Mosquitoes in the Environment

Mosquitoes can affect many areas, particularly those near waterways and other water sources.

They have the potential to cause nuisance and transmit diseases. The risk and nuisance levels they pose can change depending on environmental conditions and the type of mosquito.

The continued development of areas in close proximity to mosquito habitat has also compounded the problem.

Mosquito numbers can vary significantly from year to year. Different climatic factors such as temperature, high tides and rainfall can greatly influence growth cycles.

Your Council Working in Partnership with its Neighbours

Mosquitoes do not recognise local government boundaries. Breeding in one area may affect residents in another.

The Cities of Bayswater, Belmont and Swan and the Towns of Bassendean and Vic Park are working in partnership to address this problem.

This partnership ensures information and resources are shared and that issues are addressed regardless of boundaries. Funding is sourced directly from the Department of Health, thereby minimising the financial burden to residents.

Your Council's Mosquito Control Program

Your council has a mosquito control program that runs throughout the year. These programs are made up of four primary measures:

1. Source Reduction
2. Monitoring and Investigation
3. Management
4. Education

Source Reduction

Source Reduction strategies are intended to eliminate mosquito breeding sites.

They attempt to ensure water does not accumulate and allow mosquitoes to breed. Examples include improved stormwater design and maintenance, filling depressions, removing disused material such as old tyres and ensuring structures such as swimming pools and gutters are properly maintained.

Monitoring and Investigation

Each council regularly monitors known breeding sites within their district.

Monitoring is usually conducted by setting adult traps and inspecting water bodies for mosquito larvae. Public complaints or reports of an infectious disease such as Ross River virus may lead to an investigation being undertaken.

Adult mosquitoes are trapped, counted and identified to species. This helps determine where they may be breeding and if the numbers are higher than normal.

Treatment will be undertaken where breeding is identified. During the warmer months treatments are ongoing.

If the breeding occurs on private land the Local Government can require the owner to take action to eliminate these breeding sites, such as disused pool, gutters, car tyres etc.

Management

Control options include chemical, physical and biological techniques.

A range of factors including the severity of the mosquito problem, environmental conditions and impacts on the environment are considered when deciding the best control measures to be implemented.

Some pesticides are not target specific and may have adverse effects on other beneficial fauna. Larvicides are preferred as they are more target specific and do not affect other organisms in the environment.

The traditional method of 'Fogging' is not usually used in metropolitan area due to its effect on other organisms.

Education

Despite best efforts, mosquito problems may arise from time to time, particularly following higher than average rainfall or tides.

Education strategies are designed to inform and empower the community to take their own actions to minimise the effects of mosquitoes. They can include warnings at known problem areas or general information and advice.

What Can You Do?

You can help reduce mosquitoes by taking some simple steps to remove mosquito breeding habitats around your home.

	Dispose of all containers that hold water.
	Stock ornamental ponds with mosquito larvae eating fish such as goldfish. Keep vegetation away from the water's edge.
	Keep swimming pools well chlorinated, filtered and free of dead leaves.
	Level or drain depressions in the ground that hold water.
	Fit mosquito-proof covers to vent pipes on septic tank systems. Seal all gaps around the lid and ensure leach drains are completely covered.
	Screen rainwater tanks with insect-proof mesh, including inlet, overflow and inspection ports. Ensure guttering is not blocked and does not hold water.
	Empty pot plant drip trays once a week or fill with sand. Empty and clean animal and pet drinking water bowls once a week.
	Some plants (especially bromeliads) hold water in their leaf axils. These should also be emptied weekly.

Residual chemical sprays can be used to further reduce mosquitoes. This should not, however, replace the removal and prevention of backyard breeding sites which is a more effective control method.

Rainwater Tank Checklist

Rainwater tanks, if not installed correctly can produce large numbers of mosquitoes. Use this checklist to ensure you are not breeding mosquitoes.

Is there a seal between the roof and main body of the tank?

Is there a mesh cover on the inlet pipe?

Is there a mesh cover on the overflow pipe?

