

**Malaria–Information for Clinicians**

 6/2/2023

**Please contact your County Health Department (CHD) by the next business day if you suspect a patient has malaria.**

Malaria is a serious and potentially fatal disease caused by any of four species of protozoan parasites of the genus *Plasmodium*: *P. falciparum*, *P. vivax*, *P. malariae*, and *P. ovale*. Infection with *P. falciparum* is most likely to result in severe malaria and death if not promptly treated. Infection with *P. vivax* or *P. ovale* may result in chronic infection, with parasites remaining dormant in the liver, causing relapsing episodes. **Suspected or confirmed malaria, particularly *P. falciparum*, is a medical emergency and should be treated urgently and aggressively.**

**Transmission** occurs through the bite of an infected *Anopheles* mosquito. Malaria may also be transmitted from mother to fetus in utero or to neonate at parturition. **An infected person should avoid mosquito bites while ill to prevent infection of local mosquitoes.**

Areas with endemic malaria transmission include Africa, South and Southeast Asia, the Middle East, Central America including Mexico, and South America.

**Incubation** **period** varies by species, but in most cases is from 7 to 30 days.

**Clinical Presentation:** Malaria is characterized by flu-like symptoms including fever, nausea and vomiting, diarrhea, headache, and myalgia. Anemia, thrombocytopenia, elevation of bilirubin, and elevation of aminotransferases may also be seen. Symptoms of severe malaria include seizures, mental confusion, hemoglobinuria, kidney failure, acute respiratory distress syndrome, coma, and parasitemia >5%.

**Treatment** should be guided by the infecting species,clinical status of the patient, drug susceptibility as determined by the geographic area where exposed, and previous use of antimalarials.Information on malaria treatment is available at: [www.cdc.gov/malaria/diagnosis\_treatment/clinicians1.html](https://www.cdc.gov/malaria/diagnosis_treatment/clinicians1.html). **Intravenous artesunate** is the only treatment option for patients with severe malaria and is available commercially for treatment of malaria. The hospital pharmacist should call 1-855-526-4827 to identify the closest distributor for a patient emergency. To eradicate the dormant forms of *P. vivax* and *P. ovale*, primaquine phosphate or tafenoquine should also be given. G6PD testing should occur prior to administering these drugs as they may cause hemolytic anemia in persons with a G6PD deficiency.

**Malaria prevention** consists of mosquito avoidance measures and chemoprophylaxis. An individual risk assessment should be conducted for each traveler to determine risk and appropriate prevention strategies.

**Laboratory testing:** Smear microscopy is the gold standard for malaria diagnosis. Microscopy results should be available within a few hours. If microscopy is not immediately available, the rapid diagnostic test BinaxNOW should be used. Both positive and negative rapid test results should be confirmed by microscopy. Polymerase chain reaction testing may also be useful to confirm the species after the diagnosis has been made by microscopy. Additional laboratory findings may include mild anemia, mild decrease in blood platelets (thrombocytopenia), elevation of bilirubin, and elevation of aminotransferases. Your County Health Department can provide guidance on how and when to submit samples to the Florida Department of Health, Bureau of Public Health Laboratories.

**Resources:**

Florida Department of Health in XXXX County: phone number

Centers for Disease Control and Prevention: [www.cdc.gov/malaria/index.html](http://www.cdc.gov/malaria/index.html)

Malaria 101 Training for Health Care Providers (CME): [www.cdc.gov/parasites/cme/malaria/index.html](https://www.cdc.gov/parasites/cme/malaria/index.html)

CDC Malaria Hotline: (770) 488-7788 (M-F, 9am-5pm eastern), (770) 488-7100 (after hours)