



# What is Malaria ?

Malaria is a mosquito-borne infectious disease that affects humans and other animals

Malaria is caused by single-celled micro-organisms of the *Plasmodium* group

The disease is most commonly spread by an infected female *Anopheles* mosquito.



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# No Mosquitoes No Malaria !!

I spread Malaria,  
Beware of my bite !



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## Malaria mosquitoes bite mostly at night



- Don't go to bed when you see a Malaria mosquito in room
- Sleep under a net
- Keep it repaired
- Tuck the net
- Be sure no mosquito is already inside, waiting for you



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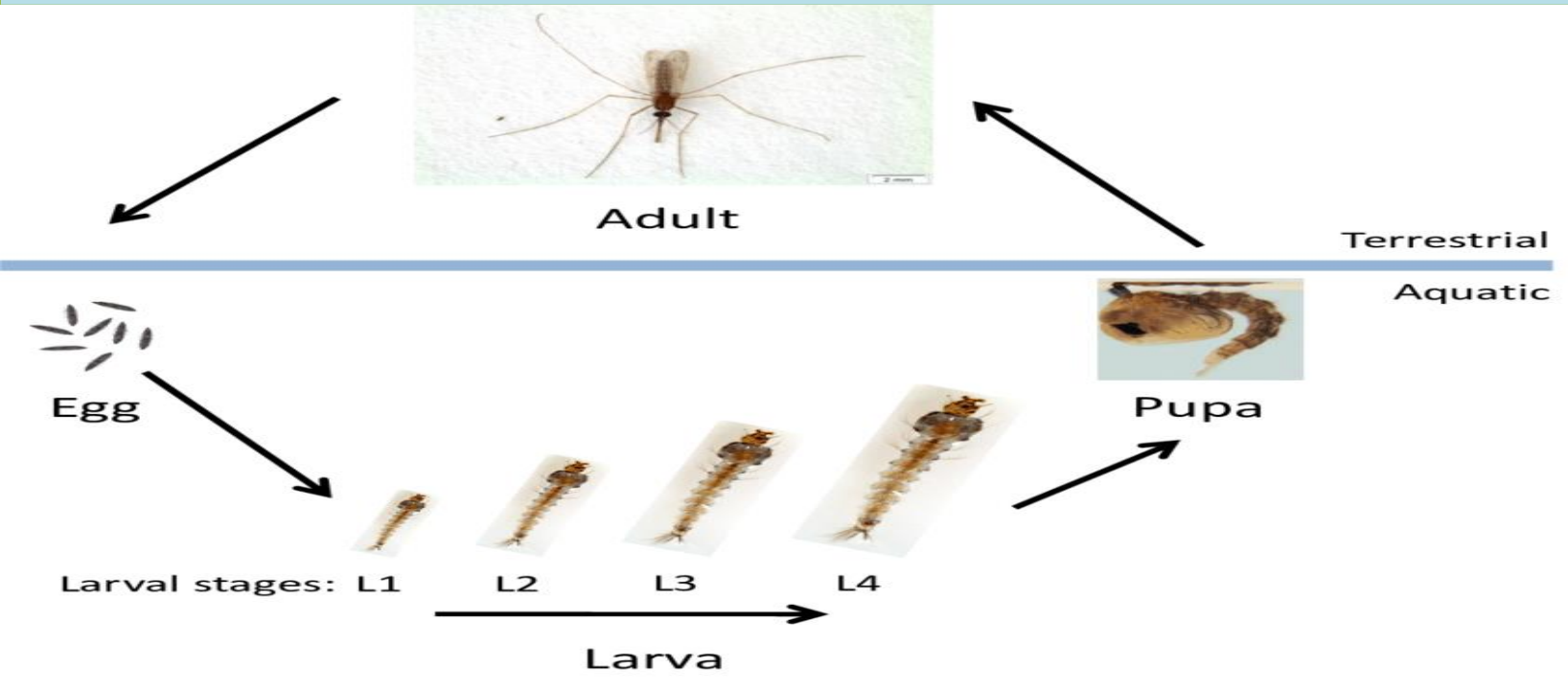


