Mosquito control on private land after floods and storms

Mosquito numbers can increase after floods and storms as standing water from heavy rainfall provides the perfect conditions for mosquito breeding. Increased numbers of mosquitoes leads to an increased risk of being bitten and of contracting mosquito borne-diseases. You can protect yourself and your family by taking the following actions in and around your house.

**Actions to take**

Mosquitoes breed in stagnant fresh, salty, brackish and polluted water. When cleaning up your house and yard following a flood or storm, you can reduce the number of potential breeding sites around your home by:

- removing any pools of water around your house and yard – this may involve clearing debris from ditches, cutting small channels to help pooling water drain, or filling in holes and vehicle wheel ruts
- cleaning up debris deposited on your property by flood waters or storms, which may be half-buried but can contain enough water to breed large numbers of mosquitoes
- emptying then covering or puncturing containers and other items or equipment that hold or collect water
- increasing water movement in areas such as drains, dams and creeks by removing excess vegetation
- appropriately disposing of rubbish that holds or collects water.

Rain or floodwater may have collected in containers around your yard, so make sure you empty and store them in a dry place or throw them away. Common mosquito breeding sites include:

- pot plants and bases
- tyres
- tarpaulins
- buckets
- cans, bottles and plastic containers
- boats and trailers
- roof gutters, particularly if blocked by debris.

Rainwater tanks and septic tanks can also be potential breeding sites for mosquitoes. You can reduce the risk by:

- checking valves on rainwater tanks (particularly in-ground tanks) by making sure the valves are still in place and by making any necessary repairs
- ensuring rainwater and septic tank openings, wells or other large water containers are covered with wire mesh no coarser than 1mm.

As a last resort, rainwater tanks can be treated by adding a small amount of liquid paraffin or domestic kerosene. Do not apply kerosene if water levels are low.

Add 5ml of kerosene (or 1 teaspoon) for a 1kl tank and up to 15ml or 3 teaspoons for a 10kl tank. When using paraffin, double the dose.

NOTE: Consult your rainwater tank manufacturer about whether kerosene can be used. Commercial or industrial kerosene, such as power kerosene for tractors, should not be used in rainwater tanks.

Following a flood or storm, it is also important to ensure that swimming pools are maintained and properly disinfected.
Chemical treatment for Mosquitoes

Chemicals that target mosquito larvae can be purchased at hardware stores and may be used around your property. Always follow instructions on the label.

For large or persistent breeding sites, you may need to contact a licensed pest controller to treat them with larvicides.

Protecting yourself

There are several simple steps you can take to reduce your risk of being bitten by mosquitoes:

> fit insect screens to windows and doors, ensure mosquito-proof mesh that is less than 1mm in size is used
> repair any defective or damaged insect screens
> use insect spray to kill any mosquitoes indoors
> wear loose fitting, light coloured clothing that covers as much of the body as possible
> mosquito coils can help protect you when outside but always follow instructions on the label
> wear insect repellent that contains DEET (diethyl toluamide) or picaridin on uncovered skin whenever mosquitoes are present, particularly when outdoors. Always follow instructions on the label.

Mosquitoes are generally considered to be nuisance biters however, they can also pose a risk to human health. In South Australia, the most common viruses spread by mosquitoes are Ross River virus and Barmah Forest virus.

Symptoms may include fever, headache, skin rash, joint or muscle pain. If you become unwell with these symptoms, see a doctor immediately.

Roles and Responsibilities

Under public health legislation, it is the role of the local council to promote proper standards of public health and to take reasonable steps to prevent or minimise harm to the public. As mosquitoes can spread disease in humans, this includes ensuring that land owners and occupiers exercise their responsibility to control mosquito breeding on their properties.

If the local council believes mosquitoes are breeding on private property, they can issue a written notice requiring the owner or occupier of the premises to take action to eliminate or minimise mosquitoes breeding.

Further information

> Department of Health
> Further information from SA Health on staying safe and healthy during flood recovery can be found [here](http://www.sahealth.sa.gov.au)
> For further information on mosquito control, download the South Australian Integrated Mosquito Management Resource Package [here](http://www.sahealth.sa.gov.au)
> For advice on mosquito control, contact an Environmental Health Officer at your local council
> For the control of mosquitoes you may seek the services of a licensed pest controller
> In a medical emergency, call Triple Zero (000) for emergency assistance.
> Contact your doctor or health clinic for medical advice or call healthdirect Australia on telephone 1800 022 222 to speak to a health professional.