

West Nile Virus



Frequently Asked Questions

What is West Nile virus?

West Nile virus is a viral infection that is spread by the bite of an infected mosquito. Mosquitoes get infected with the West Nile virus by feeding on infected birds. The infected mosquitoes then spread the virus by biting humans and other animals, such as horses. Identified in the United States in 1999, West Nile virus is seen most often during the summer and early fall months.

Who gets West Nile virus?

Anyone can get infected with the West Nile virus. The virus can affect anyone bitten by an infected mosquito. People over the age of 50 and people with weak immune systems are at greater risk of developing severe illness.

How do people get West Nile virus?

The virus is spread by the bite of a mosquito infected with the West Nile virus.

What are the symptoms of West Nile virus?

Many people infected with West Nile virus do not become ill and may not develop symptoms. About 20% of infected people will develop West Nile fever. When symptoms do occur, they may be mild or severe and show up 3 to 15 days after being bitten by an infected mosquito.

- Mild symptoms include flu-like illness with fever, headache, body aches, nausea and sometimes swollen lymph glands or a skin rash on the chest, stomach and back.
- Severe symptoms include high fever, neck stiffness and swelling of the brain (encephalitis) which can lead to coma, convulsions and death. Less than 1% of infected people will develop severe symptoms.

How is West Nile virus diagnosed?

If a health care provider suspects West Nile virus, samples of the patient's blood or spinal fluid will be examined.

What is the treatment for West Nile virus?

There is no specific treatment for West Nile virus. Most people with West Nile fever will recover in approximately seven days. Antibiotics are not effective against viral illnesses and anti-viral drugs have not shown to be effective for treating West Nile virus. Most treatment focuses on supportive therapy to lower fever and ease pressure on the brain and spinal cord. In severe cases, hospitalization may be needed. There is no vaccine for humans.

Can people with West Nile virus pass the illness to others?

The virus that causes West Nile virus is spread only by mosquitoes. West Nile virus is not spread from person to person.

In rare cases, the virus has been spread through blood transfusions, organ transplants, breastfeeding and during pregnancy from mother to baby.

How can West Nile virus be prevented?

The best way to protect yourself from getting West Nile virus is to prevent mosquito bites.

Follow these steps to reduce your risk of being bitten by mosquitoes:

- Wear shoes and socks, long pants and a long-sleeved shirt when outdoors at dusk or dawn when mosquitoes are most active.
- Use an EPA-registered insect repellent such as those with DEET, picaridin, or oil of lemon eucalyptus. These products can be used on skin or clothing. Choose a product that provides protection for the amount of time spent outdoors. Permethrin is another type of insect repellent. It can only be used on clothing. ALWAYS follow the directions on the product label.

Mosquitoes begin to breed in any puddle or standing water that lasts for more than four days. Get rid of mosquito breeding sites around the home.

- Clean out gutters and drains
- Dispose of old tires
- Drain standing water from pool covers. Keep pools chlorinated. Flip over plastic children's pools when not in use.
- Remove all containers that hold water
- Change birdbath water every several days
- Make sure all windows and doors have screens and that all screens are in good condition.

Where can I get more information on West Nile virus?

- Your health care provider
- Your local health department
- NJ Department of Health <http://www.nj.gov/health>
- Centers for Disease Control and Prevention <http://www.cdc.gov/westnile>

This information is intended for educational purposes only and is not intended to replace consultation with a health care professional.

Adapted from Centers for Disease Control and Prevention.

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Avoid Mosquito Bites

- ✔ Use insect repellent when outdoors.
 - DEET is the “gold-standard” for mosquito repellents. Choose the proper percent of DEET for the amount of time you will be spending outdoors. The higher the concentration, the longer the protection. **Follow all directions carefully.**
 - Do not apply to eyes, mouth, or broken skin (cuts, scrapes, etc.).
 - Do not apply to skin that is covered with clothing.
 - Avoid using products that combine sunscreen with insect repellent. Apply separate products.
 - Do not use products that contain permethrin on skin. Spray onto clothing only. Permethrin can also be sprayed on gear such as hats, tents and sleeping bags.

Note: DEET and other repellents can be used on children older than two months of age. Apply repellent to your hands and then rub onto children. Oil of lemon eucalyptus should not be used on children younger than three years of age.

- ✔ Wear light-colored clothes with long sleeves and long pants. Mosquitoes are more attracted to dark-colored clothes.
- ✔ Limit time outdoors when mosquitoes are most active (during dusk and dawn).
- ✔ Use mosquito netting on infant carriers and strollers while outdoors.

Mosquito-Proof Your Home

- ✔ Drain standing water.
 - Clean out gutters and drains.
 - Dispose of old tires. Drill holes in tire swings.
 - Drain standing water from pool covers. Make sure pool covers are pulled tight. Keep pools chlorinated. Flip over plastic children’s pools when not in use.
 - Drain or change water every four days in containers such as pet dishes, flower pots, wheelbarrows, birdbaths, decorative pools and rain barrels. Decorative pools and rain barrels can be stocked with a special type of fish that feed on mosquito larvae.
 - Cover garbage and recycling containers. Remove any loose garbage from your yard such as bottle caps, pie plates, food containers, etc.
 - Check swing sets, lawn furniture and decorations, toys, etc. for standing water.
- ✔ Install or repair window screens.
- ✔ Call your county mosquito control agency at 1-888-NO NJ WNV for more information on mosquito control activities in your neighborhood, or to report mosquito problems in your yard.

A photograph of a well-maintained wooden deck. In the foreground, there are two dark brown wicker chairs with light-colored cushions and a matching wooden table. The deck is surrounded by a wooden railing. To the right, there are several potted plants, including purple flowers and green foliage. In the background, there is a white door with a glass insert and a brick wall. A black lantern-style light fixture is mounted on the wall above the door.

