

Insect Bite Prevention



Bug and insect bites abroad can carry the risk of serious, and potentially fatal, diseases.

Biting insects and bugs such as mosquitoes, ticks, and flies, are not only a nuisance when you are on holiday, but they can also carry diseases.

Mosquitoes: There are many different types of mosquitoes, some bite during daylight hours whilst others are more active from dusk to dawn. Day-biting mosquitoes can carry serious illnesses like dengue fever and yellow fever. Night-biting mosquitoes can carry Japanese encephalitis and malaria.

Ticks: These are generally found in meadows and grassland near woods and forests. Ticks are usually active during the day; they attach themselves to your clothing as you brush past and then crawl up your clothing until they find an exposed area of skin where they start feeding. Ticks can carry diseases such as tick-borne encephalitis and Lyme disease.

Flies: There are a number of different types of flies worldwide that can spread diseases:

- **Sand flies** usually feed close to the ground and are most active between dusk and dawn. However, they will bite during daylight hours if they are disturbed. Sand flies can carry diseases such as leishmaniasis.
- **Tsetse flies** tend to live in the dense vegetation and savannah areas in sub-Saharan Africa. They bite during the day and are attracted to dark, contrasting colours (particularly the colour blue). They can attack in swarms and their bite is very painful. Tsetse flies carry diseases such as sleeping sickness (trypanosomiasis)
- **Black flies** live close to fast flowing water and bite during daylight hours. They spread several diseases, including river blindness in Africa.

Lice, fleas, mites and bedbugs can also carry diseases. For example; fleas can spread plague and some mites may carry typhus (a flu like illness with a rash).

What can you do to help protect yourself?

Talk to your healthcare provider for advice about diseases which might be present in your chosen destination, and what you can do to help protect yourself.

Book an appointment with your nurse or doctor for a pre-travel consultation at least 6 weeks before you are due to travel.

Some diseases which are carried by bugs and insects overseas can be prevented by vaccination, and taking anti-malaria tablets can help reduce your risk of malaria. However it is still important for you to take bite prevention measures as no products are completely effective. Talk to your healthcare provider for advice about diseases which might be present in your chosen destination, and what you can do to help protect yourself.

For many diseases spread by bugs and insects, avoiding being bitten is the only way to prevent them. It is almost impossible to completely avoid being bitten, but there are a few things you can do to reduce your chances:

Outdoors

Avoid highly infested places such as jungles and swamps. Try not to go outdoors between dusk and dawn when many insects and mosquitoes commonly bite.

Clothing:

- If you are outdoors, particularly at night, wear long-sleeved loose fitting clothing, long trousers, and socks. Clothing may be sprayed or impregnated with permethrin, an insecticide which kills insects on contact.
- If you are going to a tick infested area, avoid shorts or skirts, and tuck your trousers into your socks to prevent ticks from crawling up your legs.



Repellents:

- Use insect repellents these are available as creams, lotions and sprays. There are many brands of insect repellents on the market, but evidence suggests that N, N-diethylmetatoluamide (DEET) based products are the most effective.
- Duration of protection depends on the concentration; 50% DEET has the longest duration of action and requires the fewest applications per day.
- Follow the manufacturer's recommendations for use. Note that you should not use DEET containing repellents in babies younger than two months of age.
- Apply insect repellent to exposed skin. If you are applying sunscreen, this should be used before the repellent. You may need repeated applications, particularly in hot, humid conditions.



There is no proof (scientific or otherwise) that herbal or homeopathic remedies, tea tree oil, essential oils, vitamin B tablets, yeast extract (Marmite[®]) or electronic buzzers prevent insect bites.

Citronella based repellents are not recommended, as they do not protect you for very long.

Indoors

Accommodation and mosquito nets:

- Try and stay in a room with air-conditioning as this usually reduces the number of insects in the room. Mesh screening on doors and windows also helps to reduce the number
- If your accommodation doesn't have air-conditioning or screens, then you should sleep under a mosquito net. These are available to buy at most specialist camping shops, larger chemists and travel clinics. A variety of nets are available, including ones for cots.
 - check that your net is not torn and that there are no mosquitoes inside; most nets bought in the United Kingdom (UK) will also have been treated with an insecticide (like permethrin).



Sprays, coils and plug in devices:

- If you are outdoors an insecticide coil can be used to repel insects. Plug-in devices are available for indoor use, but be aware that you may need to buy an adapter in order to use it overseas. Fly sprays (knock down sprays) are generally not effective at reducing insect bites.



What should you do if you are bitten?

If you are bitten you should keep the bites clean and try not to scratch them as they could become infected. Anti-histamine tablets can help relieve itching and reduce swelling. You may need to seek advice from a healthcare professional if the bites do become infected.

If you are bitten by a tick, you will need to remove it carefully from the skin as soon as possible. Grasp the tick near the skin with a pair of tweezers or specially designed tick removers and steadily pull it out, being careful not to crush or squeeze the body of the tick. If you get a rash or fever within several weeks of removing the tick you should seek advice from a doctor or nurse.

Further information:

- The National Travel Health Network and Centre (NaTHNaC): Avoiding Insect Bites http://www.nathnac.org/travel/misc/travellers_mos.htm
- Public Health England (PHE) information on malaria and how to protect yourself is available from: <http://www.malaria-reference.co.uk/>
- PHE Guidelines for malaria prevention in travellers from the UK. Primarily aimed at healthcare workers who advise travellers but can be accessed by travellers
<http://www.hpa.org.uk/Topics/InfectiousDiseases/InfectionsAZ/Malaria/Guidelines/>

This leaflet has been prepared by Sanofi Pasteur MSD to provide general information on issues relating to healthy travel. It is not meant as an alternative to individual advice and should be used in conjunction with advice provided for you by a health care professional.

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