

## ★ GENERAL REPELLENT GUIDELINES ★

Insect repellents containing DEET, picaridin or Oil of Lemon Eucalyptus (OLE), also known as PMD, are the most effective.

As a general rule, the greater the percentage of the active ingredient, the longer the product will remain effective.

- ★ Always follow instructions on the label.
- ★ Choose a repellent with an appropriate concentration of DEET, picaridin or Oil of Lemon Eucalyptus (OLE), also known as PMD, to match the length of time you are outdoors.
- ★ Apply directly to skin (except face) and spread evenly with hands.
- ★ For face application, apply first to hands and then spread evenly on face, avoiding mouth and eyes.
- ★ Repellents will not be as effective if applied sparingly to the skin.
- ★ Reapply repellent according to the label.

## ★ PROTECT YOUR BABY OR TODDLER ★

Where possible, avoid exposing your baby or child to mosquitoes. Consider staying indoors, using pram netting or dressing them in loose, long-sleeved clothing, socks and shoes.

### Mosquito repellents for children

- ★ **Under 12 months** – repellents containing DEET, picaridin or OLE are not recommended.
- ★ **From 12 months** – repellents containing up to 10% DEET, picaridin or OLE can be used.

### Application guidelines for children

- ★ Do not allow children to apply repellent.
- ★ Apply repellent firstly to the hands of the carer and then spread evenly to exposed skin of child.
- ★ Avoid applying repellents to hands, near the eyes or mouth.
- ★ Do not apply repellent under clothing.

## DON'T LET MOSQUITOES BITE ★ INTO YOUR HOLIDAY ★

Whilst there is a vaccine for Japanese encephalitis, there is no cure or vaccine to protect against all other mosquito-borne diseases acquired in Australia. The only way to prevent infection is to avoid being bitten.

## ★ COVER UP. REPEL. CLEAN UP. ★

Many mosquitoes are at their biting best around dusk and dawn, but some will bite day and night.



### COVER UP

Wear long, loose-fitting, light coloured clothing to cover exposed skin.



### REPEL

Apply insect repellent containing DEET (diethyltoluamide), picaridin or Oil of Lemon Eucalyptus (OLE), also known as PMD, evenly to all areas of exposed skin.



### CLEAN UP

Stop mosquitoes breeding around your home by removing, emptying or covering water holding containers.

### For more information

Contact the Department of Health or visit  
[healthywa.wa.gov.au/FighttheBite](http://healthywa.wa.gov.au/FighttheBite)

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Government of **Western Australia**  
Department of Health

# ★ ★ ON HOLIDAY IN AUSTRALIA ★ ★

## ★ FIGHT *the* BITE ★



## ★ COVER UP. REPEL. CLEAN UP. ★

## MOSQUITO-BORNE DISEASES ★ IN AUSTRALIA ★

In Australia, mosquitoes can transmit Ross River virus, Barmah Forest virus, Kunjin virus as well as the potentially fatal Murray Valley encephalitis and Japanese encephalitis viruses.

The only way to confirm if you have a mosquito-borne disease is to visit your doctor for a specific blood test. Whilst there is a vaccine for Japanese encephalitis, there is no vaccine or cure for any of the other diseases. The only way to prevent infection is to avoid being bitten by mosquitoes.

### Common mosquito-borne diseases in WA

Ross River and Barmah Forest viruses occur throughout WA. Common symptoms include:

- ★ skin rashes
- ★ painful or swollen joints
- ★ sore muscles
- ★ flu-like symptoms (fever, chills, headache)
- ★ tiredness or weakness.

Symptoms can last for several weeks to months, and in some cases, years.

### More serious mosquito-borne diseases in WA

Murray Valley encephalitis and Japanese encephalitis are rare but potentially fatal diseases that may occur in northern WA. Symptoms include fever, drowsiness, headache, stiff neck, nausea and dizziness. In severe cases seizure, coma, brain damage or death may result. People experiencing these symptoms should seek medical advice quickly.

Kunjin virus disease is a rare disease also occurring in northern WA. Generally, the symptoms are milder than Murray Valley encephalitis.

## TRAVEL WITHIN WA ★ OR INTERSTATE ★

### Plan. Prepare. Pack.

- ★ Research your travel destination and know the health risks.
- ★ Pack long, loose-fitting, light coloured clothing.
- ★ Pack or purchase chemical-based insect repellents containing DEET, picaridin or Oil of Lemon Eucalyptus (OLE), also known as PMD.
- ★ Consider packing a mosquito net or mosquito-proof camping equipment, if required.

## ★ WESTERN AUSTRALIA ★

Ross River and Barmah Forest viruses occur in all regions of WA. However, the risk of infection is highest if you are travelling to northern WA or the South West.

Murray Valley encephalitis, Japanese encephalitis and Kunjin viruses occur in the northern two thirds of WA only. The risk of infection is highest if you are travelling to the Kimberley and Pilbara regions during or shortly after the wet season.

## ★ INTERSTATE TRAVEL ★

If you are travelling to northern Queensland, occasional outbreaks of dengue virus occur. Dengue virus causes severe flu-like symptoms including fever, headaches, muscle and joint pains, rash, nausea and vomiting. A second infection with a different strain of dengue in your lifetime can lead to a more severe form of the illness that is potentially fatal. Dengue virus is not transmitted by mosquitoes in WA.

Ross River, Barmah Forest, Murray Valley encephalitis, Japanese encephalitis and Kunjin viruses can occur in other states and territories of Australia.

## HOLIDAY HOUSES, SHACKS, BOATS, ★ CARAVANS AND TENTS ★

Mosquitoes breed in fresh or salty water and often in containers that hold water.

- ★ Reduce mosquito breeding around your accommodation by removing, emptying or covering anything that holds water.
- ★ Boats, canoes and dinghies should be stored so they don't hold water.
- ★ Make sure windows and doors are fitted with mosquito-proof mesh.
- ★ If your accommodation or tent isn't mosquito-proof, cover your sleeping area with a mosquito net.
- ★ When outdoors and mosquitoes are present, apply a chemical-based insect repellent.

## ★ HOTELS AND MOTELS ★

- ★ Close all doors and windows if they do not have adequate insect screens.
- ★ Sleep under a bed net if mosquitoes are present in the room.
- ★ Request the room be sprayed for mosquitoes if you notice them.
- ★ When outdoors and mosquitoes are present, apply a chemical-based insect repellent, evenly to all areas of exposed skin.