Treatment

Malaria is curable if the patient receives an accurate diagnosis and prompt treatment. However, severe disease/complications or drug resistance may occur and lead to death.

The patient should not treat him/herself. Medical consultation is recommended.

Prevention

The preventive measure for those who have to enter malaria endemic areas is to prevent themselves from being bitten by a mosquito vector, e.g.

- put on clothes, preferably light color, to cover the entire body
- apply mosquito repellant to the exposed area of the body
- sleep in a bed-net; an impregnated bed-net provides more efficacy in prevention
- spray a screened bedroom with an insecticide

In Thailand, chemoprophylaxis is not recommended due to drug resistance and side-effects. If someone has any of the above symptoms and suspects of malaria, they should urgently seek medical advice.

Whenever
Fever rising
Entering jungle
Possible of malaria
Please consult
the Hospital for Tropical Diseases

Consultation and treatment are available at the Hospital for Tropical Diseases

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MALARIA

HOSPITAL FOR TROPICAL DISEASES

Malaria (paludism, jungle fever)

Human malaria is caused by 4 species of protozoal parasites of the genus *Plasmodium*, ie. *P. falciparum*, *P. vivax*, *P. malariae* and *P. ovale*. The most prevalent species found in Thailand are *P. falciparum* and *P. vivax*.

Falciparum malaria is the most dangerous form of the disease and can be fatal. Vivax and ovale malaria may remain quiescent in the liver (hypnozoite) even after treatment and, at times, are released into the bloodstream and cause recurrence of the disease.

Monkey malaria (*P. knowlesi*) can also infect human, though uncommon.

Endemic areas

The endemic areas of malaria in Thailand are along the border provinces, especially in the hilly and forested areas where there are breeding places of anopheline mosquitoes, the vectors of malaria.

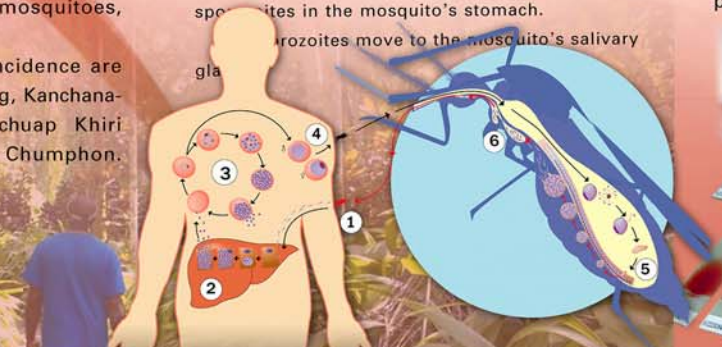
Provinces with high malaria incidence are Mae Hong Son, Tak, Trat, Ranong, Kanchanaburi, Chanthaburi, Sa Kaeo, Prachuap Khiri Khan, Ratchaburi and Chumphon.

Transmission

Malaria is transmitted to humans through the bite of infected female *Anopheles* mosquitoes.

Life cycle

1. Infected mosquito bites human, injects malaria parasites (sporozoites) into human bloodstream.
2. Sporozoites develop into merozoites and multiply in human liver cells while some remain as hypnozoites.
3. Merozoites are released into the bloodstream, infect red blood cells and propagate their asexual life cycle.
4. Some merozoites develop into sexual stages (gametocytes) which is the infective stage for mosquitoes.
5. Gametocytes mate and develop into spo ites in the mosquito's stomach.
6. rozoites move to the mosquito's salivary gla



Symptoms

Usual presenting symptoms, occurring 10-14 days after mosquito's bite, are fever accompanied by headache, muscle pain, nausea, vomiting and anorexia. The classical symptoms of the disease, which the name paludism is derived from, are chill, high fever, followed by sweating; these symptoms occur only in some cases.

Diagnosis

By blood examination for malaria parasites.