Use this checklist to help you find and eliminate the places where mosquitoes breed around your home. Any container that holds water can be a home for mosquito larvae. After 7 days, larvae will become adult mosquitoes. Remember to stay aware and to keep containers free of standing water.

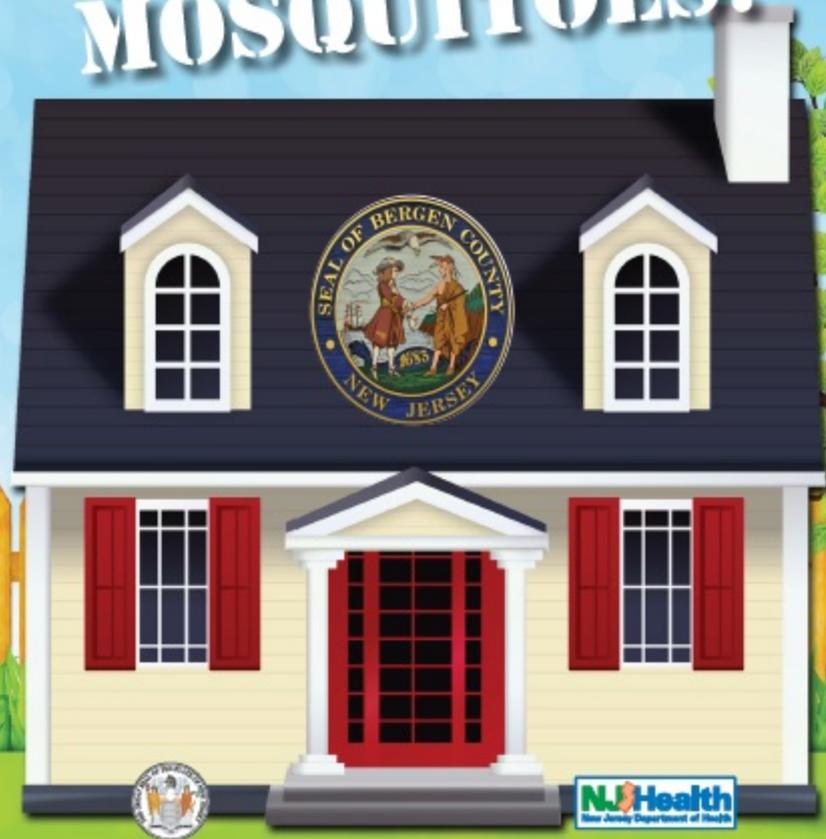
Mosquito-Proof Your Yard **Habitat Checklist**

**WATER + 7 DAYS =
MOSQUITOES!**



Mosquito-Proof Your Yard

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Mosquito-Proof Your Yard Habitat Checklist.....



Buckets
Empty buckets and turn them over.

Gutters
Keep gutters clean and properly pitched.



Garbage cans and recycling bins
Drill drainage holes in the bottoms of garbage cans and recycling bins and keep them covered to prevent water from getting in.



Portable basketball hoops and playsets
Make sure caps for basketball hoop fill holes are in place; replace if lost. Dry off playsets to prevent standing water.



Leaky hose spigots
Fix leak or call a professional plumber.



Decks and Porches
Make sure to check under decks and porches for containers that may hold water.



Flexible downspout extensions
Pitch downspout extensions so water drains completely after it rains or replace with a non-flexible extension that is pitched to drain fully. Keep the inside free of debris.



Kiddie pools
Empty or change the water every 5-7 days. Be sure to store indoors or turn over when not in use.

Big plastic toys, wagons, etc.
Keep toys turned over or inside when not in use. If water can get inside the toy or tire swing, drill drainage holes in the bottom.



Tarps, plastic bags and sheets
Keep tarps tight and refit them if water collects.



Bird Baths
Change water at least once a week.



Deflated toys
Drain off water, dry out, and store indoors when not in use.



Sand boxes
Drill small drainage holes in the bottom of the sand box.

Watering Cans
Empty and store upside down or in a garage or shed.



Pet dishes and planter saucers
Dump the water out or rinse the dish or saucer every 3-5 days.



Self-watering planters
Tightly seal the watering hole after adding water. The most effective method for preventing mosquitoes is to not use these planters.



Wheelbarrows
Turn wheelbarrows over or store them upright. Check them weekly and empty any water found.

Planters without drainage holes
Drill holes in the bottom of your planter.

Rain Barrels
Cover tops of rain barrels with tightly fitted screen. (Use nylon window screen and secure with a bungee cord or other tight elastic.) Mosquitoes will use the overflow hole to get in and lay their eggs; either plug hole or contact your local mosquito control agency for guidance.*



Decorative Ponds
Add a fountain, waterfall or other device to prevent standing water, or contact your local mosquito control agency on how to treat for mosquito larvae.*

Boats
Empty all the water possible. Cover boats in storage with tight-fitting tarps or use boat shrink wrap.



Behind the shed and under shrubs
Look under bushes and in overlooked spots in the yard and remove debris that can hold water.



Pools and pool covers
Keep pool covers tight. If you know of an abandoned home in your neighborhood with a neglected pool, contact your local mosquito control agency.*



Jet skis
Rinse out the foot depressions with a hose every week. Jet skis can be tightly tarped or stored indoors.

*For contact information on your local mosquito control agency, visit <http://www.nj.gov/dep/enforcement/pcp/bpo-mfacencies.htm>.

The Monmouth County Mosquito Control Division is acknowledged for information contained in this brochure.