

CDC's Domestic Malaria Unit



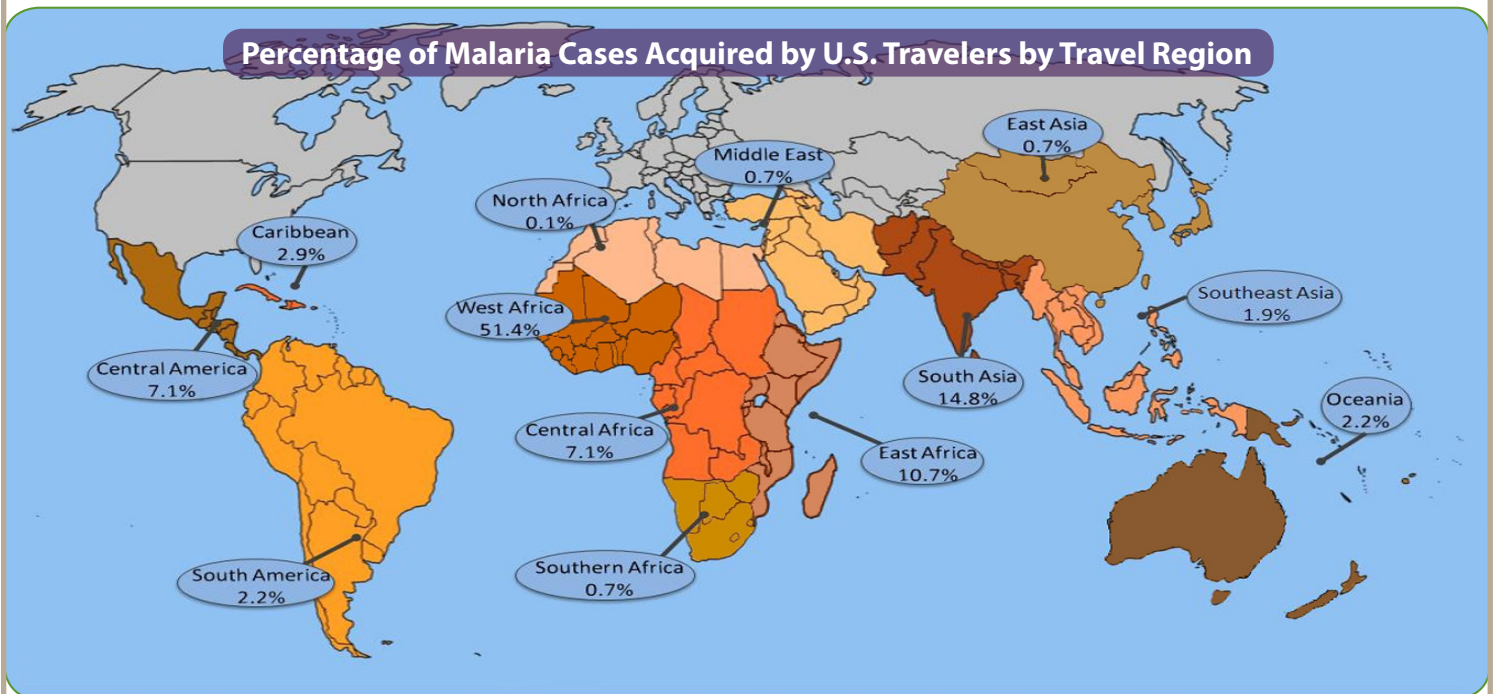
Malaria Surveillance

Malaria is a largely preventable disease, yet approximately 1,400 malaria cases and 4 deaths occur in the United States annually, mostly in returned travelers. Malaria is a reportable disease in the United States and its territories. Healthcare providers report laboratory-confirmed malaria cases occurring in the United States and its territories to their local, state or territorial health department. These reports, which contain epidemiological and clinical information on malaria, are then transmitted to CDC through the National Malaria Surveillance System (NMSS). CDC staff members review all reports when received and request additional information from the reporting healthcare provider or health department if necessary (e.g., when no recent travel to a malarious country is reported). Information regarding cases reported directly to CDC is shared with the relevant state health department. All cases that are reported as having been acquired in the United States are investigated further, including all induced and congenital cases. Information derived from uniform case report forms is entered into a database and summarized annually.

Depending on the level of detail obtained for each case, malaria surveillance reports typically contain information on age, purpose for travel, type of malaria and species, region of acquisition and diagnosis, resident status for imported malaria, estimated relative case rates for U.S. residents, interval between arrival in the U.S and illness onset, chemoprophylaxis use among U.S. civilians, and imported malaria among U.S. military personnel. If there are any in a reported year, deaths and transfusion-acquired cases are detailed. Additionally, select case reports are highlighted.

CDC's Domestic Malaria Unit

The CDC Domestic Malaria Unit focuses solely on clinical and surveillance issues within the United States. This is achieved through a) monitoring the frequency and distribution of malaria cases that occur in U.S. residents and visitors b) providing information to healthcare providers and the public about antimalarial drugs and other measures to protect them from malaria infection when traveling abroad c) offering clinical advice and epidemiologic assistance on the treatment, control, and prevention of malaria, and d) providing information to blood collection centers about where malaria occurs so they can appropriately screen donors.



