

# FIGHT THE BITE!

# GRAND FORKS MOSQUITO CONTROL



## CONTROLLING MOSQUITOES IN URBAN & RURAL AREAS

**T**aking the time to learn a little bit about mosquitoes can make for an enjoyable summer. Communities that have comprehensive mosquito control programs benefit substantially by reducing the mosquito population and the risk of West Nile virus. Mosquito control is very expensive. Most small communities can't afford a comprehensive mosquito program. So, trying to achieve successful mosquito control on a single farmyard or rural home is almost impossible. The cost per household would be too expensive for most. However, by taking a few simple steps, you may be able to reclaim your back yard. **Here are four simple steps that will help reduce the mosquito population on your property in both rural and urban areas:**

### #1: Eliminate Breeding Habitat



Mosquitoes can reproduce anywhere that water collects and remains for as little as one week. By eliminating standing water on your property, you can prevent mosquitoes from reproducing. Inspect your property weekly for any signs of standing water or water holding containers. If you have a rain barrel used for collecting rainwater, make sure it is completely sealed to prevent mosquitoes from gaining access to the water. If you have a low spot in your yard where water accumulates and remains for several days after a rain, fill it in or consider planting a water tolerant tree or shrub to soak up the water. Develop a property checklist and get your children or grandchildren involved with weekly inspections. Assign the responsibility to the kids. They'll love it! It also gives them ownership in the success of reducing the mosquito population.

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### #2: Make Your Property Undesirable for Mosquitoes



The first step to making your property undesirable for mosquitoes is to eliminate breeding habitat. Then, learn a little bit about the biology of the mosquitoes in your region. The majority of the mosquitoes in the Grand Forks region are night biters. However, if kicked up during the day in shaded areas, you can expect to be bitten. They generally seek out their blood meals around sunset and may stay active until midnight. Once the temperature starts rising, they head for cover. During hot sunny days,

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### #3: Protect Yourself



Wear protective clothing to cover exposed skin. Apply an effective insect repellent. The Centers for Disease Control and Prevention recommends repellents that contain DEET. There are several new repellents on the market that go on dry. According to the American Academy of Pediatrics, DEET is not recommended for children under 2 months old. Always follow the label directions when applying insect repellents.



### #4: Apply Barrier Treatments



Mosquito barrier treatments are products designed to repel or kill mosquitoes on contact. Many professional mosquito control programs use these products to get instant results in controlling mosquitoes in a selected area. Permethrin is a common active ingredient in these products. Barrier treatments are residual products, meaning they'll continue working for an extended amount of time (1-3 weeks). When applying these products, try to spray areas that remain shaded during the day. The shaded areas are where the

mosquitoes choose to rest during the day. Treating the shaded areas may also extend the effectiveness of the product. The active ingredient in these products breaks down rapidly from Ultra Violet sunlight. These products can usually be purchased from local retail stores and can be applied by the homeowner. Always read and follow the label directions when working with any chemicals.



If you have any questions or concerns relating to mosquito control visit our website at [www.gfsmosquito.com](http://www.gfsmosquito.com) or contact the Grand Forks Public Health Department at 701-787-8110

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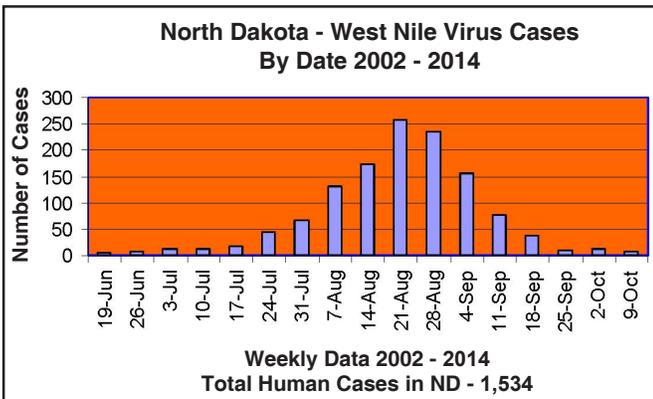
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## WEST NILE VIRUS RISK FACTORS

West Nile virus (WNV) is an infection transmitted by mosquitoes. The mosquito most common for transmitting this virus is one that is widespread throughout the Grand Forks region. This mosquito does not discriminate. People of all ages are susceptible to WNV infection, but the elderly are at higher risk for developing the more severe form of this disease (neuroinvasive illness). Children infected with WNV generally show no symptoms or may have a mild fever.

**A human case of West Nile virus was recently reported in N.D.**



### Risk factors for West Nile virus:

- Time of year – The majority of WNV cases occur from July – September.
- Geographic region – The Dakotas have reported some of the highest cases per capita in the United States.
- Time spent outdoors not wearing protective clothing and mosquito repellent – If you work or spend a lot of time outdoors (golfing, gardening, hunting, etc.), you're at a higher risk of being bitten by mosquitoes.
- Proximity – If you live in an area where WNV has already been identified or near mosquito larval habitat.
- If you have a weakened immune system.

### The best way to prevent West Nile virus infection is to avoid mosquito bites.

- Use mosquito-repellent products containing DEET.
- Wear long sleeves and pants.
- Eliminate any standing water from your property, such as trash bins, plant saucers, rain gutters, buckets, etc.

## Repellents: Still One of the Best Ways to Prevent Mosquito Bites

Unfortunately, there's no easy solution to controlling mosquitoes. The more rain and standing water we have, the more mosquito habitat available for those pesky critters. The start of the 2015 mosquito season has been fairly wet, thereby producing a healthy hatch of skeeters. Eliminating mosquito breeding sites is essential to keeping the mosquito population in check.

When the adult mosquito population seems unbearable, turn to one of the best prevention methods available... a can of OFF! Mosquito repellents with DEET are safe and very effective when applied according to the label. They've even improved many of these products so they go on dry, not oily. Don't let these pesky critters win the outdoor battle this summer. Eliminate any standing water on your property and apply repellents with DEET when outdoors.



## PROTECTION TIMES FOR TESTED MOSQUITO REPELLENTS

PRODUCT	Active Ingredient	Avg. Protection Time
OFF! Deep Woods	23.8% DEET	5 hours
Sawyer Controlled Release	20% DEET	4 hours
OFF! Skintastic	6.65% DEET	2 hours
Repel Lemon Eucalyptus	Oil of eucalyptus; p-menthane 3, 8-diol (PMD)	2 hours
Bite Blocker for Kids	2% Soybean Oil	1.5 hours
OFF! Skintastic for Kids	4.75% DEET	1.5 hours
Skin-So-Soft Bug Guard+	7.5% IR3535	23 minutes
Natrapel	10% Citronella	20 minutes
Green Ban for People	10% Citronella, 2% peppermint oil	14 minutes
Buzz Away	5% Citronella	14 minutes
Skin-So-Soft Bug Guard	0.1% Citronella	10 minutes
Gone Original Wristband	9.5% DEET	0
Repello Wristband	9.5% DEET	0
Gone+ Repelling Wristband	25% Citronella	0

For information about West Nile Virus and the Grand Forks mosquito control program visit our website at [www.gfmosquito.com](http://www.gfmosquito.com)