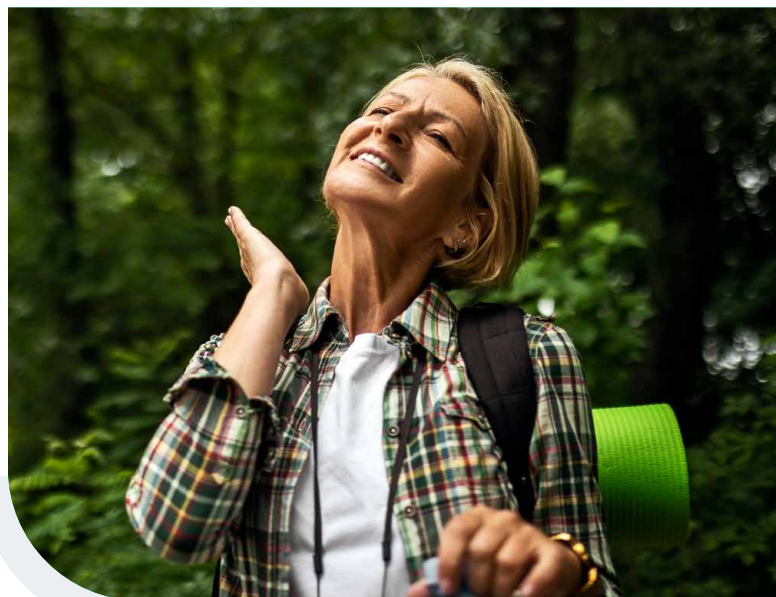




Mosquito & Tick Bite Avoidance

Planning for mosquito and tick bite prevention needed should be part of preparations for travel.



Before traveling

Planning for any mosquito and tick bite prevention needed should be part of preparations for travel, alongside any vaccinations or malaria prevention medications recommended for your destination. You can get advice on the risks of insect-borne diseases associated with your trip from the Everbridge clinical team, as part of a travel health consultation with your family physician or travel clinic, or from various online travel advice resources.

You will need to pack appropriate equipment for your destination. Practical measures to reduce mosquito and tick bites are an essential part of reducing your risk of malaria, dengue fever, Zika, Lyme disease and other serious conditions. They do not replace the need for anti-malarial medications where those are advised. Using a combination of measures is usually the most effective strategy to keep safe and well.

Mosquitoes do not carry diseases in all places that they are found, but can still be a source of skin reactions and irritation which can affect your experience of a trip.

Mosquitos and ticks can transmit a wide range of diseases, including malaria, dengue fever, Lyme disease, Zika and tick bite fevers. They are found in both tropical and temperate places. The risk of exposure to these should be considered for all trips, and plans made take insect repellents, appropriate clothing and other measures when required.

Choice of insect repellent:

DEET based repellents are the most effective when used at concentrations of 20-50%. Research and extensive clinical experience indicate that DEET is safe, when used according to the manufacturer's instructions. However, this repellent can damage artificial fibers or plastic.

DEET is not recommended for infants below the age of two months. However, concentrations of up to 50% can be used by pregnant women and during breastfeeding.

Picaridin and lemon eucalyptus oil are available for those who prefer not to use DEET-based products. These repellents have repelling action similar to DEET. Picaridin should be used in concentrations of at least 20%.

When sunscreen and DEET are both required, DEET should be applied after sunscreen. When used together, the effectiveness of repellent reduces more rapidly than sunscreen. Use SPF 30-50 sunscreen to allow for the reduction in SPF caused by DEET.

Repellents should be reapplied at regular intervals, after swimming and in hot, humid conditions when they may be removed by sweating.

Sprays that are designed to kill flying insects are not likely to provide sufficient protection from nuisance insect biting or malaria prevention.

Clothing:

Ideally wear loose-fitting clothing, long sleeves, long trousers, and socks to minimize access to skin for mosquitoes.

Permethrin is available in formulations designed to be sprayed on to clothing and this provides protection against mosquitoes, ticks, fleas, lice, sand flies, triatome bugs and tsetse flies.

Cotton clothing can be sprayed with DEET, although it only tends to be effective for a short period.