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# Anopheles Mosquito life cycle

Malaria is a life-threatening disease caused by a parasite (*Plasmodium spp.*), that is transmitted through the bite of infected female *Anopheles* mosquitoes



*Female adult Anopheles mosquito*

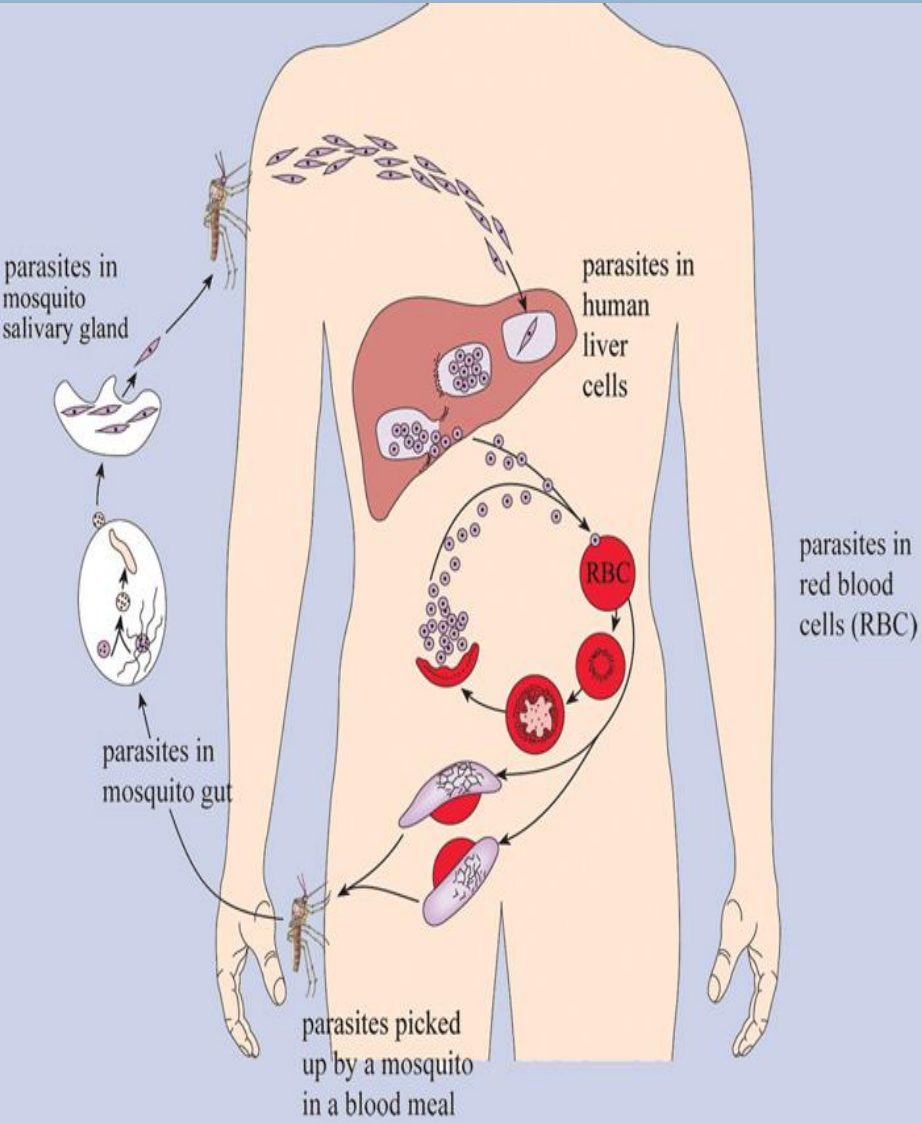
- Life cycle of *Anopheles* mosquito go through four stages in their life cycle: Egg, larva, pupa and adult
- The first three stages are aquatic while as adult is aerial.





