



# Murray Valley encephalitis (MVE)



## What is MVE?

Encephalitis is inflammation of the brain tissue and is usually caused by an infectious agent such as a virus. MVE is potentially fatal and a person is infected after being bitten by a mosquito carrying the MVE virus.

## How is MVE spread?

The MVE virus is spread by the bite of an infected mosquito (usually *Culex annulirostris* also known as the “common banded” mosquito). Not all of these mosquitoes carry the virus, and only about 1 person in a 1000 who get bitten by infected mosquitoes will become unwell.

## Where does MVE usually occur?

Although MVE can occur throughout Australia, it is most common in northern Australia. The MVE virus is seasonally present in the north west of Western Australia, inland North Queensland and the Top End of the Northern Territory (NT) during most years, and can extend into the Barkly and Central Australia in wet years.

MVE can occur from February to July although most cases are detected in the months March to May.

## What are the symptoms?

It usually takes 5 to 15 days (normally 7 to 12 days) between getting bitten and becoming sick.

Symptoms include: high fever, severe headache, seizure or fits (especially in young children) neck stiffness, drowsiness, confusion and progression to delirium and coma in severe cases.

## Who is at risk?

People most at risk are babies, young children and newcomers to the region.

## What is the treatment?

There is no specific treatment or vaccine available for MVE.

## How can MVE be prevented?

The only protection from MVE is to *avoid being bitten by mosquitoes*. This applies to all residents and travellers throughout the NT. Everyone should take measures to avoid being bitten by mosquitoes, particularly those visiting and camping in or near swamp or river systems during the evening and night, and in rural areas near sites of relatively high mosquito activity.



*Mosquito protection for young children and babies is absolutely essential.*

**Personal protection includes:**

- Avoiding being outside when mosquitoes are most active, from just before and until 2 hours after sunset.
- Wearing loose light coloured clothing with long sleeves, long trousers and socks (mosquitoes can bite through tight-fitting clothes).
- Applying a protective repellent containing up to 20 percent diethyl toluamide (DEET) or picaridin to exposed areas of skin. Lotions and gels are more effective and long lasting than sprays.
- Ensuring flyscreens in houses or caravans are in good repair.
- If camping out, either sleep in a mosquito-proof tent or under a mosquito net. Repellents only protect against mosquito bites for up to four hours, not all night.

**For more information on disease aspects and prevention contact your nearest Centre for Disease Control.**

Darwin	8922 8044
Katherine	8973 9049
Nhulunbuy	8987 0359
Tennant Creek	8962 4259
Alice Springs	8951 7549

**For more information on mosquitoes and virus ecology contact the Medical Entomology Branch.**

Darwin 89228901