

Malaria

7.1 Background

Malaria is a common and life-threatening disease in many tropical and subtropical areas. There is currently a risk of malaria transmission in 91 countries and territories, and these are visited by more than 125 million international travellers every year.

Each year many international travellers fall ill with malaria while visiting countries/territories where malaria is endemic, and well over 10 000 are reported to become ill with malaria after returning home. However, under-reporting means that the real figure may be considerably higher. International travellers to countries/territories with ongoing local malaria transmission arriving from countries with no transmission are at high risk of malaria infection and its consequences because they lack immunity. Migrants from countries/territories with malaria transmission living in malaria-free countries and returning to their home countries to visit friends and relatives are similarly at risk because of waning or absent immunity.

Travellers who fall ill during travel may find it difficult to access reliable medical care. Those who develop malaria upon returning to a country that is malaria-free face particular problems: medical personnel may be unfamiliar with malaria, the diagnosis may be delayed, and effective antimalarial medicines may not be registered and/or available, resulting in progression to severe malaria with complications and, consequently, high case fatality rates.

Fever occurring in a traveller within 3 months of leaving a country in which there is risk of malaria is a potential medical emergency and should be investigated urgently to exclude malaria. In the rare situations in which there is no rapid access to reliable diagnostic facilities, standby emergency treatment (SBET) is indicated (see section 7.3.2).

7.1.1 Cause

Malaria is caused by the protozoan parasite *Plasmodium*. Human malaria is caused by five different species of *Plasmodium*: *P. falciparum*, *P. malariae*, *P. ovale*, *P. vivax* and *P. knowlesi*. Of these, *P. falciparum* and *P. vivax* are the most prevalent, and *P. falciparum* is the most dangerous, with the highest rates of complications and mortality. This deadly form of malaria is a serious public health concern in most countries in sub-Saharan Africa. *P. knowlesi*, a species that normally infects animals, can occasionally infect humans. As yet there are no reports of human-mosquito-human transmission of such “zoonotic” forms of malaria.

7.1.2 Transmission

The malaria parasite is transmitted by female *Anopheles* mosquitoes, which bite mainly between dusk and dawn.