

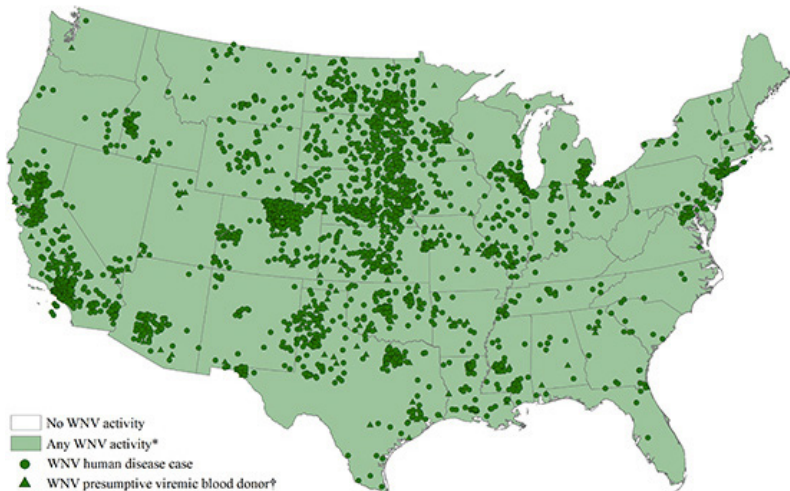
# West Nile Virus Facts

West Nile Virus is normally found in temperate and tropical regions of the world. It was first identified in the West Nile subregion of the East African nation of Uganda in 1937. Prior to the mid-1990s, WNV disease occurred only sporadically and was considered a minor risk for humans, until an outbreak in Algeria in 1994, with cases of WNV-caused encephalitis, and the first large outbreak in Romania in 1996, with a high number of cases with neuroinvasive disease. WNV has now spread globally, with the first case in the Western Hemisphere being identified in New York City in 1999.<sup>2</sup>

Mosquitoes carry the highest amounts of virus in the early fall, which is why the rate of the disease increases in late August to early September. The risk of disease decreases as the weather becomes colder and mosquitoes die off. West Nile Virus is an infectious disease transmitted to people by the bite of an infected mosquito that picked it up from an infected bird. By 2013, all 48 contiguous states and the District of Columbia reported West Nile Virus infection in people, birds, or mosquitoes.

A total of 2,469 cases of West Nile Virus disease in people, including 119 deaths, were reported to the Center for Disease Control for 2013. Of these 1,267 (51%) were classified as neuroinvasive disease (such as meningitis or encephalitis) and 1,202 (49%) were classified as non-neuroinvasive disease.<sup>1</sup>

You can go to [www.cdc.gov/westnile](http://www.cdc.gov/westnile) for maps and additional information.



## References

- 1 Center for Disease Control  
<http://www.cdc.gov/westnile/index.html>
- 2 Nash D, Mostashari F, Fine A, et al. (June 2001). "The outbreak of West Nile virus infection in the New York City area in 1999". *N. Engl. J. Med.* 344 (24): 1807–14.

# West Nile Virus Facts

Although many people are bitten by mosquitoes that carry West Nile virus, most do not know they've been infected. Only about 20% of infected people fall ill after being bitten by an infected mosquito.

Risk factors for developing a more severe form of West Nile virus include:

- Conditions that weaken the immune system such as organ transplants and recent chemotherapy
- Older or very young age
- Pregnancy

West Nile virus may also be spread through blood transfusions and organ transplants. It is possible for an infected mother to spread the virus to her child through breast milk.

While most people infected with West Nile Virus do not develop symptoms of the illness, some individuals, particularly the elderly or those with a compromised immune system, may become acutely ill; usually within 3 to 15 days after the bite of an infected mosquito.

In some the virus can cause muscle weakness, swollen lymph glands, and flu-like symptoms such as nausea, aches, and fever. Severe symptoms such as stiff neck, stupor, disorientation, tremors, convulsions, paralysis, coma, and/or death caused by inflammation of the brain (encephalitis), may also occur.

