Alabama Department of Public Health
Alabama Emergency Response Technology
Health Alert Network (HAN)
June 29, 2023

Locally Acquired Malaria Cases Identified in the United States

Summary
The Centers for Disease Control and Prevention (CDC) has issued a Health Alert Network (HAN) Health Advisory to share information and notify clinicians, public health authorities, and the public about identification of locally acquired malaria cases (P. vivax) in two U.S. states (Florida and Texas) within the last two months, concern for a potential rise in imported malaria cases associated with increased international travel in summer 2023, and the need to plan for rapid access to IV artesunate, which is the first-line treatment for severe malaria in the United States.

Background
Locally acquired mosquito-borne malaria has not occurred in the United States since 2003 when eight cases of locally acquired P. vivax malaria were identified in Palm Beach County, FL. Despite these cases, the risk of locally acquired malaria remains extremely low in the United States. However, Anopheles mosquito vectors, found throughout many regions of the country, are capable of transmitting malaria if they feed on a malaria-infected person. The risk is higher in areas where local climatic conditions allow the Anopheles mosquito to survive during most of or the entire year and where travelers from malaria-endemic areas are found. In addition to routinely considering malaria as a cause of febrile illness among patients with a history of international travel to areas where malaria is transmitted, clinicians should consider a malaria diagnosis in any person with a fever of unknown origin regardless of their travel history.

Recommendations for Clinicians

- Consider the diagnosis of malaria in any person with a fever of unknown origin, regardless of international travel history, particularly if they have been to the areas with recent locally acquired malaria.
- Routinely obtain a travel history and consider malaria in a symptomatic person who traveled to an area with malaria in the weeks to months preceding symptom onset.
- Treatment recommendations for malaria vary by species and severity. Please refer to CDC’s Malaria Diagnosis and Treatment Guidelines for U.S. Clinicians for specific detailed instructions.
  - An algorithm for diagnosis and treatment of malaria is available here.
  - Patients suspected of having malaria should be urgently evaluated in a facility, such as an emergency department, able to provide rapid diagnosis and treatment, within 24 hours of presentation.
  - Order microscopic examination of thin and thick blood smears, and a rapid diagnostic test (RDT) if available, to diagnose malaria as soon as possible.
  - If blood smears or RDT are positive and species determination is not available, antimalarial treatment effective against chloroquine-resistant P. falciparum must be initiated immediately.
  - Artemether-lumefantrine (Coartem®) is the preferred option, if readily available, for the initial treatment of uncomplicated P. falciparum or unknown species of malaria acquired in areas of chloroquine resistance. Atovaquone-proguanil (Malarone®) is another
recommended option. *P. vivax* infections acquired from regions other than Papua New Guinea or Indonesia should initially be treated with chloroquine (or hydroxychloroquine).

- IV artesunate is the first-line drug for treatment of severe malaria in the United States. Artesunate for Injection™ is approved by the FDA for treating severe malaria and is commercially available. More information on how to acquire IV artesunate in the United States can be found [here](#).
- Species determination is important because *P. vivax* and *P. ovale* can remain dormant in the liver and require additional antirelapse treatment; failure to treat the dormant hepatic parasites may result in chronic infection with relapsing episodes. Relapses may occur after months or even years without symptoms.

- After an urgent infectious disease consultation, if there are still questions about diagnosing and treating malaria, CDC malaria clinicians are on call 24/7 to provide advice to healthcare providers, further information can be found [here](#).
- Suspected or confirmed locally acquired malaria is a public health emergency and should be reported immediately to your state, territorial, local, or tribal health department. Imported (or travel-associated malaria) is also reportable in all states through routine reporting methods.
- Discuss travel plans with patients; prescribe a CDC-recommended malaria chemoprophylaxis regimen and discuss [mosquito bite prevention](#) for those traveling to an international area with malaria; encourage patients to adhere to the regimen before, during, and after travel. Malaria chemoprophylaxis is not needed domestically at this time.

The full CDC HAN can be viewed here: [https://www.alabamapublichealth.gov/bcd/assets/cdc_han_malaria_cases_identified.pdf](https://www.alabamapublichealth.gov/bcd/assets/cdc_han_malaria_cases_identified.pdf)