

MALARIA INFORMATION FOR CLINICIANS

Please contact your <u>county health department</u> by the next business day if you suspect a patient has malaria.

Four local cases of malaria (*Plasmodium vivax*) have been identified in Sarasota County. These cases have been treated and recovered. Per the Centers for Disease Control and Prevention (CDC), increased international travel over the summer season may increase risk of malaria. Infected travelers bitten by vector mosquitoes can introduce malaria into local mosquito populations, which can result in malaria cases without travel.

Malaria is a serious and potentially fatal disease caused by any of four species of protozoan parasites of the genus *Plasmodium*. Infection with *Plasmodium vivax* are generally less severe but may result in chronic infection due to parasites remaining dormant in the liver. **Suspected or confirmed malaria should be evaluated and managed promptly.**

Transmission occurs through the bite of an infected *Anopheles* mosquito. Malaria may also rarely be transmitted from mother to fetus in utero or to neonate at parturition and contaminated blood, tissues, or needles. **An infected person should take precautions to 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 which may be cyclical, 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%. Pregnant women and young children are at greater risk for severe malaria.

Treatment should be guided by the infecting malaria 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. 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. 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:

County Health Department Contact Information

Centers for Disease Control and Prevention: www.cdc.gov/malaria/index.html

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

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

About the Florida Department of Health

The Florida Department of Health, nationally accredited by the <u>Public Health Accreditation Board</u>, works to protect, promote and improve the health of all people in Florida through integrated state, county and community efforts.

Follow us on Twitter at <u>@HealthyFla</u> and on <u>Facebook</u>. For more information about the Florida Department of Health please visit <u>www.FloridaHealth.gov</u>.