain.

Dengue Haemorrhagic fever

The above symptoms of dengue fever are also seen in early stage of Dengue haemorrhagic fever. The leakage of plasma out of the walls of the blood vessels is a distinctive feature in DHF which occurs after 3rd day of fever. Most of the time, patient does not have fever during the leakage phase. If this leakage continues, shock could result due to reduction of blood volume followed by organ failure (brain, liver, kidney etc).

Warning signs

Persistent vomiting, abdominal pain, refusal of oral intake, restlessness, weakness, irritability, reduced urine output, cold skin etc.

With timely fluid replacement, complications can be minimized.

During recovery, with the re-absorption of leaked plasma to the blood vessels, patient's general well being improves along with urine output and appetite. Adequate rest and food is necessary at this stage.

If you have fever.....

- ◆ Suspect it as dengue.
- ◆ Have adequate rest- preferably under a mosquito net.
- ◆ Children should not be sent to schools and adults should not go to work.
- ◆ Should avoid strenuous exercise/work.
- ◆ Take Paracetamol only in recommended doses.
- ◆ Should avoid other fever reducing drugs in any form (tablets, syrups, suppositories etc).
- ◆ If the fever continues for more than 2 days, consult a qualified doctor. Delayed treatment may result in death.
- ◆ If above warning signs are present go to the doctor even before.
- ◆ Drink adequate amount of liquids such as king coconut water, soups, cunjee, Jeevani, fruit juices, milk etc.
- ◆ Avoid taking red/brownish coloured liquids/fruits.

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We should prevent dengue.....

Out of around 140 species of mosquitoes found in Sri Lanka, dengue virus is transmitted by only two species, *Aedes aegypti* and *Aedes albopictus*. To prevent dengue, man mosquito contact should be minimized. For this, we should strive to reduce the mosquito density and the best method is the prevention of mosquito breeding. Although there are chemical and biological methods for larvae and adult mosquito control, the most effective method is the elimination of potential mosquito breeding sites.

We should learn about Dengue mosquitoes.....

- ◆ Female *Aedes* mosquito is the vector of dengue
- ◆ It is an active small mosquito
- ◆ It prefers human blood while the male mosquito sucks plant juices
- ◆ It bites several people to take blood for one meal
- ◆ Bites mainly in the mornings and in the evenings
- ◆ Life-span of an adult *Aedes* mosquito is around 2-4 weeks
- ◆ Lays eggs around 4 times during the life-span
- ◆ Lays around 100-200 eggs at a time
- ◆ Eggs are sticky
- ◆ Lays eggs slightly above the water level in container
- ◆ It takes around 7-11 days to develop an adult mosquito from an egg
- ◆ Eggs can remain live up to 1 year in dry conditions and hatch on contact with water

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