

City of Sherman

Mosquito Control Information

West Nile Virus (WNV) has been a major public health concern in North America since 1999, when the first outbreak in the Western Hemisphere occurred in New York City.

There is no way for the government to accurately measure the number of worldwide cases at this time. However, the United States keeps records of West Nile infection cases. In 2009, there were 663 cases. 335 of these cases were Encephalitis or Meningitis infections, a reaction to the virus that approximately 1 in 150 people who get the virus will show. 302 cases were filed for West Nile fever, the most likely symptom of the virus. 26 cases were unspecified. The state of Texas had the most, with 104 total cases. The total mortality rate for 2009 was 30 deaths of the 663 reported serious cases. That is a 4.5% casualty rate, but only of the severe infections. Approximately 80% of cases have no symptoms, and therefore the total casualty rate would be less than 1% of total infections in the U.S. This data and earlier years data is available from the Centers for Disease Control and Prevention.

As a result of this ongoing disease outbreak, management of mosquitoes that vector WNV throughout the United States has necessitated using insecticides in areas where they traditionally have not been used or have been used less frequently. This has resulted in concerns by the public about the risks from insecticide use.

Because of the health risks to humans, pets and plant life, the City of Sherman does not spray for mosquitoes. Instead of spraying, the City believes residents can make a larger impact by learning how to prevent mosquito populations in the first place. The City of Sherman wants to educate residents on how they can prevent mosquito infestations around their home.

Always remember the **3 D's** of protection from mosquitos:

Drain: Many mosquito problems in your neighborhood are likely to come from water-filled containers that you, the resident, can help eliminate. All mosquitos require water in which to breed. Be sure to drain any standing water around your house.

- Dispose of any tires. Tires can breed thousands of mosquitoes.
- Clear roof gutters of debris.
- Clean pet water dishes regularly.
- Check and empty children's toys.
- Repair leaky outdoor faucets.
- Change the water in bird baths at least once a week.
- Avoid water collecting on pool covers.
- Empty water collected on tarps around the yard or on woodpiles.
- Even the smallest containers that can collect water can breed hundreds to thousands of mosquitoes. They don't need much water to lay eggs (bottles, barrels, buckets, overturned garbage can lids, etc).

Bti, a naturally occurring bacteria, is becoming a popular method to kill mosquito larvae. Bti can be purchased in small donut-shaped form, often called “mosquito dunks” or in granule form, often called “mosquito bits”. These have proven to be successful in mosquito prevention when used in areas that cannot be drained, such as yard ponds, water gardens or any other standing water. Dunks and bits can be purchased in many lawn and garden, outdoor supply, farm supply and home improvement stores. The great thing about the Bti bacteria is that it kills only mosquito and black fly larvae. It is not harmful to people, pets, aquatic life or plants.

Dress: Wear light colored, loose-fitting clothing. Some mosquito species are attracted to dark clothing and some can bite through tight-fitting clothes. When practical, wear long sleeves and pants.

Defend: Choose a mosquito repellent that has been registered by the Environmental Protection Agency. Registered products have been reviewed, approved, and pose minimal risk for human safety when used according to label directions. There are current four repellents that are approved and recommended:

- Deet (N, N-diethyl-m-toluamide)
- Picardin (KBR 3023)
- Oil of lemon eucalyptus (p-methane, 3, 8-diol, or PMD)
- IR3535

Here are some rules for using repellents:

- Read the directions on the label carefully before applying.
- Apply repellent sparingly, only to exposed skin (not clothing).
- Keep repellents away from eyes, nostrils, and lips; do not inhale or ingest repellents.
- The American Academy of Pediatrics suggests that DEET-based repellents can be used on children as young as two months of age. Generally, the AAP recommends concentrations of 30% or less.
- Avoid applying repellents to portions on children’s hands that are likely to have contact with eyes or mouth.
- Pregnant and nursing women should minimize the use of repellents.
- Never use repellents on wounds or irritated skin.
- Use repellents sparingly and repeat application as needed. Saturation does not increase efficacy.
- Wash repellent-treated skin after coming indoors.
- If a suspected reaction to insect repellent occurs, wash treated skin, and call a physician. Take the repellent container to the physician.

For more information on mosquito control please visit the websites below:

www.cdc.gov/features/westnilevirus/

www.mosquito.org

www.dshs.state.tx.us/idcu/disease/arboviral/westnile