


Merlin disease code: 08460 Malaria

 Permanent slides for all cases must be sent to the Bureau of Public Health Laboratories

[Paper case report form](#)
[Indigenous malaria case report form](#)
Merlin extended data required

Clinical criteria for case classification

Signs and symptoms are variable; however, most patients experience fever. In addition to fever, common associated symptoms include headache, back pain, chills, sweats, myalgia, nausea, vomiting, diarrhea, and cough. Untreated *Plasmodium falciparum* infection can lead to coma, renal failure, pulmonary edema, and death. The diagnosis of malaria should be considered for any person who has these symptoms and who has traveled to an area in which malaria is endemic. Asymptomatic parasitemia can occur among persons who have been long-term residents of areas in which malaria is endemic.

Laboratory criteria for case classification

Confirmatory:

Either of the following:

- Detection of speciated or unspicated malaria parasites by microscopy in thick or thin peripheral blood films by a state public health laboratory or the CDC
- **Or** detection of *Plasmodium* species DNA in peripheral blood by nucleic acid test (e.g., polymerase chain reaction [PCR] test).

Supportive:

Either of the following:

- Detection of circulating malaria-specific antigens using rapid diagnostic test (RDT)
- **Or** detection of malaria parasites by microscopy in thick or thin peripheral blood films by a commercial laboratory.

Epidemiological criteria for case classification

Not applicable.

Case classification

Confirmed:

A person (symptomatic or asymptomatic) with confirmatory laboratory criteria, diagnosed in the United States, regardless of whether the person experienced previous episodes of malaria while outside the country.

Suspect:

A person (symptomatic or asymptomatic) with supportive laboratory criteria diagnosed in the United States, regardless of whether the person experienced previous episodes of malaria while outside the country.

Criteria to distinguish a new case from previous reports

A new case should be created for a subsequent infection in the same person caused by a different *Plasmodium* species. A person with a subsequent attack caused by the same species in the U.S. may indicate a relapsing infection or treatment failure caused by drug resistance.

Comments

Reports of malaria parasites detected in thick or thin peripheral blood films should be accompanied by a determination of the species by morphologic criteria and a calculation of the percentage of red blood cells infected by asexual malaria parasites (parasitemia).

Cases also are classified according to the following World Health Organization categories:

- Autochthonous:
 - Indigenous: Malaria acquired by mosquito transmission in an area where malaria is a regular occurrence.
 - Introduced: Malaria acquired by mosquito transmission from an imported case in an area where malaria is not a regular occurrence.
- Imported: Malaria acquired outside a specific area (e.g., the U.S. and its territories).
- Induced: Malaria acquired through artificial means (e.g., blood transfusion, common syringes, malariotherapy).
- Relapsing: Renewed manifestation (i.e., of clinical symptoms or parasitemia) of malarial infection that is separated from previous manifestations of the same infection by an interval greater than any interval resulting from the normal periodicity of the paroxysms.
- Cryptic: An isolated case of malaria that cannot be epidemiologically linked to additional cases.