

Malaria Review

By

Alaa Ahmed, Aymen Abdulsalam and Abdullah Ali

Abstract

Malaria is a major global health concern. Every year, an estimated 300-500 million people contract malaria, resulting in 1.5-2.7 million deaths. The incidence of imported cases of malaria in industrialized countries has increased as a result of increased global travel to and immigration from malaria-endemic areas. Each year, between 10,000 and 30,000 travelers from wealthy countries are at risk of contracting malaria. Furthermore, drug-resistant *Plasmodium falciparum* malaria has spread to practically every region of the world. Drug-resistant plasmodia are infecting an increasing number of travelers. Malaria is caused by *Plasmodium* obligate intraerythrocytic protozoa. Humans can be infected with one (or more) of the following parasites: *Plasmodium falciparum*, *Plasmodium vivax*, *Plasmodium ovale*, and *Plasmodium malariae*. Plasmodia are primarily transmitted by the bite of an infected female *Anopheles* mosquito, but infections can also occur through exposure to infected blood products (transfusion malaria) and by congenital transmission. In industrialized countries, most cases of malaria occur among travelers, immigrants, or military personnel returning from areas endemic for malaria (imported malaria).