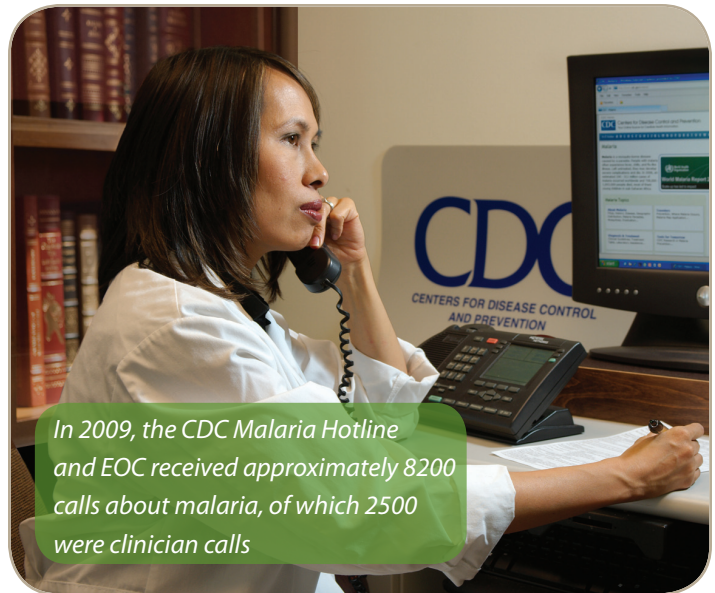
Malaria Clinical Consult

A 24-hour emergency clinical consultation service is provided for healthcare providers needing assistance with diagnosis or management of suspected or confirmed cases of malaria. During normal business hours these calls go to the CDC Malaria Hotline (below) for triage. After hours, or on weekends or holidays calls are routed through the CDC Emergency Operations Center (EOC) who then contacts the malaria clinician on call. In 2009 the EOC reported that malaria was the second most common disease topic from callers after H1N1, and that 591 of the malaria calls were from clinicians which were routed to the Malaria Branch. CDC malaria clinicians provide assistance to physicians, nurses, pharmacists, and laboratorians almost every type of health care setting nationwide. Malaria clinicians are responsible for the release of parenteral artesunate for the treatment of severe malaria under an investigational new drug protocol. The only parenteral drug approved to treat severe malaria in the US is quinidine, a drug historically used as an antiarrhythmic. However, quinidine has become less available in U.S. hospitals with the advent of newer, less toxic antiarrhythmic drugs, necessitating the availability of a paranteral antimalarial alternative such as artesunate

The Domestic Unit is also responsible for producing risk-based malaria prevention guidelines for U.S. travelers and investigating ways to improve the effectiveness of malaria prevention efforts among high risk U.S. travelers. These guidelines are made available to healthcare providers and the public in the biennial CDC publication, *Health Information for International Travel* (the "Yellow Book") and on the CDC Malaria website www.cdc.gov/malaria. Additionally, notices about confirmed malaria outbreaks are promptly made available to the public via the malaria website. A subscription email notification service is also available on the website which automatically notifies subscribers about outbreaks or any other changes to the malaria website.

Blood Donor Screening

The U.S. blood supply is kept as safe as possible from infectious diseases, including malaria, through strict Food and Drug Administration (FDA) screening guidelines for accepting or deferring donors who have been in malaria-endemic areas. Because of these control measures, malaria transmitted through blood transfusion is very rare in the United States and occurs on average, once every other year. FDA screening guidelines advise deferring blood donations from most travelers to malaria-endemic areas for 1 year after return. Former residents of areas where malaria is present are deferred for 3 years and people diagnosed with malaria cannot donate blood for 3 years after treatment, during which time they must have remained free of symptoms of malaria.



In 2009, the CDC Malaria Hotline and EOC received approximately 8200 calls about malaria, of which 2500 were clinician calls

Interactive Malaria Map Application

The CDC Malaria Map Application www.cdc.gov/malaria/map/index.html, produced by the Domestic Unit and available through the malaria website, provides information on malaria endemicity throughout the world. Users can search or browse countries, provinces, cities, and place names, get information about malaria in that particular location, and see prevention recommendations for that area. This tool is meant to complement other travelers' health resources currently available on the CDC Travelers' Health website at www.cdc.gov/travel.

CDC Malaria Hotline

The Malaria Hotline telephone service is a way for the public, healthcare providers, blood collection centers, and others to obtain general information about malaria. The hotline typically responds to callers about where malaria occurs, measures to reduce malaria risk, and what to do if malaria infection is suspected. Additionally, calls from healthcare providers are triaged through the hotline, with malaria clinicians being immediately connected to urgent calls from healthcare providers seeking assistance with diagnosing or treating a case of malaria. The hotline operates Monday-Friday from 9 am- 5 pm Eastern Standard Time and most calls are returned the same day or within 24 hours. Moreover, callers are able to speak with a health educator or another public health professional with experience and training in malaria. On average, the Malaria Hotline handles 6000 calls a year.



The hotline telephone number is 770-488-7788.