Is the man-hole lid adequately sealed?

If you answered **NO** to any of the above questions, then your tank has the potential to breed mosquitoes.

What Type of Mosquito is Annoying You?

There are almost 100 different species of mosquito in WA. The 4 main types found in the east swan river region are listed below. Can you identify the mosquito biting you?

Southern Saltmarsh Mosquito *Aedes camptorhynchus*
This species is prevalent in areas near the Swan River in winter and spring and is able to breed in both fresh and salt water. This mosquito can disperse over long distances especially through bushland or along creek lines.

Summer Saltmarsh Mosquito *Aedes vigilax*
Is very abundant at times in areas near the Swan River during summer and into autumn. It breeds in salt water especially that which is left behind after spring tides and storm surge. An aggressive day time biter and will repeatedly try to feed on hosts. This mosquito is known to disperse over very long distances from its breeding site.

Domestic Container Mosquito *Aedes notoscriptus*
This mosquito prefers relatively clean fresh water. It naturally breeds in tree and rock holes filled by rain but is also often found around the home breeding in receptacles like buckets, tyres, pot plant bases, bird baths and plants like bromeliads which hold water after watering. It mostly bites around dusk and does not disperse over long distances.

Common Banded Mosquito *Culex annulirostris*
This mosquito likes to breed in warm fresh water that may be permanent or temporary. It breeds over much of the year but particularly after heavy summer rain. It mainly bites in the evening after sunset and can disperse long distances from freshwater wetlands.

Avoid Being Bitten

There are a number of things you can do to help avoid being affected by mosquitoes.

- Recognise and avoid areas of mosquito activity e.g. swamps, salt marshes, billabongs and river floodplains particularly around sunrise and sunset.
- Use repellents containing DEET (diethyl toluamide) or Picaridin and ensure they are used as per manufacturer's instruction.
- Wear loose fitting and preferably light coloured clothing which covers as much of your body as possible.
- Plan outdoor activities. If you are hosting an outdoor BBQ have repellent available for your guests. They may not have thought ahead and you want to make sure your function is remembered for the right reasons.
- Screen all doors and windows on your house and make sure there are no holes or tears.
- Consider using residual surface sprays on structures particularly in shaded and sheltered areas. Use as per manufacturers instruction.

What if I Am Bitten?

The main mosquito-borne disease risks to people in the East Swan River Region are Ross River virus and Barmah Forrest virus.

Symptoms include joint pains and swelling, sore muscles, rash, fever and fatigue. Symptoms may persist for several weeks or even months in unlucky individuals. If you do suffer any of these symptoms you should contact your GP.

The risk of contracting these diseases is low for most people in the metropolitan area, although there may be a slightly increased risk in rural areas. Whilst the disease risk might be low the annoyance factor can still be very high.


Town of Bassendean


City of Bayswater


City of Belmont


City of Swan


Town of Victoria Park

Further Information

If you have any questions or wish to report suspected mosquito breeding sites please contact an Environmental Health Officer at your local authority.

Town of Bassendean
48 Old Perth Road, Bassendean
9377 8000
mail@bassendean.wa.gov.au
www.bassendean.wa.gov.au

City of Bayswater
61 Broun Avenue, Morley
9272 0622
mail@bayswater.wa.gov.au
www.bayswater.wa.gov.au

City of Belmont
215 Wright Street, Cloverdale
9477 7222
belmont@belmont.wa.gov.au
www.belmont.wa.gov.au

City of Swan
2 Midland Square, Midland
9267 9267
swan@swan.wa.gov.au
www.swan.wa.gov.au

Town of Victoria Park
99 Shepperton Rd, Victoria Park
9311 8111
admin@vicpark.wa.gov.au
www.victoriapark.wa.gov.au

Department of Health
Environmental Health Hazards
1a Brockway Rd, Mt Claremont
9285 5500
mosquito@health.wa.gov.au
www.health.wa.gov.au

This document is available in alternative formats upon request to your local government authority.

MOSQUITO MANAGEMENT

IN THE EAST SWAN RIVER REGION