

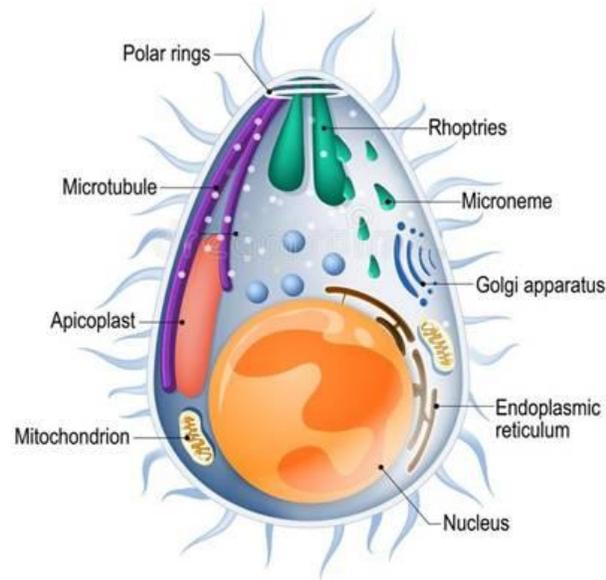
# Malaria

- Malaria is a mosquito born infectious disease of human and other animals caused by eukaryotic protists of the genus plasmodium.
- The disease results from the multiplication of plasmodium parasites within RBC

# Causative agent

Human Malaria is caused by one of protozoan parasites:

*Plasmodium*



*Plasmodium falciparum*

*Plasmodium vivax*

*Plasmodium ovale*

*Plasmodium malariae*

*Plasmodium knowlesi* - forested regions of South East Asia

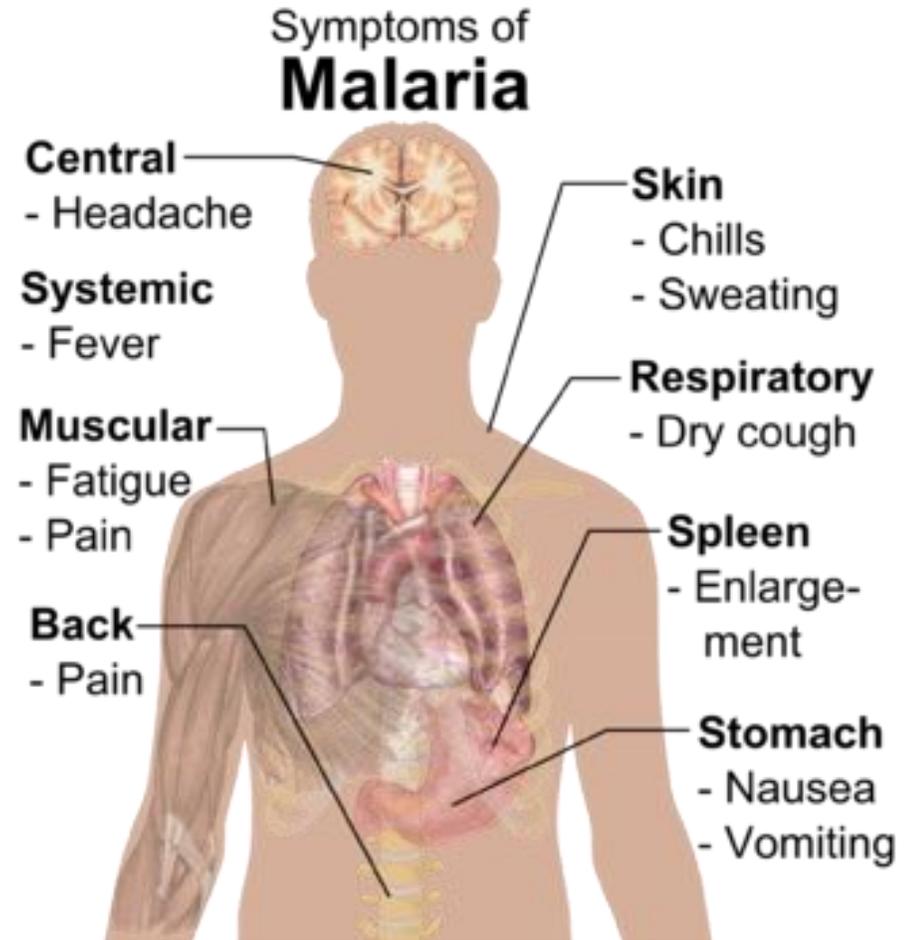


Malaria is transmitted through the bite of an infected female *Anopheles* mosquito

