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Fact Sheet Managing mosquitoes in rainwater tanks

Whilst mosquitoes can be a nuisance, certain species can also spread disease causing viruses (arboviruses) when they bite. In South Australia arboviruses of concern include <u>Ross River virus</u>, <u>Barmah Forest virus</u>, <u>West Nile virus Kunjin</u> <u>strain</u>, <u>Japanese encephalitis virus</u> and <u>Murray Valley encephalitis virus</u>. The mosquitoes that spread these diseases can be found inside or around your home, so it is important to take precautions to prevent mosquitoes from breeding on your property.

Prevent mosquito breeding

Mosquitoes can breed in stagnant or pooling water. Mosquito breeding in rainwater tanks is often associated with poor design or maintenance. If you are a property owner, resident, or tenant, it is your responsibility to ensure that rainwater tanks are properly maintained.



To prevent mosquitoes from breeding in rainwater tanks, consider the following:

- > Mesh screening inlets and outlets prevents mosquitoes from entering the tank. Regularly check mesh screening is intact and replace when damaged.
- Ensure every pipe and inlet is covered in mesh screening with approximately 1mm openings.
- > Trapped dirt, debris and moss may become a breeding spot for mosquitoes. Check inlets and outlets regularly and remove visible matter.
- > Older tanks are unlikely to have mesh screening. Check pipes and inlets and install mesh screening as required.
- > Check tanks, guttering and pipework for cracks, rusting, and gaps, and seal as required.
- Overflow from rainwater tanks can provide additional breeding sites for mosquitoes. Ensure the water from the overflow can drain away effectively into the ground or into a drain.
- > Consider overflow in the construction installation, and maintenance of rainwater tanks.

Larval control

You may find mosquito larvae in a rainwater tank during routine checks. Larvae inside a tank indicates that mosquitoes can enter the tank and that maintenance is required. Thoroughly check the entire tank considering the points above, and conduct repairs as required.

As a last resort, rainwater tanks can be treated with surface oils or films which reduces the surface tension, preventing the larvae from being able to attach to the surface and breathe. Liquid paraffin or domestic kerosene are oils which can be used to create a film over the surface of the water.



Dosage

Add 10ml of paraffin or one teaspoon for a 1 kilolitre tank – up to 30ml or 6 teaspoons for a 10-kilolitre tank. Bullet point style

Add 5ml of kerosene or one teaspoon for a 1 kilolitre tank – up to 15ml or 3 teaspoons for a 10-kilolitre tank.

Precautions

- > Do not apply kerosene if water levels are low.
- > Consult rainwater tank manufacturer to ensure kerosene can be used.
- > Commercial or industrial kerosene should not be used in rainwater tanks.
- Kerosene is not suitable for use in tanks coated with Aquaplate® and may not be suitable for use in tanks constructed of, or lined with, plastic.
- Kerosene will not result in risks to human health if used in accordance with these instructions, but excess quantities can taint the water and very high doses can be poisonous to humans. Kerosene added to the surface will not mix through the body of rainwater in the tank and it will either evaporate or be washed out of the tank by overflow.
- > If excess quantities of kerosene are added to the point that taste is affected, the tank should be drained and cleaned.

Protect yourself

Information on how to protect yourself from mosquito borne disease can be found on the SA Health <u>Fight the Bite!</u> webpage.

For more information

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