



# Mosquitoes are a health hazard

Follow the advice in this fact sheet to protect yourself from mosquitoes and the viruses they may carry.

## Avoid mosquito bites

Mosquitoes can transmit a number of serious human diseases. In NSW, some mosquitoes transmit viruses such as [Japanese encephalitis](#), [Ross River](#), [Barmah Forest](#), [Kunjin](#) and [Murray Valley encephalitis](#). Some parts of northern Queensland have mosquitoes that can transmit [dengue fever](#) infections.

Overseas travellers may be at risk of mosquito-borne diseases such as [malaria](#), [dengue](#), [yellow fever](#), [chikungunya](#) or [Zika](#). While vaccines are available for some diseases (e.g. [yellow fever](#) and [Japanese encephalitis](#)) and chemoprophylaxis medicine can help prevent [malaria](#), all travellers should also use repellents and other general protective measures to avoid mosquito bites.

[Mosquito bite prevention](#) is the best way to reduce your risk of mosquito-borne diseases.

## Wear appropriate clothing

Wear loose, light-coloured clothing with long sleeves and pants when outside. Also wear socks and shoes where possible. Clothing pre-treated with insecticides can provide additional protection but remember that repellent must still be applied to exposed skin.

## Apply mosquito repellent to all areas of exposed skin

The most effective mosquito repellents contain Diethyl Toluamide (DEET) picaridin, or oil of lemon eucalyptus (OLE) (also known as Extract of Lemon Eucalyptus).

The strength of a repellent determines how long it will protect against mosquito bites, with higher concentrations providing longer periods of protection.

Apply repellent to all areas of exposed skin, after you apply sunscreen. Avoid putting repellent near the eyes and mouth, or over open wounds, broken skin or abrasions. Always follow the product label instructions.

It's important to reapply repellent after swimming. The length of protection from repellent is also reduced with sweating, such as during strenuous activity or hot weather, so it may need to be reapplied more frequently.

Most repellents are safe for use on children aged 3 months and older when used according to directions, although some formulations are only recommended for children aged 12 months and older - always check the product label for recommended age use.

Don't allow children to apply their own repellent, apply it on them. Infants aged less than 3 months can be protected from mosquitoes by using an infant carrier draped with mosquito netting that is secured along the edges.

Registered mosquito repellents used according to product label instructions are considered safe for use during pregnancy and while breast-feeding.

## Use appropriate insecticides

Aerosol insecticide sprays, mosquito coils (used outdoors) and insecticide vapour dispensing units (used indoors) can help to clear or repel mosquitoes. These products should be used in addition to, not in place of, other measures such as appropriate clothing and the application of mosquito repellents.

Devices that use light to attract and electrocute insects have not been proven to be effective in reducing mosquito numbers and often kill harmless insects.

## Be aware of the peak risk times for mosquito bites

Take extra care during peak mosquito activity times to reduce the risk of infection. In NSW, most mosquitoes become active at dawn and dusk, and into the evening. Avoid the outdoors during these times or take preventive actions (such as appropriate clothing and skin repellent).

When travelling overseas it is important to be aware of the biting patterns of the local mosquitoes which transmit diseases. For example:

- The mosquitoes that transmit diseases such as dengue, chikungunya, Zika will bite throughout the whole day.
- The mosquitoes that transmit malaria are most active at dawn and dusk, and into the evening.

## Reduce mosquito risk at home

Mosquitoes need water to breed, and some mosquitoes can breed in very small amounts of water. Measures to reduce the risk of mosquitoes breeding around the home include:

- using insecticide sprays and vapour dispensing units in areas where mosquitoes like to rest, such as cool, shady areas such as in and around the home before emerging at dusk to feed. Make sure you avoid using these products around aquaria and fishponds as fish can be harmed by these insecticides.
- installing fly screens on windows, doors, vents, and other entrances
- cleaning up your backyard and removing all water-holding rubbish, including tires and containers
- keeping your lawns mowed
- flushing and wiping out bird baths and water features once a week.
- filling pot plant bases with sand to avoid standing water
- storing anything that can hold water undercover or in a dry place, and keeping bins covered
- flushing out the leaves of water-holding plants such as bromeliads once a week
- keeping drains and roof guttering clear to avoid standing water
- covering or securely screening the openings of septic tanks and rainwater tanks.

Properly cleaned and chlorinated swimming pools are rarely a source of mosquito breeding, but neglected pools can be a haven for mosquitoes.

## Reduce mosquito risk around the farm

If you live on a farm, additional precautions are needed to reduce opportunities for mosquitoes to breed. These include:

- keeping dams and ground pools free of vegetation
- checking dam walls and irrigation bays for leaks
- being careful not to over-irrigate to avoid water collecting in low-lying areas for long time periods
- not allowing irrigation water to flow into and lie undisturbed in roadside table drains.

## KEEP MOZZIES AWAY

Take the steps to protect

SPRAY UP • COVER UP • SCREEN UP

## Reduce mosquito risk while travelling

In addition to the general protection measures above, travellers should also:

- stay in screened or air-conditioned rooms
- use a bed net if the area where you are sleeping is exposed to the outdoors. Nets are most effective when they are treated with a pyrethroid insecticide, such as permethrin. Pre-treated bed nets can be purchased before travelling, or nets can be treated after purchase.
- avoid known areas of high mosquito-borne disease transmission or outbreaks. This is particularly important for people at higher risk of complications from mosquito-borne diseases, such as pregnant women if exposed to Zika or malaria.

See the [Staying healthy when travelling overseas factsheet](#) for further information on travel.

The [Smartraveller website](#) also has health information for specific destinations.

## Taking care of mosquito bites

Most mosquito bites can be managed by washing the bite area with soap and water or by applying ice packs to reduce pain and swelling. Antihistamine creams may also relieve itching. Make sure you follow the directions on the product label.

Avoid scratching the bite as it can break the skin and lead to a wound and/or infection. Symptoms of an infected bite include swelling, pain, redness and inflammation. If you think a bite is infected, seek assistance from a pharmacist.

If after a mosquito bite, you develop a rash, flu-like symptoms such as fever, chills, headaches, joint or muscle pains (swelling or stiffness), fatigue, or you generally feel unwell, contact a doctor right away, or visit your nearest emergency department.

## Further resources

- [NSW Health Mosquito-borne diseases](#)

For further information please call your local public health unit on **1300 066 055**.

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