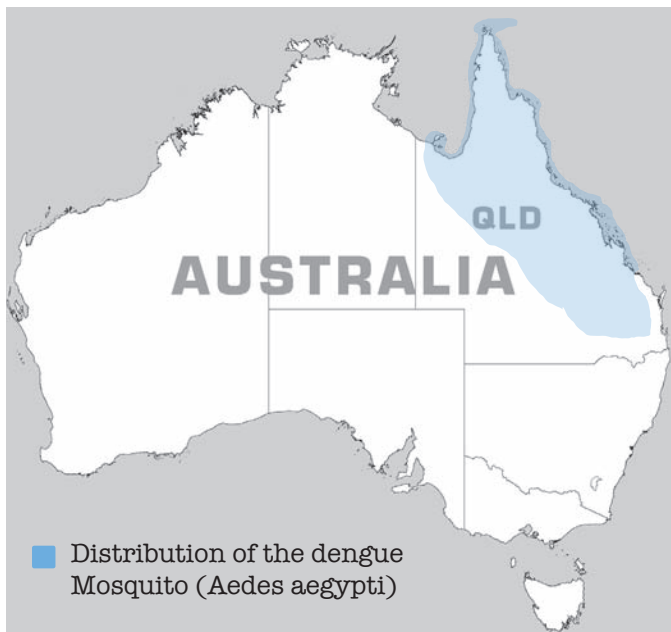


Protecting your home against dengue outbreaks

OVERVIEW

Climate change is causing temperatures to go up and down a lot more. This results in a lot more rain during the wet and winter seasons. When there is more rain and temperature changes, certain vector-borne diseases like dengue fever, malaria and Ross River Virus can start to spread. This BUSH TECH shares with you a few things you can do in your house or community to prevent the spread of these types of diseases.



WHAT IS A VECTOR-BORNE DISEASE?

A vector is an insect or any living carrier that transmits disease. These insects carry infections and transmit these from one host to another. One group of these vectors is bugs like mosquitoes, sand-flies, lice, ticks and fleas. These types of bugs often feed on blood, so when they bite you they may transfer their disease or virus to you. Barmah Forest Virus (BFV) and Ross River Virus are vector borne diseases that occur over the Northern tropical coast of Australia. ¹

GET RID OF STAGNANT WATER:

Mosquitoes breed in stagnant, standing water. The first defense is to get rid of their breeding sites. There are a few common breeding sites around the home. These include:



- rain barrels which hold stagnant water, bird baths, drums
- roof eaves

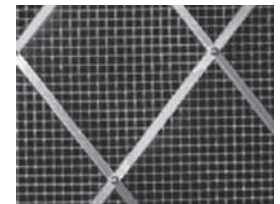
- cattle troughs
- empty planters, pool covers, wading pools,
- tyres, dog bowls, mugs and kid's toys.

Empty these type of containers (especially if they have dirty water inside them) twice a week to make sure mosquito eggs (larvae) do not grow into adults. Clear up the dead leaves from roof eaves at least once a month. Some mosquitoes like puddles so fill these up, to stop them from breeding. ²

PROTECTING YOUR HOUSE FROM MOSQUITOES:

Here are a few simple ways to help protect your house from mosquitoes:

- Make sure you have fly-screen on all your windows. Check that there are no holes in this, and replace when needed.
- If you don't have a fly-screen door, try to get one made up for your front and back doors. Always keep these fly-screen doors closed, to stop the bugs coming inside the house and biting you.
- Use mosquito sprays, mosquito coils and plug-in-vaporising devices inside your house.
- A cheap solution is to buy mosquito nets, and hang these up during the wet / winter season, over your bed. Sleep under the nets. The best ones to buy are those that have been treated with mosquito repellent.

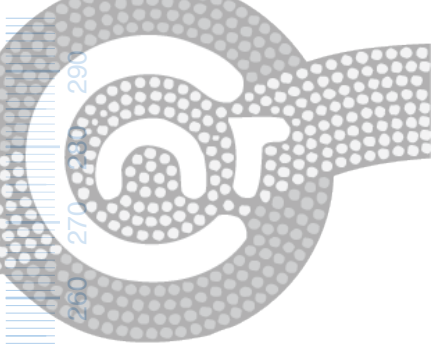


MOSQUITO CONTROL PROGRAMS FOR YOUR COMMUNITY

If you're looking at applying a mosquito control program for your whole community or town, first survey where the mosquito populations are. When you do this you learn more about the mosquito life cycle (how they breed, when they lay their eggs (larvae), when they hatch, how long they last and when they die. After you've studied these patterns, you may consider applying the following measures:

- Source reduction: involves removing the places where mosquitoes live and breed (their habitat). ³
- Habitat modification: You can change the area where mosquitoes live to reduce breeding like draining a swamp. ³
- Biocontrol: this involves bringing in natural predators of mosquitoes (like mosquito fish, guppies, birds, bats, etc). ³
- Larvicide: using pesticides (like DEET, pest-killer, etc) to cut down mosquito eggs (larval populations). ³
- Adulticide: using pesticides to kill mosquitoes and lower adult mosquito populations. ³





WHAT ATTRACTS MOSQUITOES



• **Dark clothing:** Many mosquitoes use vision to locate hosts from far away. Dark clothes and foliage are initial attractants. ⁴



• **Carbon Dioxide:** When you burn a candle or light a fire, carbon dioxide is produced. Also we give off more carbon dioxide when we're hot or have been playing sports.



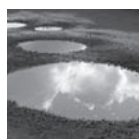
• **Lactic Acid:** When we eat salty foods, like fried chips, we release more lactic acid. This also happens when we play sports or exercise. High-potassium foods also release this.



• **Floral or fruity fragrances:** In addition to perfumes, hair products, and scented sunscreens, floral fragrance from fabric softeners attract mosquitoes.



• **Skin temperature:** the exact temperature depends on the type of mosquito. Many mosquitoes are attracted to the slightly cooler temperatures of the extremities. ⁴



• **Moisture:** Mosquitoes are attracted by sweat because of the chemicals it contain and also because it increases the humidity around your body. ⁴ Even a small amount of water (eg moist plants or mud puddles)

will draw mosquitoes. Standing water also allows mosquitoes to reproduce.

HOW TO AVOID GETTING BITTEN BY MOSQUITOES

There are many simple ways to help you avoid getting bitten by mosquitoes. These steps can help:

- Try not to go out at dusk and dawn when mosquitoes are most active. ⁵
- Wear long loose clothes if mosquitoes are around, preferably in light colors. ⁵
- Use mosquito repellent (aeroguard, etc) on exposed skin and clothing.
- Always keep insect repellents out of the reach of children.

WHAT CAN YOU DO WHEN YOU GET BITTEN?

There are several commercially available remedies. Applying calamine lotion is a common way to soothe your skin. ⁶ You can buy insect bite relief sticks, oral antihistamines and steroid creams for more serious bites from a pharmacy. ⁶ Another easy way is to apply a cloth that is soaked in steaming hot water (not boiling water, so you don't burn your skin). Visit your local clinic or doctor if you get bitten and start getting a fever. If you get really sick your Pharmacy or clinic will have medicine for malaria and dengue fever.



A dengue Mosquito. Photo by Muhammad Mahdi Karim

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PHOTO CREDITS (Mosquito, Stagnant water, Mosquito net)

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