Accommodation:

Hotels or houses with air conditioning reduce the likelihood of mosquito bites. Ceiling fans are also effective in reducing mosquitoes. If sleeping in accommodation without fine mesh screening on doors and windows to the outside, insecticide-treated bed nets should be used.

Heated liquid reservoir devices containing insecticide or electrically heated devices that vaporize a tablet containing a synthetic pyrethroid can be useful in some situations. A mosquito coil can be burned outdoors. Always follow manufacturer's instructions.

Measures not shown to be effective for repelling insects include:

- Bath oils
- Citronella oil-based repellents (these have very short durations of action)
- Citrosa plant (geranium)
- Garlic: fresh or capsules
- Vitamin B12 complex
- Yeast extract spread
- Electronic (ultrasonic) buzzer devices
- Vitamin B1 tablets

Tea tree oil It is useful to pack a first aid kit containing a mild steroid cream or antihistamine cream, antiseptic wipes, basic wound dressings, and antihistamine tablets to treat any skin reactions to bites.

Mosquito bites:

Mosquitoes that transmit malaria will usually bite after sunset until the early morning. However, mosquitoes that transmit dengue fever, Zika, chikungunya or yellow fever are more active during the daytime. In many areas of the tropics, both of these risks occur simultaneously, and it is advised to use repellent and wear long loose clothing during the day and in the evenings.

A mosquito bite can be sore but is often painless. Mosquito bites usually appear as small, red, raised papules that itch. Applying a cold compress to the bite may provide relief from pain or itching.

Local swelling can be reduced by applying a mild antihistamine or steroid cream. Antihistamine tablets can be taken to relieve itching.

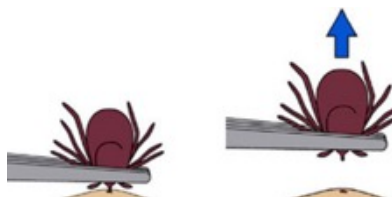
Mosquito bites should not be scratched and should be kept clean and dry to avoid infection.

Tick bites:

Ticks generally live on grasses and bushes. They can be found in woodland, overgrown fields, parkland, and mountainsides. You should wear long sleeves and trousers tucked into socks/boots to reduce the amount of exposed skin in these areas. Wash clothes on a 'hot' setting to kill ticks.

Ticks become attached to skin or clothing after brushing against foliage or long grass and then crawl to find warm moist areas of the body, such as groins or armpits, to feed. The bite is painless, and often you will not sense a tick moving on your skin. Ticks do not normally feed for about 12-24 hours after attaching themselves, during which time the risk of infection is small. Always inspect your entire body and regularly examine clothing and skin for ticks after outdoor activities in areas where ticks exist. If found, they should always be removed immediately.

Removing a tick:



Source: CDC. Tick Removal. https://www.cdc.gov/ticks/removing_a_tick.html

Ticks must be removed from the skin very carefully. They can be removed using specially designed tick removers, hooks or with fine tipped tweezers.

Grasp the tick near to the skin and steadily pull out the tick being careful not to detach the body from the jaws or crush the tick's body. Sometimes you need to gently twist the tick as you remove it. Do not smother the tick in ointment or cream as this can cause the tick to regurgitate into the wound.

Bites can cause an itchy red local reaction especially if the mouth parts are incorrectly removed.

After removing the tick, clean the bite area and your hands with soap and water or alcohol gel.

What to do if you fall ill after mosquito or tick bites:

Most illnesses transmitted by mosquitoes or ticks will start to show symptoms 5-30 days after being bitten, however in the case of malaria, this occasionally won't become evident for weeks or even months. Always seek medical attention within 24 hours if you have been to an area where ticks and mosquitoes can spread diseases and you develop fever, rashes, aches and pains, tiredness or feel generally unwell. Some tick-borne infections can cause discoloration or a rash that looks like red rings around the original bite. Always tell a doctor where you have travelled to so they can test for infections you might have been exposed to.

Always call the Everbridge Assistance line if help is required with medications or any medical issues during travel.

References

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This factsheet has been developed for educational purposes and is correct at the time of production. It is not designed as a replacement for professional medical advice. Please consult your medical professional for any concerns or queries regarding Inflammatory Bowel Disease whilst traveling.