# Symptoms



- Fever
- Muscular fatigue and pain
- Headache- central
- Back pain
- Skin- chills and shivering
- In severe cases progressing to coma or death
- Arthralgia (joint pain)
- Vomiting
- Anemia
- Jaundice
- Hemoglobinuria
- Renal damage
- Spleen enlargement
- Dry mouth



## **Diagnosis**

Blood film examination(Microscopy)

Rapid Diagnostic Tests (Antigen or antibody test)

PCR

## **Treatment**

By combining two or more antimalarial drugs with different mechanism of action

Chloroquine

Primaquine

Malarone

Tafenoquine

Quinine

Antibiotics can also be used in combination with antimalarial drugs

## **Prevention**

By avoiding mosquito bites

Wearing long sleeves and trousers

Insecticide treated bed net

Repellent creams or sprays

# Dengue fever

Dengue virus (RNA virus)

DENV-1, DENV-2, DENV-3 and DENV-4

## Transmission



*Aedes aegypti*

## Diagnosis

Detecting antibodies

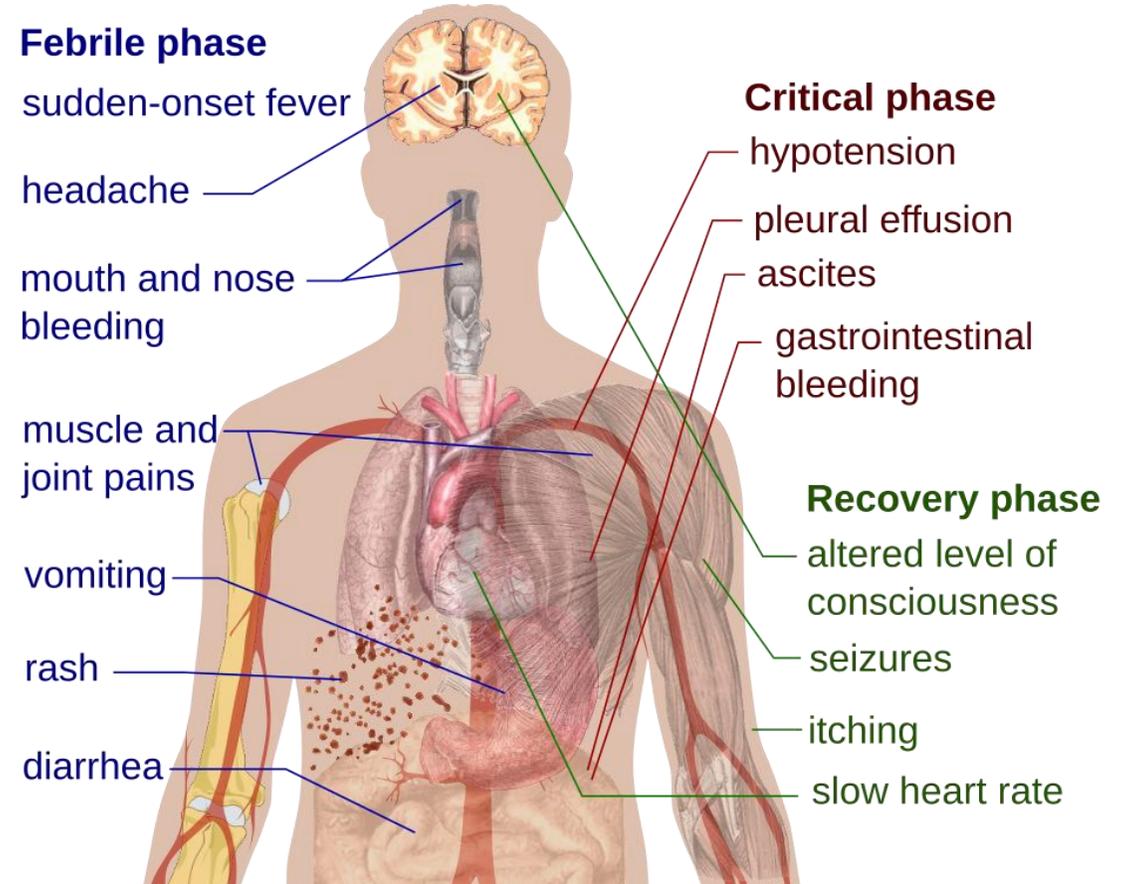
[Nucleic acid amplification tests](#)

## Prevention

prevent mosquito bites

prevent mosquitoes from breeding

## Symptoms



## Treatment

Supportive care,  
intravenous fluids, blood transfusions

# Pathogenesis

