

## Malaria

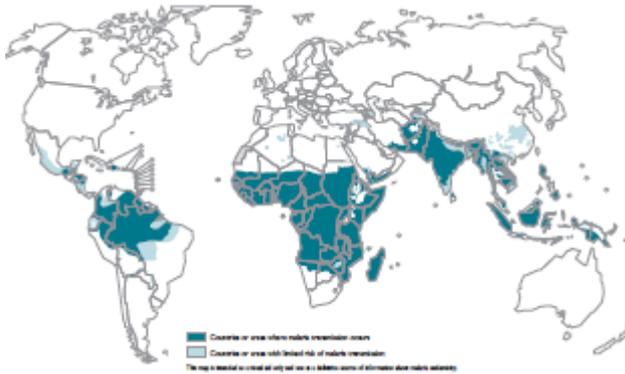
### What is malaria?

Malaria is a serious, sometimes fatal, tropical disease spread by mosquito bites. The World Health Organization estimates 3.4 billion people (half the world's population) are at risk from malaria, with approximately 207 million cases and approximately 627,000 deaths every year.

### Where is malaria found?

Malaria is found in more than 100 countries, including large areas of Africa, Asia, Central and South America, Hispaniola (Haiti and the Dominican Republic), parts of the Middle and Far East and some Pacific Ocean Islands.

### Malaria risk areas worldwide 2011



Map from: World Health Organization, 2011

### How can I catch malaria?

Malaria is caught through bites from mosquitoes infected with parasites called Plasmodium. Mosquitoes carrying malaria usually bite at night, between the dusk and dawn.

There are five different types of *Plasmodium*: falciparum and vivax are the most common, ovale and malariae are occasionally seen and knowlesi is very rare. Falciparum malaria is the most dangerous, but any type can cause serious illness.



Courtesy: US CDC

### What are the symptoms?

- Fever (high temperature), muscle aches, chills and sweating.
- Cough, headache and diarrhoea.
- Seizures (fits) and loss of consciousness with severe illness from falciparum malaria.
- Babies and children may have difficulty sitting or standing and can develop problems breathing.

Malaria symptoms can appear as soon as 7 days after arriving in a risk area, and as long as a year (or sometimes longer) after being bitten.

Malaria is a medical emergency. Falciparum parasites can cause sudden, life-threatening illness. Severe complications include: blood clotting problems, fluid in your lungs, kidney failure, internal bleeding, and coma (called cerebral malaria). Fatal complications can appear rapidly.

If you have any symptoms (usually fever), either while you are away or once you return home, you must get immediate medical help. This is important, even if you took the right malaria tablets, tried to avoid getting bitten, and have been back in the UK for a while.

An urgent malaria test must be arranged by your GP, Accident and Emergency doctor or Tropical/Infectious Diseases clinic.

Your doctor will send a sample of your blood to a laboratory, where a microscope is usually used to check for malaria parasites in the blood. If any are found, you must start immediate treatment, so results should be available the same day blood was taken.

### How can I prevent malaria?

Avoiding malaria involves several steps, known as the 'ABCD' of malaria prevention:

**Awareness of risk** – find out if your trip will take you to a malaria risk area. You can check by looking at [NaTHNaC's Country Information Pages](#). Then get advice from your GP or travel clinic as soon as possible.

**Bite avoidance** – Apply [insect repellent](#) frequently, wear long-sleeved shirts/long trousers and sleep under an intact mosquito net (you can buy nets pre-dipped in insecticide) if you are not in enclosed, air conditioned accommodation. Homoeopathic or herbal remedies, electronic or ultrasonic buzzers, garlic and vitamins do not protect against mosquito bites.

**Check** – if you need malaria prevention tablets. If you do, make sure you take the correct tablets, as recommended (daily or weekly) and **FINISH** the course.

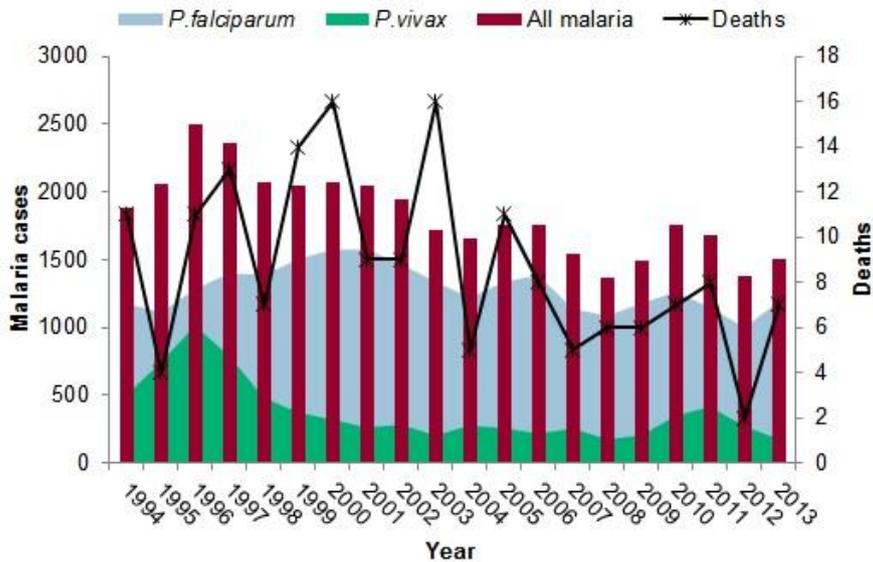
**Diagnosis** – see a doctor **IMMEDIATELY** if you have any symptoms (usually high fever 38C or greater but if you are very unwell without fever you should also seek prompt medical advice), either while abroad or for a year after you return. Tell the doctor you have been at risk.

Nothing guarantees 100% protection against malaria – it is important to protect yourself and your family as much as possible, but if you have any symptoms, see a doctor.

### Malaria in UK travellers

Approximately 1,500 travellers are diagnosed with malaria in the UK each year. Since 2005, there have been between two and ten deaths each year from malaria.

### Imported malaria cases and deaths, United Kingdom: 1993 - 2013



Information from the Malaria Reference Laboratory, Public Health England, 2013

Anyone going to a malaria region is at risk. This includes anyone originally from a country with malaria now living in a malaria-free country. People born and brought up in areas with malaria may develop some immunity. However, this disappears quickly once they leave. Parents do not pass on malaria immunity to their children. Babies and young children are particularly likely to become seriously ill with malaria.

Even if you previously lived in a malarial country, you must follow malaria prevention advice. This includes taking the correct tablets for the areas you are visiting.

**Your risk of dying from malaria depends on:**

- Lack of awareness of the risk.
- Not realising you need to take tablets, taking the wrong tablets for your destination, or not finishing your course of tablets.
- Mistaking malaria for another illness, such as flu.
- Any delay seeing a doctor or starting treatment.

**Can malaria be treated?**

Yes, if diagnosed quickly and if the correct treatment is given immediately. There is a risk of rapid death, so people with suspected malaria are usually admitted to hospital and given drugs directly into their veins via a drip. Malaria carries a risk of serious illness, disability and death. Even if you make a full recovery, it can take a long time to get back to normal. Remember - prevention is better than cure!

**Links**

- [Public Health England: Guidelines for malaria prevention in travellers from the UK 2014](#)
- [Public Health England: Malaria information for people travelling overseas](#)
- [NHS Choices: Malaria](#)
- [World Health Organization: 10 facts on malaria](#)

**Advice current at: July 2014**