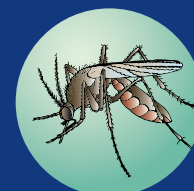


Mosquito bite avoidance for travellers

In many tropical countries, mosquitoes can spread diseases such as dengue, chikungunya, West Nile, malaria, yellow fever and Zika. Here are five simple rules you should follow to reduce your risk of infections spread by mosquitoes.



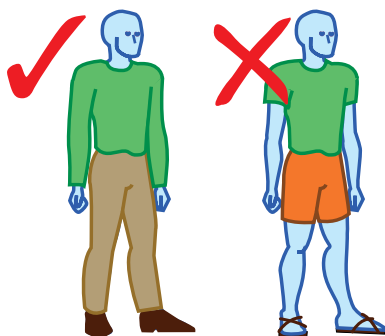
1 Know the disease risks and the best ways to avoid them



A variety of diseases across the world are transmitted by the bites of mosquitoes. Many diseases result in mild symptoms but others have more serious consequences. Currently many countries in South and Central America and the Caribbean have active transmission of Zika virus. This generally causes no or mild symptoms but has been linked to birth defects – in particular microcephaly (this means an abnormally small head and can be associated with abnormal brain development).

Therefore it is important that before travelling, you seek travel health advice from your GP/practice nurse or a travel clinic ideally six to eight weeks before you go. Detailed travel health advice for your destination, including disease risks associated with each country, is also available from the [National Travel Health Network and Centre \(NaTHNaC\)](#) website or the Scottish travel health service [fitfortravel](#) and [TRAVAX](#).

2 Cover up



Mosquitoes can bite day and night, indoors and outdoors. When possible, wear loose fitting clothing with long sleeves and long trousers, socks and shoes.

3 Nets



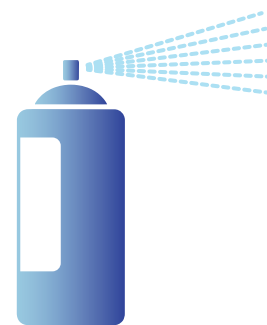
If sleeping outdoors or in unscreened accommodation, insecticide-treated mosquito nets should be used. The nets should be free of tears and should be tucked under the mattress.

4 Repellent

It is important to use a DEET-based insect repellent day and night, indoors and outdoors, on any exposed areas of skin. Picaridin and lemon eucalyptus extract or PMD are available for those who prefer not to use DEET. These repellents have compared favourably with DEET. Picaridin should be used in concentrations of approximately 20%.

Remember to

- **reapply** repellent frequently, especially in hot countries and after swimming
- apply repellent after sunscreen when using both together (30 to 50 SPF sunscreen should be used to compensate for DEET-induced reduction in SPF)
- don't use DEET for babies younger than two months
- use DEET in concentrations up to 50% in pregnant or breast-feeding women, and in infants and children older than two months
- take supplies with you – there is a shortage in some countries with active Zika transmission. If you need repellent locally, ask for “repelente de insectos” in Spanish or Portuguese speaking countries



5 Feel unwell, seek medical attention



Those with a fever (38°C or more) or other symptoms during or after travel should seek prompt medical help. Malaria can be serious and needs to be excluded or treated. If you become unwell on your return, make sure to tell your doctor about any trips abroad you have taken in the past year.

If you are pregnant and have a history of travel to a country where there is an ongoing Zika virus outbreak, see your GP or midwife and mention your travel history even if you have not been unwell.

Key facts for mosquito bite avoidance

- bite avoidance **at all times** is important
 - cover up
 - use repellents
 - use nets
- mosquitoes which transmit Zika, dengue and chikungunya infections bite predominantly during the daytime and at dusk
- mosquitoes which transmit malaria bite in the evening and at night and only the female mosquito bite can pass on infection to humans

Websites for specific disease information:

Zika

www.nhs.uk/news/2016/01January/Pages/Zika-virus-your-questions-answered.aspx

Dengue

www.nhs.uk/Conditions/dengue/Pages/Introduction.aspx

Malaria

www.nhs.uk/Conditions/Malaria/Pages/Introduction.aspx

For more information, please go to:

NaTHNaC <http://travelhealthpro.org.uk>

Fit for travel www.fitfortravel.nhs.uk/home.aspx

TRAVAX www.travax.nhs.uk

Health Protection Scotland www.hps.scot.nhs.uk

Public Health England www.gov.uk/phe