# Life cycle of MALARIA parasite

Malaria is a life threatening disease and transmitted to humans through the bites of infected female *Anopheles* mosquito



Four common species of *Plasmodium* (single-celled parasites) can infect humans and cause illness:

1. *Plasmodium vivax*
2. *Plasmodium falciparum*
3. *Plasmodium malariae*
4. *Plasmodium ovale*



Female *Anopheles* Mosquito

Fight-Mosquito bites



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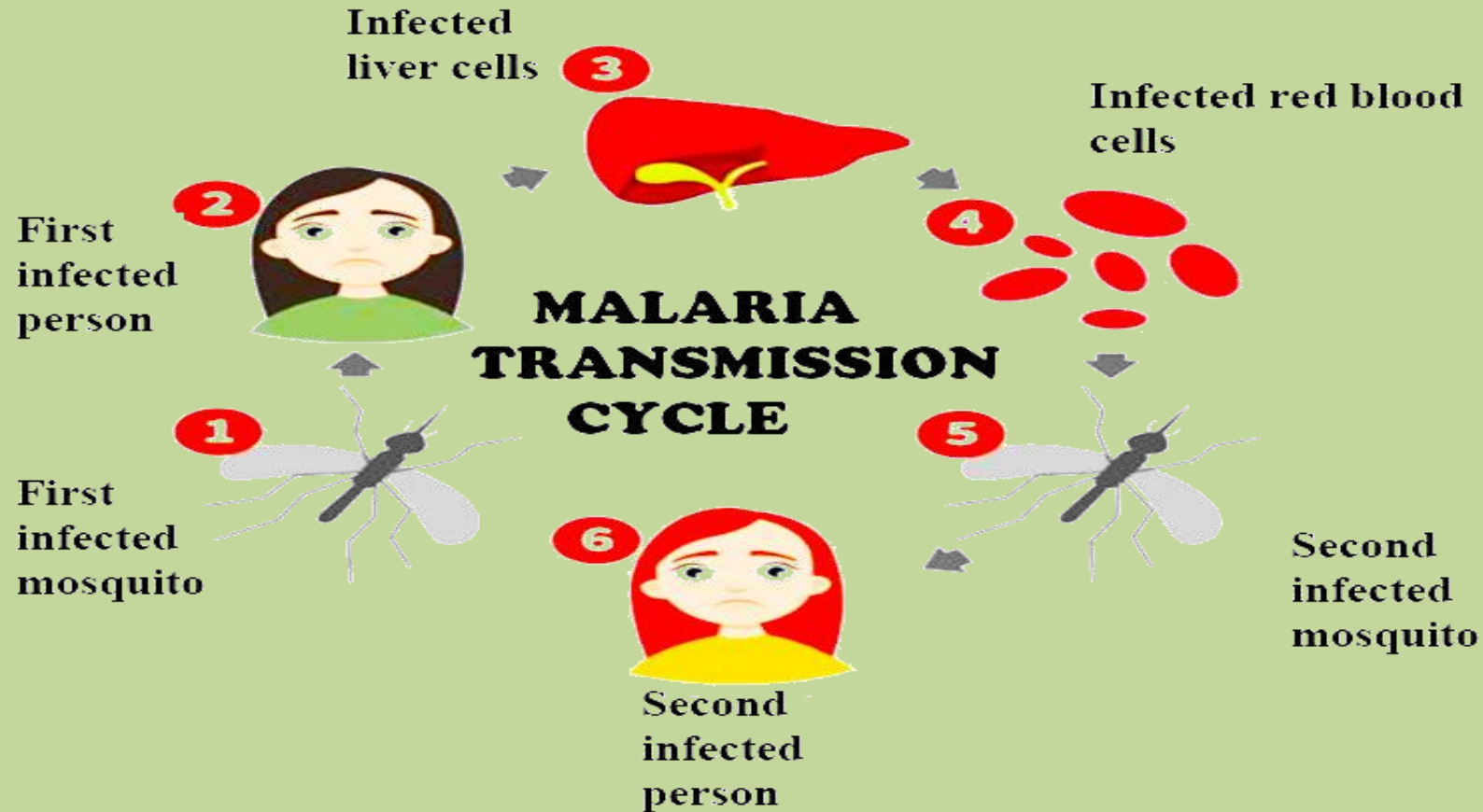
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# Malaria: Transmission Cycle



