

MOSQUITO CONTROL

West Nile Virus in Local Mosquitoes!!

Aberdeen Mosquito Division continues to identify West Nile virus (WNV) in local mosquitoes. WNV is a serious disease that is transmitted by mosquitoes. Most people infected with this disease will have no symptoms or mild symptoms but this is a serious disease and can be fatal. The Aberdeen Mosquito Division urges citizens to take personal precautions to avoid mosquito bites. The type of mosquito most common for transmitting WNV is present in our area and is most active from dusk until dawn. Please take the necessary measures to avoid mosquito bites.



How do people get infected with WNV?

Most people get infected with WNV by an infected mosquito. Mosquitoes become infected when they feed on infected birds. Infected mosquitoes can then spread the virus to humans and other animals. In a very small number of cases, West Nile virus has been spread through blood transfusions, organ transplants, and from mother to baby during pregnancy, delivery, or breastfeeding.



Can I get West Nile virus directly from birds?

There is no evidence that a person can get infected from handling live or dead infected birds. However, you should avoid bare-handed contact when handling any dead animal. If you must pick up a dead bird, use gloves or an inverted plastic bag to place the bird's carcass (body) in a garbage bag.

Why do some states and local areas stop collecting dead birds to test for West Nile virus?

West Nile virus is found in all 48 contiguous states (not in Alaska and Hawaii) and the virus circulates in mosquitoes and birds every year. Because West Nile virus is well established, some states and local jurisdictions are no longer collecting dead birds for testing. Instead, they have chosen to shift staff and funding resources away from testing of dead birds to other areas of West Nile virus surveillance and control.



Why Trap Mosquitoes?

The Aberdeen Mosquito Division maintains an active mosquito surveillance program. The more we know about mosquitoes, the better equipped we are to control them. Our surveillance program is responsible for collecting, identifying, and conducting West Nile virus tests on mosquitoes. Traps are distributed throughout the community and the information gained from these traps include:

Mosquito Population – Knowing the population helps us determine if it's necessary to conduct citywide mosquito spraying. This information also enables us to measure the



effectiveness of the mosquito spraying operations.

Species of Mosquitoes – There's around 43 different species of mosquitoes in South Dakota. Some of these mosquitoes are just annoying pests, but one of them, the *Culex tarsalis*, is the most common mosquito for transmitting West Nile virus in South Dakota. This mosquito is prevalent in the Aberdeen region. Monitoring and testing the *Culex tarsalis* mosquito is important because it may enable us to respond to an elevated threat of West Nile virus before it infects the human population. This component of mosquito control is very important in reducing the risk of mosquito-borne disease in our community.

Mosquito Activity – Knowing what times the mosquitoes are active is important for getting the best results from our spray operation. We use ultra-low volume sprayers that deliver very small droplets and only 1 ounce of a diluted, non-residual insecticide per acre. Because we're using such a small amount of insecticide, timing is critical to be successful. This insecticide must directly impact mosquitoes, generally while in flight to be effective. Rotator traps are used to monitor the times the mosquitoes are most active.

Gender Identification – Knowing the sex of the mosquito can be helpful in predicting a new hatch. Male mosquitoes hatch out before females. Therefore, if we see a spike in the number of male mosquitoes collected in our traps, we know there's the potential for an increase of females soon to follow. That data is helpful in preparing us for a citywide spray. It's a short warning to get ready.

Traps used in mosquito surveillance programs are not successful in reducing mosquito populations. They are simply a surveillance tool used to collect data about the mosquitoes in our community.

Who is at risk for serious illness if infected with WNV? Serious illness can occur in people of any age. However, people over 60 years of age are at the greatest risk for severe disease. People with certain medical conditions, such as cancer, diabetes, hypertension, kidney disease, and people who have received organ transplants, are also at greater risk for serious illness.

Majority of West Nile Virus Cases Occur in August!

