Is this a normal season for mosquitoes in Victoria?
Recent heavy rainfall across the state has led to ideal breeding conditions for mosquitoes. Current and predicted weather conditions, particularly in the northern part of the state, suggest that high numbers of mosquitoes that can spread disease will continue over the summer months.

What is the Victorian Government doing to improve mosquito control in Victoria?
Since 1974, the Victorian Government has worked with other agencies including selected local governments to deliver an integrated mosquito management program. This includes surveillance activities to monitor mosquito numbers and to test mosquitoes for viruses, investigations of infections of mosquito-borne diseases in humans, and community education to reduce mosquito bites. A final and important measure has been control of mosquitoes in selected council areas where mosquitoes are of particular concern.

In response to the recent floods and the increased mosquito numbers being observed, the Victorian Government has announced a significant enhancement of these annual activities to control the impact of mosquitoes on people.

These enhancements include:
- Increased flocks of sentinel chickens across Western, Central and Northern Victoria to detect early signs of mosquito-borne disease.
- Expanded mosquito surveillance and control, including in twelve new councils, to reduce mosquito breeding.
- A new app and web portal for selected councils to monitor mosquito hot-spots and provide a real time picture of their mosquito breeding sites, numbers and controls undertaken.
- Faster testing of trapped mosquitoes for diseases including Ross River virus and Murray Valley encephalitis virus using cutting edge techniques.
- Investigating early signs of disease by detailed review of the cause of illness in certain sick horses.
- Increased community information through the ‘Beat the Bite’ campaign to ensure all residents and visitors know how to protect themselves and those in their care from mosquito bites.

How are councils being supported to reduce mosquito numbers?
The Victorian Government is delivering a comprehensive package valued at $4.6 million in collaboration with seventeen higher risk councils this summer. In addition, the Victorian Government will support councils by providing advice and scientific services to help councils expand and extend their existing programs, or to implement new surveillance and control activities where needed.

This package provides support to councils to control mosquito breeding and biting, reducing the potential impact of mosquito-borne diseases on the community.

Fewer mosquitoes will also make summer more enjoyable for residents and visitors to Victoria.

Which councils have been funded?
The Victorian Government’s Arbovirus Disease Control Program routinely provides funding to nine councils. Seven of these councils are now receiving additional funding, together with ten new councils. They are:
- Buloke
- Campaspe
- Gannawarra
- Greater Bendigo
- Greater Shepparton
- Hindmarsh
- Horsham
- Indigo
- Loddon
- Mildura
- Moira
- Mount Alexander
- Northern Grampians
- Swan Hill
- Wangaratta
- West Wimmera
- Wodonga
- Yarriambiack

Preparing Victorians for the mosquito season
Frequently asked questions
Preparing Victorians for the mosquito season: FAQs

What is my local council funded to do?

There are a range of activities being funded and it will be up to each council to determine the measures best suited to their needs. The focus of activities will be on reducing the risk of spread of mosquito-borne diseases, including Ross River virus and Murray Valley encephalitis virus. Activities might include:

Trapping adult mosquitoes – this allows us to count the numbers of mosquitoes, identify whether they are a type of mosquito that can spread disease (not all mosquitoes spread disease), and determine whether they are carrying any diseases which could be spread to the people they bite.

Testing sentinel chickens – mosquitoes also like to bite birds so testing specially located chickens each week over summer for signs of any disease can give us an early warning that local mosquitoes are spreading disease.

Larviciding – the most effective way to stop mosquitoes from biting is to stop them from ever turning into flying, biting, adult insects. Larvicides are control agents placed into water where mosquito larvae breed to stop them from growing. This is the primary control method used by state and local governments around Australia.

Fogging – where mosquito numbers are excessive, and the possibility of disease is high, some councils will undertake large-scale fly spraying, called fogging. This will only control the mosquitoes that are flying in that area at that exact time.

How were councils selected for funding?

The Department assessed councils impacted by the 2016 Victorian floods to identify those at significantly increased risk of mosquito-borne diseases. Seventeen councils were identified. Seven of these already had extensive mosquito surveillance and control programs in place.

Ten new councils will now be able to receive financial, technical and scientific support to implement new mosquito surveillance and control activities.

In addition to looking closely at the conditions in these eighteen councils, the department is monitoring the conditions across the entire state for any substantial changes to risk. These could change during the summer.

Will these mosquito control measures have any impact on my garden, pets or livestock?

No, because officers always conduct a risk assessment before they apply any control agents. They give consideration to the safety of people, other animals, insects, and the environment, including water, soil and plants.

The larvicides selected for use in areas where animals may contact the water, where fish may swim, or that have fragile habitats, are very specific to mosquitoes and have negligible wider effects. They have been used safely for many years across the globe and have been studied in even the most sensitive wetlands. Birds, pets, livestock, fish and other insects will not be affected by the larvicide.

Fogging is a technique used by only some local governments, where disease risk is particularly high and larviciding is not sufficiently controlling the mosquitoes. Officers will usually conduct this activity in the early morning or late at night, when conditions are optimal and the community is normally inside. Whilst it is best to stay clear of the area while the treatment is occurring, like fly spray, any minor accidental exposure to people, pets or livestock is unlikely to cause any harm.