The following common symptoms usually last 3 - 6 days, but may last a month:

- Abdominal pain
- Diarrhea
- Fever
- Headache
- Lack of appetite
- Muscle aches
- Nausea
- Rash
- Sore throat
- Swollen lymph nodes
- Vomiting

More severe forms of disease, which can be life threatening, may be called West Nile encephalitis or West Nile meningitis, depending on what part of the body is affected.

The following symptoms can occur, and need prompt attention:

- Confusion or change in ability to think clearly
- Loss of consciousness or coma
- Muscle weakness
- Stiff neck
- Weakness of one arm or leg

There is no specific treatment or vaccine for the disease and antibiotics are ineffective. Currently, no vaccine against West Nile Vile infection is available.

On an individual basis, the use of personal protective measures to avoid being bitten by an infected mosquito is the best course of action.

# West Nile Virus Facts

## Recommendations to prevent mosquito breeding include:

- Discard old tires, buckets, drums, or any water holding container
- Keep roof gutters and downspouts clear of debris
- Keep trash containers covered
- Empty plastic wading pools at least once a week; store indoors when not in use
- Drain unused swimming pools
- Fill in tree rot holes and hollow stumps that hold water
- Change the water in bird baths and plant urns at least once a week
- Store boats upside down or drain rainwater weekly

## Recommendations to prevent mosquito bites include:

- Wear light colored clothing that minimizes exposed skin and provides some protection from mosquito bites
- Make sure door and window screens fit tightly and that holes are repaired
- Apply insect repellent. Avoid those usually recommended that contain DEET, Picaridin, or IR3535. They are known to be **very** toxic. Not recommended for small children, the elderly or those with health conditions.
- **Bug Pro-Tech** Repellent Spray is a natural Essential Oil repellent containing Eucalyptus Citriodora, Tea Tree, and Grape Seed oil. All are known to be a much safer and effective alternative to toxic bug repellents.
- Stay indoors at dawn, at dusk, and in the early evening during the warm months, when mosquitoes are most voracious.
- If you should get bitten, apply **After-Bite** Blend to reduce the itching and to help disinfect the bite area reducing the risk of viral or bacterial infection growth.



# Insect Repellent Products

## Bug Pro-Tech Insect Repellent Spray



**Ingredients:** Certified Organic oils of Eucalyptus Citriodora, Tea Tree, and Grape Seed.

This is a gentle but very effective blend with several seasons of successful use to its credit. Safe for those of all ages, it is in a base of hypoallergenic Grape Seed oil with no toxic chemicals added.

Naturally non-toxic and gentle on the skin, the Grape Seed oil base helps it stay on the surface of the skin longer than water-based products that evaporate quickly, requiring the repellent to be reapplied more frequently or to become ineffective altogether.

### Suggest Usage

- Lightly spray areas of exposed skin and spread evenly with hands. Do not spray directly into the face; spray on hands and rub on face being careful not to get too close to the eyes or in the mouth. Repeat as needed every couple of hours or if you notice a mosquito landing on your skin.
- For Pets: Spray lightly on hands and then apply to animal's coat. Do not use on cats.

## After-Bite Soothing Relief Blend



**Ingredients:** Certified Organic and Wild Harvested oils of Patchouli, Lavender Fine, Spruce, Black; Neroli, Vetiver, Basil, Sweet; and Certified Organic Fractionated Coconut Oil.

After-Bite Blend is designed to be applied to an insect bite to detox the bite area and help relieve itching and the swelling that develops around the area of the bite.

When scratching repeatedly, the bite area can bleed and the skin can become abraded allowing infection to enter the bite. After-Bite blend is disinfecting, wound healing, and promotes detoxification of the toxin injected by the insect.

### How to Apply

- Roll After-Bite over the surface of the bite area including all swollen and itchy areas. May be applied as needed to reduce itching, reduce swelling, and promote healing. Non-toxic and safe for all ages when used as directed..