

Managing mosquitoes in swimming pools, spa pools and ponds

Fact sheet

While mosquitoes can be a nuisance, certain species can also spread disease causing viruses (arboviruses) when they bite. In South Australia arboviruses of concern include [Ross River virus](#), [Barmah Forest virus](#), [West Nile virus Kunjin strain](#), [Japanese encephalitis virus](#) and [Murray Valley encephalitis virus](#).

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 mosquitoes breeding in swimming and spa pools

Mosquitoes can breed in stagnant or pooling water. A poorly maintained swimming or spa pool can create breeding opportunities for mosquitoes. Mosquito breeding associated with pools is usually associated with inadequate operation and maintenance. If you are a property owner, resident, or tenant it is your responsibility to ensure that your pool is properly maintained and operated.

To prevent mosquitoes from breeding in pools, consider the following:

- Keep pool water clean, clear, and recirculating. Regularly chlorinate and maintain recommended disinfection levels.
- Clean pool filters, pumps, and surrounding areas thoroughly to remove organic matter and debris.
- Operate the filtration system according to the manufacturer's recommendations.
- If pool or spa no longer in use, drain it completely and install a tight-fitting pool cover to prevent water collecting within the pool, or on top of the cover.
- Alternatively, consider converting your pool or spa into a natural pond with native plants and fish. If introducing native fish it is important to choose the correct type for your location further information can be found on [the Department for Environment and Water website](#).
- Incorporate mosquito-repelling plants like citronella, lavender, and marigold into poolside landscape.



Prevent mosquito breeding in ponds

- Replace water in pond regularly.
- Install a pump or aerator to circulate the water, as this will make it difficult for mosquitoes to lay their eggs.
- Consider installing fountains, waterfalls, or spitters to ensure more water movement.
- If pond is small, install mosquito proof netting over the top.
- Regularly remove algae as it is a food source for larvae.
- Introduce native fish to your pond. They act as a natural predator to mosquitoes and their larvae. Some non-native fish can be added like Koi, Goldfish mosquito fish and guppies. Ensure they will not access natural waterways, as they can destroy the balanced ecosystem. Further information on what can be added to a pond in your location can be found on [the Department for Environment and Water website](#).
- Encourage frogs and tadpoles by adding water lilies around the pond and marginal plants, as they eat mosquito larvae.

Mosquito larvicide application

Larvicides prevent mosquito larvae from emerging as adults from aquatic mosquito breeding sites and do not harm mammals, birds, or other insects. The mosquito larvicides commonly used in South Australia are (S)-methoprene and *Bacillus thuringiensis* subspecies *israelensis* (Bti). Bti is used for the immediate short-term control of mosquito larvae and (S)-methoprene is used for longer-term control.

Protect yourself

Information on how to protect yourself from mosquito borne disease can be found on [the SA Health Mozzies Suck webpage](#).

For more information

More information on maintaining swimming pools and spa pools can be found on the SA Health [pools](#) and [spa pools](#) webpages.