



Mosquitoes in Your Backyard Environmental Health Guide

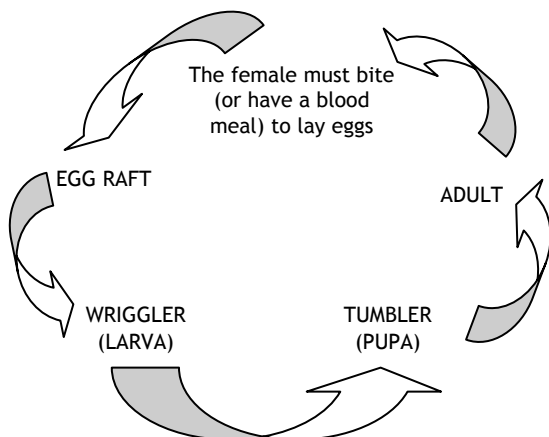
Facts about Mosquitoes

There are almost 100 species of mosquitoes in Western Australian and many of them can be serious pests, interfering with leisure time and outdoor activities. Mosquito bites cause discomfort and pain, particularly to babies and others with sensitive skin.

Only female mosquitoes bite. They need blood to be able to develop their eggs. While taking blood, infected mosquitoes can pass on disease-causing viruses and parasites. Exposure to large numbers of mosquitoes may increase the chance of being infected with a mosquito-borne disease.

Mosquitoes breed in standing water - such as may occur in old car tyres and other water-holding containers, pot plant drip trays, septic and water tanks, roof gutters, domestic ponds, etc. By eliminating or preventing access for mosquitoes to these breeding sites you can help to permanently reduce mosquito numbers in your backyard. During summer the life cycle from egg to flying adult mosquito takes 7-10 days. In colder months the life cycle may take several weeks.

Mosquito Life Cycle



You can Help Eliminate Breeding Areas in your Backyard

- Dispose of all containers which hold water
- Keep ornamental ponds stocked with mosquito-eating fish, e.g. goldfish. Keep margins free of vegetation
- Keep swimming pools well chlorinated and filtered and free of dead leaves.
- Fill or drain depressions in the ground that hold water.
- Vent pipes on septic tank systems must be fitted with mosquito proof cowls. Seal all gaps in lid and ensure leach drains are completely covered.
- Screen rainwater tanks with insect proof mesh, including inlet, overflow and inspection ports. Ensure guttering does not hold water.
- Empty pot plant drip trays once a week or fill with sand. Empty and clean animal and pet drinking water once a week.



- Some pot plants (such as bromeliads) hold water in their leaf axils. These should be emptied of water once a week.

Residual pyrethroid sprays, e.g. deltamethrin, permethrin, can be used to further reduce nuisance mosquitoes. However this should not replace the removal and prevention of backyard breeding, which is a permanently effective control.

Larval mosquito insecticides: S-methoprene is registered (in briquet formulation) for control of mosquito larvae (wigglers) in rain water tanks. A range of 'larvicides' are available for control of mosquito wigglers in other domestic breeding sites. However, the use of chemicals for adult or larval mosquito control should not replace the removal and prevention of backyard breeding, which is a permanently effective control.

Avoid Being Bitten

- **Houses:** Screen all doors and windows. Doors should be self-closing and open outwards.
- **Camping:** Screen caravans, tents, swags and other sleeping equipment or use a mosquito net. Use repellents[†] containing DEET (diethyl toluamide)* or Picaridin. Wear long loose-fitting and preferably light-coloured protective clothing.
- **Outdoor activities:** Take protective measures when mosquitoes are prevalent.
- **Locations:** Recognise and avoid areas of mosquito activity, e.g. swamps, salt marshes, billabongs, river floodplains.

[†] Mosquito repellents are an important way of avoiding exposure to mosquito-borne diseases. However, as with all chemicals they should be applied in accordance with the manufacturer's instructions, especially to infants and young children.

*The most effective repellents include those containing:

- 5-20% (50-200g/litre DEET (diethyl toluamide)
- picaridin

Disease

Worldwide, mosquito-borne viruses and parasites are major causes of human and animal sickness and death. In WA the main mosquito-borne diseases of concern are:

- **Ross River virus disease.**
This is the most common mosquito-borne disease in WA. Symptoms include joint pains and swelling, sore muscles, rash, fever and fatigue and may persist for several months or even years in unlucky individuals. In epidemic years there may be hundreds of people effected in WA.
- **Barmah Forest virus disease.**
This disease is not as common, but has very similar symptoms to Ross River virus disease.
- **Murray Valley encephalitis**
This a rare but serious disease occurring mainly in the northern half of WA. In severe cases, brain damage, paralysis or death may result.
- **Dog heartworm**
This disease of dogs is caused by a parasitic worm, which in large numbers can clog the heart and seriously affect the blood flow.

Two other diseases, malaria and dengue, have previously occurred in WA and could be reintroduced given the right conditions. In the case of malaria, travellers should protect themselves from mosquitoes while overseas and take malaria tablets. The mosquito which carries dengue virus is no longer in WA, but elimination of backyard breeding areas is important for ensuring it does not become re-established.



Mosquito Control

What are local and state governments doing?

The Department of Health, in collaboration with local governments, conducts mosquito control programs in areas where mosquitoes are suspected of carrying disease. However, despite these programs, Ross River virus and Barmah Forest virus will always be a threat because they occur in natural cycles between mosquitoes and animals, and it is simply not possible to eliminate all mosquitoes. Therefore it is important for people to take personal measures to reduce the risk of contracting disease and to reduce the breeding of nuisance mosquitoes.

Further Information:

For further information on mosquito control and RRV and BFV prevention please contact your local government Environmental Health Officer

or

Environmental Health Directorate
Department of Health
PO Box 8172
PERTH BUSINESS CENTRE WA 6849

Telephone: (08) 9385 6001

Facsimile: (08) 9383 1819

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