



Mosquitoes

Centre for Disease Control Fact sheet



What is there to know about mosquitoes?

In the Northern Territory (NT) there are 20 different problem mosquitoes that live and breed in varying habitats. Some of these species are capable of carrying and spreading diseases that are potentially harmful to both humans and pets.

Exposure to large numbers of mosquitoes increases the risk of being infected with a mosquito-borne disease.

What diseases do mosquitoes spread in the NT?

Murray Valley encephalitis virus disease

This is a rare disease but can cause serious illness and death. The virus is spread by the common banded mosquito and outbreaks of the disease occur sporadically in the wet and early dry season. There are usually 1 or 2 cases a year in the NT.

Kunjin virus disease

This is also a rare disease and is characterised by severe headaches and fever, and the virus is spread by the common banded mosquito.

Ross River virus disease

This potentially debilitating disease results in rash, swelling and pain in the joints and is spread by a number of mosquito species. There are usually 100-250 cases every year in the NT.

Barmah Forest virus disease

This disease is similar to Ross River virus disease but is generally milder and less

common. There are usually 15-50 cases in the NT every year.

What diseases are also spread by mosquitoes, but NOT in the NT?

Malaria

Australia was certified malaria free in 1981. While mosquitoes capable of spreading the malaria parasite are present in the NT the endemic disease has been eradicated. The parasite could be re-introduced into the NT by infected people returning or visiting from overseas and being bitten by local *Anopheles* mosquitoes. People visiting countries known to have malaria should consult their doctor regarding anti-malarial medication.

Dengue fever

Aedes aegypti, the mosquito species capable of spreading dengue fever is no longer present in the NT, however it is found in northern Queensland and could potentially be introduced into the NT. Don't bring old tyres or pot plant drip trays with mosquito eggs into the NT from north Queensland. Dengue fever is characterised by fever and severe muscle and joint pain.

Japanese encephalitis

The Japanese encephalitis virus is not found in the NT, however the mosquito capable of spreading it is present. Japanese encephalitis is a potentially fatal disease and was first found in Australia in 1995. Since then there have been 5 reported cases in Australia, all from the Torres Strait region.






What measures are being taken to prevent mosquito-borne diseases in the NT?

The Medical Entomology Branch (MEB), in conjunction with environmental health officers and local government conducts mosquito surveillance, monitoring and control programs, provides advice and conducts a public mosquito awareness service.

What protective measures can be taken against mosquito borne diseases?









Elimination of breeding areas around the home and personal protective measures to avoid being bitten are the best ways to avoid mosquito-borne diseases.

Personal protective measures

	<p>Houses Screen all doors and windows. All doors should be self-closing and open outwards.</p>
	<p>Outdoor activities Screen tents Use repellents * Wear loose light coloured clothing with long sleeves, long trousers and socks.</p>
	<p>Locations Recognise and avoid exposure at times and locations of mosquito activity e.g. large shallow vegetated swamps.</p>

* di-ethyl-toluamide (DEET) or picaridin containing formulations. Lotions and gels are more effective and long lasting than sprays.

Eliminate breeding areas

	<p>Dispose of all unwanted containers (tins, tyres, jars) which hold water or empty them and spray inside with surface spray. Store containers upside down and out of the rain.</p>
	<p>Keep fish ponds stocked with fish. Keep edges of ponds and drains clear of grass.</p>
	<p>Keep swimming pools full and properly maintained. Fix leaking taps.</p>
	<p>Fill or drain depressions in the ground that hold water. Keep drains clean.</p>
	<p>Screen all septic tank vents. Seal all gaps. Flush disused toilets once a week.</p>
	<p>Screen rainwater tanks. Ensure guttering is not holding water. Treat tanks with methoprene briquettes.</p>
	<p>Empty pot plant drip trays once a week, or fill with sand, or treat monthly with 4 methoprene pellets. Empty and wipe clean inside any pet/bird drinking containers weekly.</p>
	<p>Use methoprene pellets or briquettes for short term larval control. Use bifenthrin residual applications for short term adult mosquito control.</p>

For more information on mosquitoes & virus ecology contact
Medical Entomology Branch Darwin 892 28901

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

Hotline	1800 008 002
Darwin	892 28044
Alice Springs	895 17540
Katherine	897 39049
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Tennant Creek	896 24259