



(701) 787-8100 Fax (701) 787-8145
www.grandforksgov.com/publichealth



MOSQUITO CONTROL

Defend & Protect Yourself From West Nile Virus

Personal Protection

The City of Grand Forks continues to make improvements to the Mosquito Control Program, but there's no way we can eliminate mosquito-borne diseases. Taking responsibility for yourself and loved ones is the best way to reduce the risk of mosquito-borne diseases.

During the summer of 2006, the Grand Forks region experienced one of the driest summers on record. We also had record low mosquito populations. Although the mosquito population was at a minimum, West Nile virus was still active and present in our community.

The mosquito that is most efficient for transmitting West Nile virus in our region is a mosquito that does well in dry conditions. This mosquito, like all mosquitoes, needs to be submerged in water to complete its life cycle. It is very successful in locating permanent pools of water. Some of these permanent pools can be as small as a pop bottle. Even during hot dry summers, a bottle in a shaded area can hold water for several weeks and produce thousands of mosquitoes.

The Grand Forks Health Department urges you to protect yourself and avoid mosquito bites. Apply repellents and wear protective clothing when outdoors.

Dog Heartworm

A Preventable Disease
Mosquitoes are one of our biggest summer pests in the Red River Valley. These pests have the ability to infect both the human population and our pets with fatal diseases. Every year in North Dakota and Minnesota dogs become ill or die from heartworm disease. Heartworm disease, caused by a filarial nematode (a thread-like round worm) is transmitted by mosquitoes. Once transmitted into the bloodstream of a dog, the microscopic organisms grow into large worms which accumulate in the heart and lead to heart failure. Left untreated, this is fatal. However, heartworm infection is preventable. Several products are available to prevent dogs and cats from contracting this disease. These medications are available from local veterinarians.

It Could Be Worse...



As mosquito-borne diseases become more common...we need to take these precautions.

Go to www.itcouldbeworse.com

Steve Edwards, UMass, MA

Symptoms of West Nile Encephalitis

- Fever
- Headache
- Body aches
- Swollen lymph glands
- Body rash

About 80% of the people infected with West Nile virus will not have any symptoms, or the symptoms may be mild.

Encephalitis develops in less than 1% of infected people, with severe symptoms that include **headache, high fever, neck stiffness, disorientation, tremors, convulsions, paralysis, and coma.** If you experience these symptoms, contact a physician or hospital immediately. Occasionally, death can occur. The elderly are most at risk of death due to encephalitis.

For information on daily trap counts and ground spraying, call the Mosquito Control Information Line at 701-787-8144.

Plant A Tree

Do you have a low spot in your yard where water accumulates and remains for several days after a rain? If so, this area could be producing mosquitoes. The Grand Forks Public Health Department recommends filling in or grading these areas to drain the water and eliminate mosquito habitat. If filling in or grading is not an option, consider planting water tolerant trees to soak up the water and beautify your property. It's amazing how much water one of these trees or shrubs will soak up.

Water tolerant trees/shrubs that do well in the Grand Forks region include the following:

Trees

- Willow
- Aspen
- Cottonwood
- Linden

Shrubs

- Willow
- Chokeberry
- False Indigo
- Grape

Mosquito Trivia

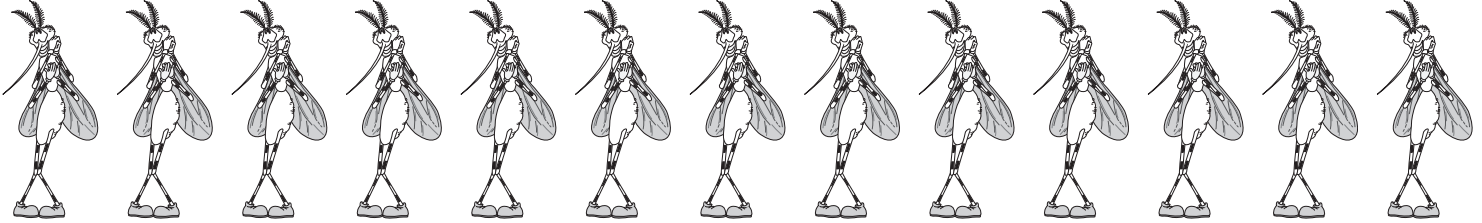
- Mosquitoes are responsible for more human deaths than any other living creature.**
A. True
B. False
- If you are bitten by a mosquito in your yard, what is the typical distance that mosquito has traveled from it's hatch site?**
A. 2-3 Blocks
B. 10-20 miles
C. Within 100 yards or so
D. The nearest tire pile
- One female mosquito can lay more than 200 eggs at one time.**
A. True
B. False

(Answer 1: A; 2: C; 3: A)

Get Involved - Reduce Mosquitoes in Your Backyard

This may come as a surprise to you, but the majority of the mosquitoes in our community come from our own property. That's right; we unintentionally raise these pests in our own backyards. Mosquitoes can reproduce anywhere that water collects and remains for as little as one week. The Grand Forks Public Health Department has an aggressive larvicide program that has identified and mapped more than 1,000 sites around our community. These sites are checked on a weekly schedule and treated with products that prevent adult mosquitoes from hatching. However, we still need your help. We do not have the resources to inspect all of the private property in the city. You can help by getting your children or grandchildren involved with weekly inspections of your property. Use this checklist once a week to reduce and eliminate mosquito breeding habitat. Assign the responsibility to the kids. They'll love it! Not only is this educational, it also gives them ownership in the success of reducing the mosquito population in our community.

For copies of this home checklist and additional information about mosquito control, contact Todd Hanson at the Grand Forks Public Health Department at 787-8110, or visit our website at www.gfmosquito.com



Location	WE FOUND WATER AT THESE LOCATIONS:	WE DID NOT FIND WATER AT THESE LOCATIONS:
Bird Bath Change water weekly		
Boat/canoe Drain or dump water and store upside down if possible		
Buckets, pails, barrels Dump water and store upside down		
Cans, bottles, plastic jugs, jars Dispose of, or dump water and cover, or store upside down		
Flower pots Dump water		
Low areas in your yard holding water Fill in low areas or contact Mosquito Control Department for treatment		
Ornamental ponds Contact Mosquito Control Department for treatment		
Pet water dishes Change water weekly		
Rain collection barrel Cover with screen or contact Mosquito Control Department for treatment		
Rain gutters Keep clean so water drains		
Standing water anywhere Fill in low areas or contact Mosquito Control Department for treatment		
Tarps (sagging) Dump water		
Tires Drill holes for drainage or contact Mosquito Control Department for disposal		
Toys Dump water		
Tree holes Fill-in holes with sand		
Wading pool/swimming pool Drain or change water weekly when not in use		
Wheel barrow Dump water and store upside down or cover with tarp		
Other		
Other		

This publication is provided as a service of Grand Forks Public Health Department. Please call (701) 787-8110 with any questions.

For copies of this checklist, visit our website at gfmosquito.com.