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## MALARIA

### What is Malaria?

Malaria is a vector borne disease caused by malaria parasites and is transmitted to human by female *Anopheles* mosquito. Once bitten parasite multiply in the hosts liver before infecting and destroying red blood cells.

### Vectors

The main malaria vectors are *Anopheles culicifacies*, *An. stephensi*, *An. fluviatilis*, *An. minimus*, *An. baimaii* & *An. epiroticus* in India.

### Causes of malaria.

Malaria is caused by the *Plasmodium* parasite. The parasite can be spread to human through the bites of infected mosquitoes.

These are four parasitic species that cause malaria in human

1. *Plasmodium falciparum*
2. *Plasmodium vivax*
3. *Plasmodium malariae*
4. *Plasmodium ovale*

### Symptoms of malaria

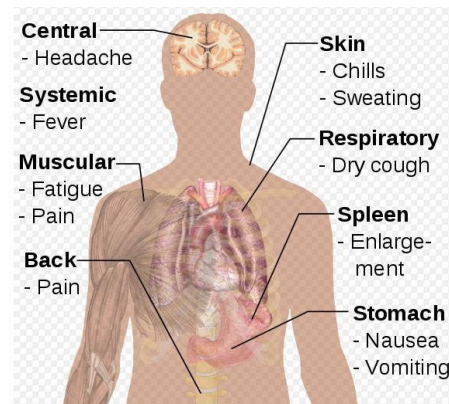
Typically, malaria produces fever, headache, vomiting and other flu-like symptoms.

The parasite infects and destroys red blood cells resulting in easy fatigue-ability due to anemia, fits/convulsions and loss of consciousness.

Parasites are carried by blood to the brain (cerebral malaria) and to other vital organs.

Malaria in pregnancy poses a substantial risk to the mother, the fetus and the new born infant. Pregnant women are less capable of coping with and clearing malaria infections, adversely affecting the unborn fetus.

### General overview symptoms

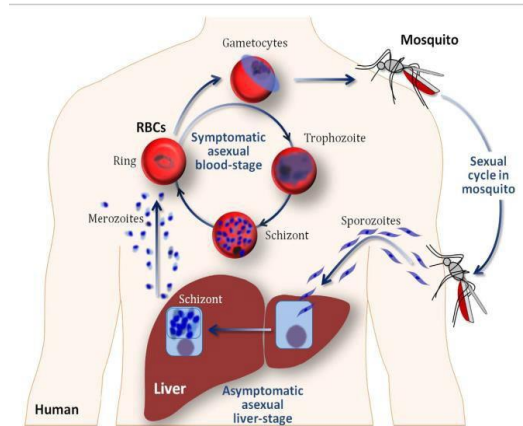


### Malaria life cycle

The *Plasmodium* parasite has two hosts in life cycle

1. Mosquito vector (Definitive host)
2. Vertebrate host (Intermediate host)

### Life cycle in host



### Prevention

Reduce exposure to mosquitoes by:

1. Insecticide spraying your home.
2. Sleeping under a net
3. Covering your skin with cloths
4. Screening of the house with wire mesh
5. Source reduction i.e., filling of the breeding places
6. Proper covering of stored water.

# Signs and symptoms of Malaria



Fever



Chills



Headache



Vomiting



Tiredness



Seizures



# ABCD against Malaria

A → Awareness



B → Bite prevention



C → Control the mosquitoes

D → Diagnosis



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