

Trainers Guide to Malaria

Transmission: Life Cycle of Mosquito

1. In the rainy season, mosquitoes lay eggs on the surface of standing water where rain-water collects.
2. It takes one week for the eggs to hatch into larvae which transform into pupae, from which the adult mosquito emerges.
3. Only the female mosquito feeds on human blood. If the mosquito bites a person with malaria parasites in the blood, it will take these into its own system, where the male and female parasites will unite and reproduce in the mosquito's stomach. These cells get into the saliva of the mosquito. This cycle takes 10 days.
4. If at that time the mosquito bites another person, it will then infect the victim with its saliva.
5. This is because when a mosquito inserts its proboscis (tongue) into the skin it injects saliva to stop the blood clotting as it sucks.
6. The saliva contains the parasites which transfer to the next person.
7. The malaria parasite invades the blood cells of the new host and grows and multiplies, destroying the cell.
8. The symptoms take exactly 10 days to emerge and need immediate attention.

Symptoms:

1. Severe headaches and very sore, aching joints, and temperature, sometimes with diarrhoea.
2. A typical fever attack has 3 stages:
 - a. **Cold:** the temperature rises but the person feels cold and shivers.
 - b. **Hot:** for 3 – 4 hours, the temperature is high (40°C). The skin is dry and hot, there is a severe headache and often nausea and vomiting.
 - c. **Sweating:** the temperature falls rapidly for 2 – 4 hours. The patient may feel better, but sweats profusely so that the bed and clothes are soaked.

Treatment/Cure:

1. The patient must be taken to the clinic as soon as the first fever appears and have a blood test.
2. Medications must be taken immediately.
3. If this does not work within the first day, return to the clinic as it may be resistant to drug.
4. Give the patient plenty of liquid drinks.
5. Do not wrap up hot blanket as this will increase the temperature.
6. Children especially should be bathed with cool water to reduce temperatures.

Prevention:

1. **Stop Mosquitoes breeding:** Drain all rain-water puddles where mosquitoes are breeding.
2. **Chemical Control:** Use a thin layer of oil to cover deep ponds to stop mosquito laying eggs
Health Authority to spray breeding grounds.
2. **Protect Homes:** Use mosquito netting on all windows. Spray room before sleeping.
3. **Protect family:** All in the family must sleep under bed nets. Cover all skin when outside at night.
Nets should be treated with insecticide regularly which will also kill mosquitoes and lower rate of infection between people.

