

Malaria

The name “*mal aria*” was coined in Italy, as people believed that “bad air” brought about the disease. In truth, the cause of malaria is a parasite transmitted from person to person through the bite of the female *Anopheles* mosquito.

The environment is a key determinant of the spread of malaria – the deadliest of all the vector-borne diseases. Malaria flourishes within a certain temperature range and altitude, where favourable rainfall patterns and humidity prevail, and where animal or human blood is available. Any clean standing water provides a potential breeding site for mosquitoes.

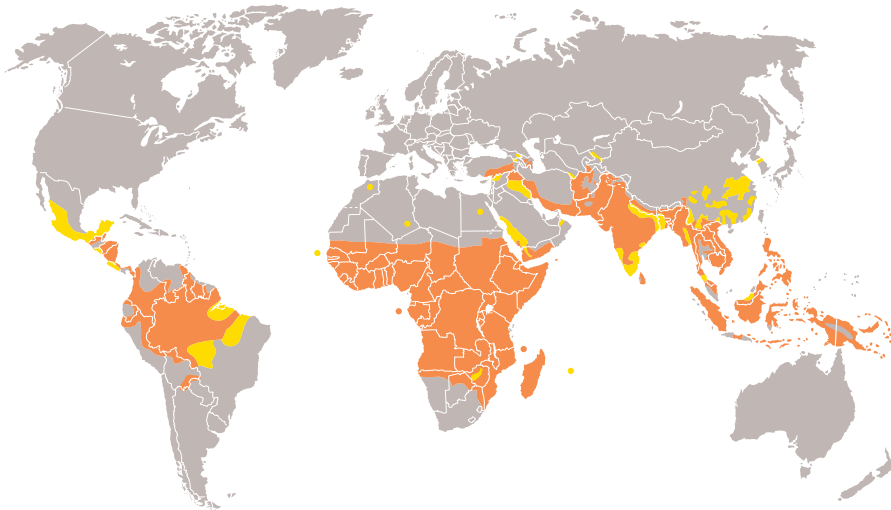
Ninety per cent of the at least one million deaths a year from malaria occur in Africa, mostly among young children. Malaria also hampers children's education: because they miss school when ill, and because severe episodes of the disease may cause permanent neurological damage. Malaria has been estimated to cost Africa more than US\$ 12 billion every year in lost GDP. The disease could be controlled for a fraction of that sum.

Preventive measures, such as insecticide-treated bed nets, stop mosquitoes biting children. Drugs, such as chloroquine, are available, but drug resistance means that new remedies are urgently being sought. Malaria is one of the major public health challenges undermining development. Long-term solutions are needed to stop an African child dying every 30 seconds.

Malaria around the world

2004

- malaria transmission occurs
- limited risk
- no malaria



Other vector-borne diseases

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|------------------------------|--|
| Schistosomiasis | Flat worms, whose life cycle partly takes place in freshwater snails, burrow through the skin. 200 million people, many of them children, are currently infected with schistosomiasis. |
| Japanese encephalitis | This is a virus transmitted by mosquitoes in Asia. 90% of the cases occur in children under five years. |
| Leishmaniasis | Transmitted by sand flies, this parasite causes skin lesions and damage to internal organs. It killed 59 000 people in 2001. |
| Dengue fever | Mosquitoes transmit the virus, which kills more than 10 000 children every year. |
| Lymphatic filariasis | Worms lodging in the lymphatic system can cause deformations in children as young as 12 years. |

Malaria in Africa

Suitability of climate conditions for the transmission of malaria 2004

- climate suitable, malaria endemic
- ■ ■ ■ ■ ■ climate unsuitable, malaria absent

Africa bears the overwhelming burden of malaria. It is home to the deadliest form of the malaria parasite and to climatic conditions where mosquitoes flourish. Local environmental conditions, such as wetlands and drainage patterns, also influence the abundance of mosquitoes. Consequently, dams and irrigation schemes must be carefully planned and managed in order to reduce opportunities for mosquitoes to breed.

