

## Prevention

A small amount of stagnant water remaining for a week or longer is a potential source of mosquitoes. The Mosquito Abatement Program offers these suggestions for the prevention of mosquitoes around your home and neighbourhood:

1. Flush bird baths and animal dishes with clean water at least once a week.
2. Eliminate containers that are no longer useful such as tin cans, old tires and other refuse.
3. Those containers that are used infrequently should be emptied and stored in a way that they will not collect water.
4. Containers that are used to hold water such as rain barrels and cisterns should be covered with tight fitting screens.
5. Drain or fill all low-lying areas. Draining can be done simply with open ditching and larger areas filled with rocks or refuse and covered with compacted soil.
6. Check regularly to ensure that all flat roofs and eaves troughs drain properly and are free of leaves and debris.
7. Ornamental pools, ponds and dugouts should be kept free of vegetation particularly around their margins. Fish that are known to eat mosquito larvae (ie) goldfish or minnows can be added to such areas.
8. Fill all tree holes with sand and/or cement.
9. Mosquito adults require shelter during the day. Cutting tall grass and weeds removes the areas of shade and high humidity they need.
10. Foliage that cannot be cut can be treated with one of the more common residual insecticides registered for the control of adult mosquitoes.
11. Two tablespoons of cooking or mineral oil can be put on surface of water in rain barrels and other containers.
12. Pools that are not in use with standing water should be chlorinated or emptied.

## West Nile Concerns

This past year brought upon some new concerns relating to the West Nile Virus. Every year we worked closely with Winnipeg and the Provincial Government in monitoring this disease. We will carry on working with these same groups to assess the current years mosquito concern. For more information on the West Nile virus, please visit the website:

[www.gov.mb.ca/health/wnv](http://www.gov.mb.ca/health/wnv)

or call Health Links at  
1-800-315-9257 in Winnipeg.

If you have any questions regarding the City of Brandon Mosquito Program, please call the Parks Section at 729-2150.



**BRANDON  
UNIVERSITY**

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A program of the City of Brandon  
Operational Services, Parks Section



for the  
**Homeowner**

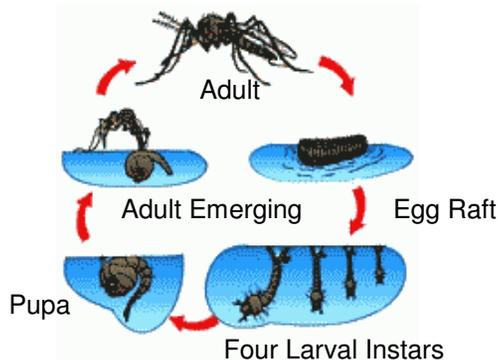
City of Brandon Program

The City of Brandon Mosquito Abatement Team consists of the Operational Services, Parks Section and the Brandon University Zoology Department. This team carries out a large scale mosquito control program every season. Traps are set inside the City of Brandon as well as outside the city. Students from the university are hired on in early May until September to carry out the monitoring, mapping and larviciding of the mosquito population.

City crews are committed to operating an aggressive program: monitoring, draining standing water, larviciding, mapping, and working with landowners and businesses in Brandon and surrounding areas to reduce mosquitoes to a tolerable level.

But, our climatic conditions, soil base and tenacity of the mosquito don't make it an easy job.

The mosquito population in any year can vary. For example, high moisture levels tend to increase mosquito populations. Hot, dry weather usually reduces mosquito populations. These conditions and mosquito populations change from year to year and month to month. In response to changing conditions, the City maintains, reduces or increases its Mosquito Abatement program.



## Program Description

### Larvae Monitoring

Monitoring begins in May and continues to September. The Mosquito Abatement team takes samples from water bodies throughout the city and up to a two kilometre radius outside the city. Mosquito larvae are counted in each of these samples. If larvae are present, larviciding begins.

### Larviciding

Larviciding is the application of control products to standing water bodies to destroy mosquito larvae. The City of Brandon uses Vectobac™, a non-toxic biological product that kills the feeding larvae by destroying the lining of their stomach. The larvicide is applied by licensed staff using a variety of equipment and vehicles. Vectobac is not harmful to wildlife, pets, other insect species or people.

### Adult Monitoring

Monitoring occurs on a daily basis with traps located in and outside the city. City staff identify the species and calculate population trends. They monitor the species identified as the vector of the West Nile Virus.

### Identification of Breeding Areas

City staff identify locations that are most suitable for mosquito breeding. Locations are recorded on maps and monitored on a regular basis. Note that mosquitoes do not lay eggs in moving water ie. rivers and streams.

### Public Education & Communication

Information on the Mosquito Abatement Program is provided to the media regularly. Information is supplied to the tourism industry and local businesses. Residents are supplied with information on request.

## Personal Protection

Mosquito adults can move considerable distances to invade areas previously free of mosquito problems. The following suggestions will help to reduce your exposure to biting mosquitoes:

1. Ensure that all doors and windows fit properly and are equipped with tight fitting, fine mesh screens that are in good condition.
2. Wear light coloured, loose fitting, long sleeved shirts and long pants.
3. Children should be protected by insect repellents and proper clothing. Infants in strollers or carriages should be covered with mosquito netting.
4. Avoid outdoor activity in those areas and those times of the day that see the most mosquito activity. Mosquitoes prefer tall, moist vegetation in sheltered areas; calm, cloudy, humid days; approximately one hour before sunset.
5. Use insect repellents on ankles, wrists, neck and ears. Avoid using repellents on infants, pets, around eyes, nose, mouth and on minor cuts or scrapes.
6. The very young and old are among the least able to defend themselves from biting insects and are the most susceptible to West Nile Virus which is spread by biting mosquitoes. Ensure they are well protected.

Various types of repellents are available to the public. The most commonly used and seemingly the most effective are those containing DEET.

Directions for various types of repellents and insecticides vary with the product. **Always read the directions before each use.** Use good judgement when storing these products and keep them locked out of reach of children.