

# MALARIA TODAY

Recently, most malaria cases have been imported. Immigrants from areas of the world where the occurrence of malaria is widespread have brought the malaria with them.

The potential for malaria transmission still exists in many parts of the United States because of large vector populations and unreported cases introduced from malarious countries.

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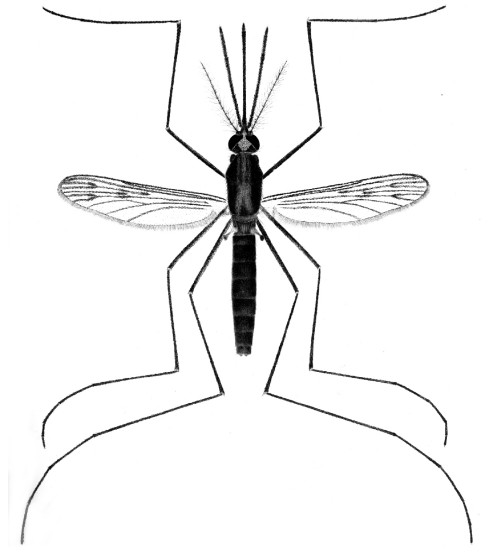
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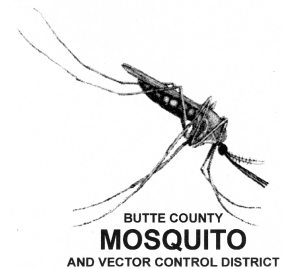
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# MALARIA

(WHAT YOU SHOULD KNOW)



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LOCAL

## HISTORY OF MALARIA

Malaria is thought to have been introduced into the Sacramento Valley around 1830 by explorers and fur trappers.

By 1833, malaria had become an epidemic among the Central Valley Indians. It has been estimated that more than 75% of the Indian population died from the disease.

Malaria remained a plague on the white gold miners, settlers and soldiers as well. The disease was present throughout the valley, and areas like Oroville, Marysville, Placerville and Colusa has the highest degree of prevalence.

Malaria became such a fact of life with people in malarious areas, that they took quinine with their coffee at breakfast every morning. School sessions were often suspended because children were unable to attend due to malaria.

## GENERAL INFORMATION

Malaria is transmitted primarily to humans by *Anopheles* mosquitoes.

*Anopheles freeborni* (western malaria mosquito), and *Anopheles punctipennis* (woodland malaria mosquito), can

transmit the malaria parasite in California.

*Anopheles freeborni* is commonly found breeding in rice fields of the Sacramento Valley, while *Anopheles punctipennis* is

found mainly in foothill streams or pools.

Other ways of contracting malaria are by shared needles, blood transfusions or transplacental infections (congenital).

Intermittent fever, blackwater fever and jungle fever, are some common names for malaria.

Malaria is caused by parasites that attack red blood cells, destroying them while undergoing reproduction. There are four types of human malaria:

- 1) *Plasmodium vivax*
- 2) *Plasmodium falciparum*
- 3) *Plasmodium ovale*
- 4) *Plasmodium malariae*

## MALARIA SYMPTOMS

The first symptoms of malaria are flu-like: headache, back pain, nausea with general malaise. In some forms, vomiting and diarrhea are common. The fever is irregular for the first two to four days, but soon becomes "intermittent" with marked swings from morning to evening of up to 105° or higher.

After the primary attack, malaria symptoms are characterized by recurring sudden attacks. These attacks begin in the afternoon and last 8-12 hours. Attacks have three distinct stages: cold, hot and sweating.

Untreated malaria can cause liver or kidney failure, enlargement of the spleen,

suppression of the immune system and changes in body physiology.

The most deadly strain of malaria, *Plasmodium falciparum*, can be fatal in some cases if not treated.

## TREATMENT

Currently, definite diagnosis of malaria infection occurs when parasites are found in blood tests.

There are a number of therapeutic or prophylactic drugs available. None of the anti-malarial drugs are effective against all stages of the malaria parasite.

Quinine is an alkaloid derived from the Chinchona tree bark. Mepracrine, chloroquine, proguanil, pyrimethamine and primaquine are other anti-malarial drugs.