West Nile virus is a disease trans-mitted by mosquitoes. The species of mosquito most common for transmitting this disease is a mos-quito commonly found in Aberdeen and throughout the Midwest. It only takes one bite from a mosqui-to infected with West Nile virus to infect you with this terrible disease. Please take precautions to avoid mosquito bites and reduce mosquito habitat on your property.

PROTECT YOURSELF FROM WEST NILE VIRUS!

- Apply effective mosquito repellants.
- If possible, wear long-sleeved shirts and pants when outdoors.
- Eliminate standing water from your property. these mosquitoes are known to stay relatively close to the site that they hatched from.

www.aberdeen.sd.us

Myth: Some popular skin creams and “natural” repellents work as well as DEET.

Fact: Scientific studies show very few repellents are as effective as DEET (Fradin & Day, 2002). The CDC urges consumers to pick only repellents EPA registrations to assure appropriate efficacy. The most effective, the CDC says, are DEET, picaridin, oil of lemon eucalyptus (not for use on children under three years of age) and IR3535 (www.cdc.gov).

The *Culex* will breed in almost any type of freshwater. Even a container as small as a pop can may produce 1,000s of mosquitoes. They develop rapidly and produce multiple generations. The mosquito can go from egg to adult in 7 days and she can lay six or seven batches of eggs with more than 200 per batch.

Peak season for West Nile virus is from July-September and the *Culex tarsalis* (a mosquito commonly found in Aberdeen) is the most common mosquito for transmitting West Nile virus in South Dakota.

These mosquitoes primarily feed on birds but will cross over to humans, horses and other mammals later in the summer. They generally come out to bite at dusk and after dark. During the day they rest in cool shaded areas.

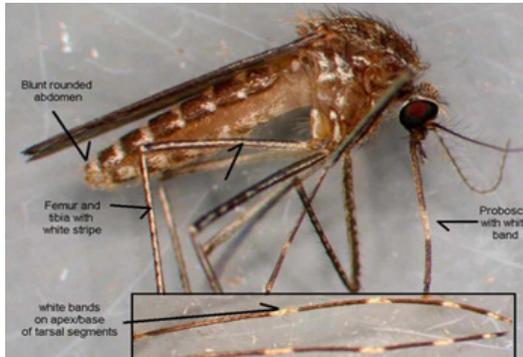
Please help reduce your risk of get-ting West Nile virus by eliminating standing water from your property and be sure to apply insect repellents when you’re around mosquitoes.

Here are 4 Simple ways to reduce the risk of West Nile virus and reduce the mosquitoes in your backyard:

1. Eliminate breeding habitat. Anything that holds water for up to seven days can produce mosquitoes. Get rid of the water!
2. Make your property not attractive for mosquitoes. Keep your grass cut short, hedges trimmed, etc..
3. Apply an effective insect repellent. Repellents have improved. There are new repellents that are odorless and leave your skin feeling dry instead of oily. Repellents are still one of the best ways to avoid mosquito bites.
4. Apply a barrier treatment to kill and fend off those pesky critters. Barrier prays can give you one to three weeks of control from a single application.

Myth: DEET is smelly and oily.

Fact: Fifty years of product development has yielded DEET-based products that are pleasant to use. They have a pleasant “feel” on the skin and fresh fragranc-es. Some even go on as a dry, powder-like formulation similar to spray deodorant. (OFF Smooth & Dry)



Notify Me Alerts

Sign up to receive email and/or text message alerts regarding city-wide mosquito spraying.

Go to the City of Aberdeen website at www.aberdeen.sd.us.

Click on the ‘Notify Me’ tab on the left side of the page.

Type in your email address and select ‘Sign In’. If you would like cell text messages, you can also enter your cell phone number.

Select the City-Wide Mosquito Spray and any other alerts of interest.

Save your profile and Sign Out.

Your will receive a ‘test message’ that requires your response.

Mosquito Trap Daily Counts

Check out the daily mosquito counts found on the Mosquito Control web site at www.aberdeen.sd.us/mosquitocontrol.

Also found on the web site is the spray routes used when performing a city-wide spray.

This publication is provided as a service of Aberdeen Mosquito Control. Please call (605) 626-7015 with any questions.