



• Introduction

How can I protect myself against insect bites?

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Outdoors

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Introduction

A wide variety of insects can spread diseases worldwide.

Day-biting mosquitoes can carry serious illnesses like <u>dengue fever</u> and <u>yellow fever</u>. Night-biting mosquitoes can carry <u>Japanese encephalitis</u> and <u>malaria</u>. Mosquitoes are attracted by carbon dioxide, heat and movement.

Sand flies can carry diseases such as <u>leishmaniasis</u> and are most active between dusk and dawn. They also bite in the day if disturbed.

Ticks can carry diseases such as <u>Lyme disease</u>, <u>tick-borne encephalitis</u> and African tick-bite fever. Ticks live in meadows or grasslands near woods and forests and are usually active during the day. They jump onto your clothes, crawl until they find your skin and then start feeding.

Tsetse flies can carry diseases such as <u>sleeping sickness (also called African trypanosomiasis)</u> and live in the dense vegetation of sub-Saharan Africa. They

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Outdoors

Insect repellents

Insect repellents made with a chemical called DEET (N, N-diethyl-m-toluamide) work best. They are available as creams, lotions and sprays and come in several strengths. However, you don't need to use anything stronger than 50% DEET.

Research and experience have shown that DEET is very safe when you follow the manufacturer's instructions.

Up to 50% DEET can be used by pregnant or breast-feeding women and for babies/children older than two months. DEET is not usually recommended for babies under this age. If you are taking a baby under two months to a country with malaria and/or yellow fever, get expert advice about suitable repellents.

Alternative recommended insect repellents are those containing Picaridin 20% and these can be used for children aged two years and older.

Oil of lemon eucalyptus-based repellent is also available however this repellent only lasts as long as 15% DEET and so needs applying more frequently. Lemon eucalyptus <u>essential</u> oil is a different product and is not recommended as an insect repellent.

Using insect repellents:

- Follow the manufacturer's instructions carefully.
- · Apply directly to any exposed areas of skin.
- Avoid spraying directly onto your face to stop repellent getting into your eyes, nose and mouth.
- Use a cream/lotion or spray repellent on your hands and then rub onto your face.
- Re-apply regularly, especially after swimming and in hot, humid countries, as sweating reduces effectiveness.
- Don't swallow repellent.
- Don't put apply to cuts, grazes or broken/irritated skin.
- · If you are using sunscreen, put it on first.
- · Sunscreen containing repellent is not recommended.

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are attracted to dark, contrasting colours, particularly blue, and bite during the day. They can attack in swarms and their bite is painful.

Bugs, including bedbugs, fleas, lice and mites can also spread disease. For example; fleas can spread plague, some mites carry typhus (a flu-like illness with a rash) and the kissing bug in South America carries a parasite that causes a serious illness called Chagas disease (also called American trypanosomiasis).

For many diseases spread by insects, avoiding bites is the only way to prevent them. Places like jungles and swamps may be highly infested with insects. It is almost impossible to completely avoid bites, but by reducing the number of times you are bitten, you will reduce your risk of being infected.

How can I protect myself against insect bites?

Indoors

Air conditioning, screens and plug in devices

Try to stay in air-conditioned accommodation, as this reduces the number of insects in your room. Mesh screening on doors and windows also helps, but is not as effective as good air conditioning. Plug-in devices (vaporisers) release an insecticide mist, but you need an appropriate adapter plug for the country you are visiting.

Bed nets

- If your accommodation does not have window and/or door screens or effective air conditioning, you must sleep under an intact bed net.
- Most nets for sale in the UK have been treated with an insecticide (like permethrin) which kills insects on contact. You must buy liquid permethrin to soak nets that have not been pre-treated.
- All nets need to be soaked again after six months.
- Babies and children need nets as well and cot nets are available.
- Carry a sewing kit and tape to repair any holes or tears. In an emergency, cotton wool can be used to plug net holes.



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Wash your hands after applying.

Clothing

- Wear loose fitting, light coloured clothes (insects can reach skin through tight clothing), long trousers and long sleeves. Don't go barefoot.
- Malaria mosquitoes are most active after dark, so it's important to cover up in the evenings in malaria risk regions.
- In tick-infested areas, avoid shorts/skirts and tuck trousers into socks to stop ticks crawling up your legs.
- Spray clothes with permethrin (an insecticide that kills insects on contact) but never use it directly on your skin.

Insecticides (sprays and coils)

- Fly sprays or "knock down sprays" are generally not effective.
- Insecticide coils are circles of solid insecticide which can be burnt outside, but not indoors as they can be a fire hazard.



Where can I buy a bed net, insect repellent and other products?

Most specialist camping shops, travel clinics and some larger chemists stock a wide range of bed nets, insect repellents and insecticides.

What doesn't work as an insect repellent?

There is no proof (scientific or otherwise) that bath oils, electronic "buzzers", essential oils, garlic, homeopathic remedies, odour baited mosquito traps, tea tree oil, skin moisturisers, smoking, vitamin B tablets or yeast extract (Marmite®), prevent insect bites.

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

Treating insect bites

Insect bites are usually small, red, raised itchy bumps. Try not to scratch, as this can introduce infection. Clean the area and try to keep it clean.

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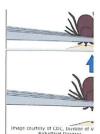


Swelling can be reduced by applying a cold compress and by anti-histamine creams. Anti-histamine tablets can help stop itching. You can buy these over the counter in most chemists.

If bites look infected, see a doctor, as you could need antibiotics. If you've had a severe reaction in the past, get advice from you doctor **before** you travel, as you may need to carry special medication.

Removing ticks

Ticks need to be removed from the skin carefully, with tweezers or special tick removers. Grasp the tick near to the skin and steadily pull it out. Be careful not to crush the tick's body or squeeze its stomach contents into the bite site.



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