However, unlike with larvicides, others insects including bees can be impacted by fogging.

What about local waterways where larvicide is being used?

Officers always conduct a risk assessment before they apply any control agent. Consideration of any effect on waterways and any animals that may drink from the water is a high priority. Agents are only used in a way that would be safe for humans and animals to swim in the water, and for animals to drink from the water.

In fact, the larvicide most commonly used in Victoria is registered for use in Australia in drinking water and is commonly applied to water tanks.

How can I help protect my family and myself from mosquito bites?

There are some simple things you can do to avoid mosquito bites and reduce your risk of catching mosquito-borne diseases.

• Wear long, loose fitting clothes if mosquitoes are around.
• Use effective mosquito repellents containing DEET or picardin on all exposed skin.
• Try to limit outdoor activity if lots of mosquitoes are about. Dusk and dawn is when most mosquitoes are more active but some will also bite during the day.
• Use ‘knockdown’ sprays and plug-in vaporising devices indoors.
• Sleep under mosquito nets treated with insecticides if you don’t have flywire screens on windows.
• Mosquito coils can be effective in small outdoor protected areas.

How can I limit mosquitoes in and around my home?

You can reduce the risk of mosquito bites by removing potential mosquito breeding sites around your home:

• Install flywire screens on all windows and self-closing wire screens on doors. Check them regularly and mend any holes.
• Prevent pools of water from forming – get rid of unused tins, tyres and similar rubbish, clean gutters and drains regularly and mend leaking taps.
• Change pets’ drinking water and the water in vases, pot plants and bird baths at least once a week.
• Put sand around the base of pot plants to absorb excess water in the dish.
• Flush unused toilets once a week.
• Keep swimming pools chlorinated or salted and well maintained, and empty them completely when not in use for long periods.
• Empty children’s wading pools if not being used regularly.
• Keep fishponds stocked with fish.

If you have a rainwater tank or alternative water storage devices:
• Make sure that any tops, lids, covers and inlet pipes are close fitting.
• Fit a removable screen mesh to the outlet end of overflow pipes and to all water inlets.
• Make sure any water collection containers have secure lids or screens.

How can I protect babies and young children from mosquito bites?
Mosquito bites are common among young children. As they are too young to be aware of this problem, it is most important to take precautions to protect them.
If a child is playing outside and mosquitoes are about, always put some kind of protective cream or spray on all their exposed skin to prevent them from being bitten.
Dress young children with a long loose shirt or top and long pants where possible. Insect nets over prams will help keep mosquitoes away from babies.

Can I use a sunscreen with a repellent?
It is better to use a separate sunscreen and repellent, than a combined product.
Apply sunscreen first, then the repellent over the top.
Repellents containing DEET may reduce the effectiveness of sunscreen, so use a product with picaridin instead, or reapply the sunscreen more frequently than normal.

How do I know which repellent works best?
Cream, gels and sprays containing N,N-Diethyl-m-toluamide (DEET, or diethyltoluamide) or picaridin are currently regarded as providing the most effective form of protection. Most products provide protection for between one and three hours in typical situations. If you swim or sweat profusely, protection will be less and you may need to reapply.

How do I treat a mosquito bite?
• Wash skin where it was bitten.
• Use a product like calamine lotion to help stop itching.
• Use ice packs or cool face washers to help with pain and swelling.

What kinds of diseases can be carried by mosquitoes?
Most types of mosquitoes found in Victoria do not carry diseases but are more of a nuisance. Diseases that can be spread by mosquitoes in Victoria include Ross River virus and Barmah Forest virus, or occasionally Murray Valley encephalitis virus.
Mosquito-borne diseases are typically found around inland waterways and coastal regions. There are some simple things you can do to avoid mosquito bites and reduce your risk of catching mosquito-borne diseases.
The Zika virus is a mosquito-borne disease, transmitted by bites from some species of Aedes mosquito, particularly Aedes aegypti. These mosquitoes bite in the day, particularly around dawn and dusk. In Australia, this species is only found in parts of northern Queensland.

How do I know if I have been affected with a mosquito-borne disease?
The two main mosquito-borne diseases spread by mosquitoes in Victoria are Ross River Virus and Barmah Forest virus. People may become infected without becoming unwell, or may develop joint swelling and pain, fatigue, muscle aches, headache or rash. Symptoms usually resolve within several weeks but lethargy, joint and muscle pain can persist for many months.
A blood test is required to establish whether you have an infection or not, and may be followed with a second blood test up to two weeks later.
Murray Valley encephalitis is rare with the last human case reported in Victoria in 1974. Symptoms can include fever, headache, nausea and vomiting. In a small percentage of all people infected, disease may affect the central nervous system. This can result in meningitis or encephalitis (swelling of the brain or its lining), which can lead to drowsiness, confusion, fitting, weakness or unsteadiness.

Where can I get help or more information?
• If you have any health concerns see your doctor or phone NURSE-ON-CALL 1300 606024
• For information about local mosquito control measures, contact your local council.
• www.betterhealth.vic.gov.au search for ‘Beat the Bite’

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