

Malaria

Malaria is a Class B Disease and must be reported to the state within one business day.

Background

Malaria is a disease caused by a parasite that is spread by a certain type of mosquito. There are five species of malaria parasite: *Plasmodium falciparum*, *P.vivax*, *P.ovale*, *P.malariae*, and *P.knowlesi*.

Most cases of malaria are in people who have been bitten by an infected mosquito. Mosquitoes are able to pick up the parasites that cause malaria when they bite a person with a malaria infection, and then continue the cycle of transmission when they bite a new person. Rarely, infection can also occur through blood transfusions, but blood products are routinely screened to help prevent infections. Also rarely, sometimes the parasite can be transmitted from mother to child during pregnancy or childbirth.

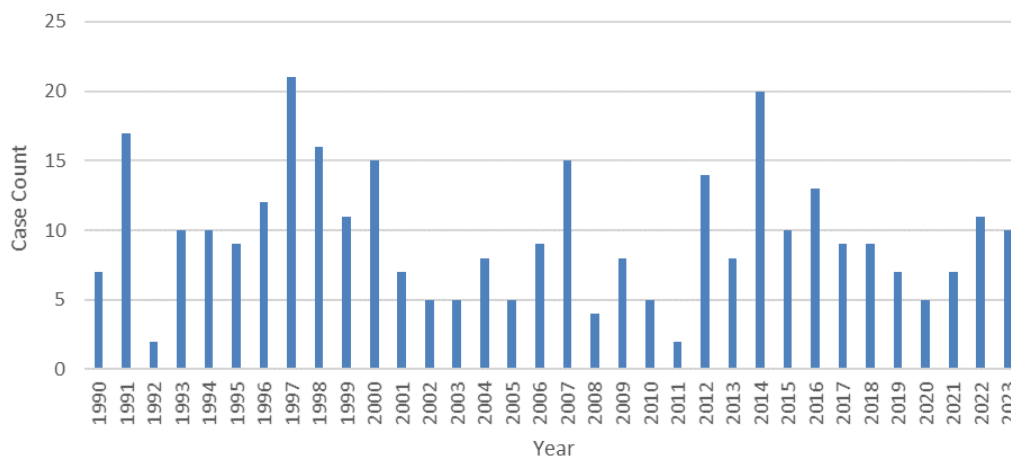
Symptoms typically begin 7 to 30 days after infection, but can sometimes take as much as a year. Malaria symptoms can include fever, chills, headache, muscle aches, nausea, vomiting, and diarrhea. Symptoms may become severe, especially if left untreated, and can progress to kidney failure, seizures, coma, and even death. The malaria species *P.vivax* and *P.ovale* can also cause relapse.

Malaria does not regularly spread in the United States, so most cases in the United States are in travelers who contracted malaria while traveling to another country. For this reason, travelers should consult with their healthcare providers regarding medications they can take before, during, and after their trip to help prevent malaria infection. There have been rare occasions of local transmission of malaria in the United States after mosquitoes picked up the parasite from imported cases, but this is uncommon. The species of mosquito which spreads malaria (*Anopheles* mosquitoes) is present in the United States, including in Louisiana.

Cases in Louisiana

There have been an average of 9 cases in Louisiana per year over the past 20 years. In 2023, there were 10 cases of malaria identified in Louisiana (Figure 1).

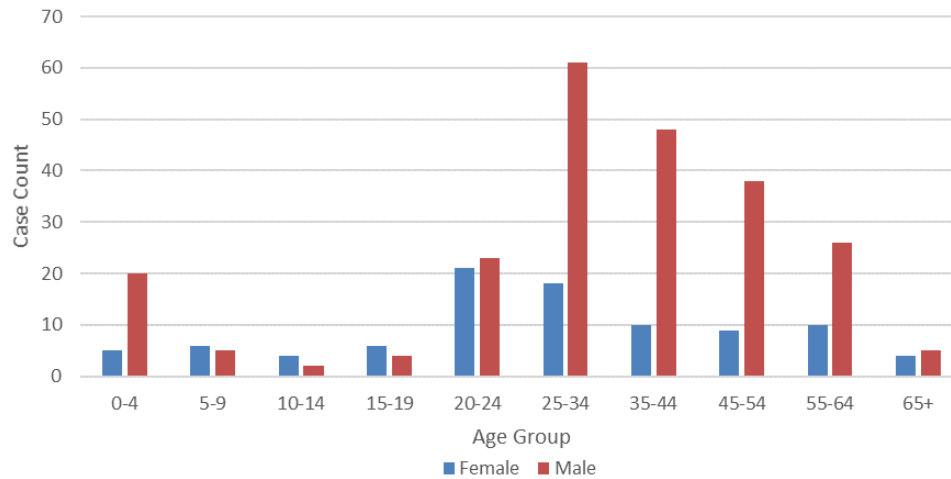
Figure 1: Malaria Cases and Incidence Rate - Louisiana, 1990-2023



Cases by Sex and Age

The majority of cases identified in Louisiana have been in males aged 34-65. Among females, the majority of cases were adults aged 20 to 34 years (Figure 2).

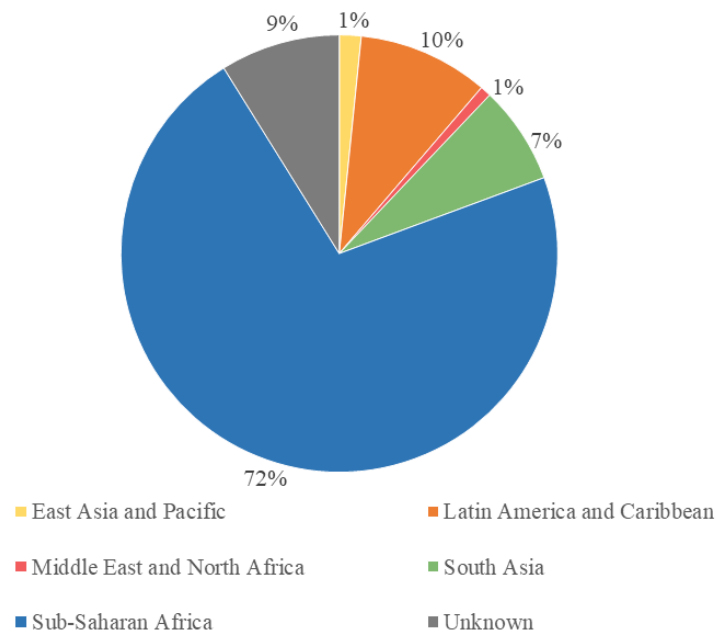
Figure 2: Malaria Cases by Sex and Age - Louisiana, 1990-2023



Travel Locations

The majority of malaria cases reported in Louisiana reported recent travel to Sub-Saharan Africa prior to illness (72%), followed by 10% to Latin America and the Caribbean, and 7% to South Asia. Only a few cases reported travel to the Middle East or North Africa, Oceania, or East Asia and the Pacific (Figure 3). Travel history could not be obtained for 9% of cases.

Figure 3: Malaria Cases Travel Locations Prior to Illness - Louisiana, 2013-2023



***Plasmodium* Species**

The majority of reported malaria cases were infected with *P.falciparum* (53%) followed by *P.vivax* (18%), *P. malariae* (3%) and *P. ovale* (2%). Species were undetermined in 24% of malaria cases (Figure 5).

Figure 5: *Plasmodium* Species – Louisiana, 2000-2023

