How can I prevent mosquito-borne diseases?

1. Protect Against Mosquito Bites

 Use EPAregistered insect repellent with DEET, picaridin, IR3535, oil of lemon



eucalyptus (para-menthane-diol) or 2undecanone. Always follow the product label instructions.

- Do not use insect repellent on children younger than 2 months. Do not use products with oil of lemon eucalyptus (para-menthane-diol) on children younger than 3 years.
- Wear long-sleeved shirts and long pants. Cover crib, stroller and baby carrier with mosquito netting.

2. Avoid Mosquito Bites After Travel

Avoid mosquito bites for 3 weeks after travel. This helps to reduce the spread of new diseases to local New Jersey mosquitoes which may then infect other people.

3. Mosquito-Proof Your Home and Yard

Empty or change outdoor standing water weekly to stop mosquito breeding.



Use window and door screens. Repair holes in screens to keep mosquitoes outside and use air conditioning when possible.

Where can I find more information about mosquito-borne diseases?

New Jersey Department of Health Communicable Disease Service: www.state.nj.us/health/cd

New Jersey Department of Environmental Protection Office of Mosquito Control Coordination: www.nj.gov/dep/mosquito

Centers for Disease Control and Prevention Division of Vector-Borne Diseases:

www.cdc.gov/ncezid/dvbd/index.html

Environmental Protection Agency Insect Repellents: www.epa.gov/insect-repellents



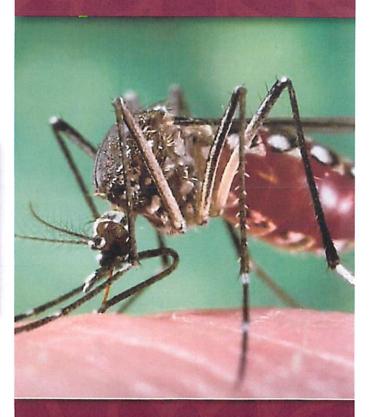
New Jersey Department of Health Communicable Disease Service PO Box 369 Trenton, NJ 08625 (609) 826-4872





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Mosquito-Borne DISEASES





MOSQUITO-BORNE DISEASES

What are mosquito-borne diseases?

Mosquito-borne diseases are illnesses that are spread to humans by the bite of an infected mosquito. In New Jersey, the most common mosquito-borne diseases people can get from local mosquitoes are:

- West Nile virus
- Eastern equine encephalitis

In other areas, mosquito-borne diseases include:

- Chikungunya
- Dengue
- Jamestown
 Canyon virus
- La Crosse encephalitis
- Malaria
- St. Louis encephalitis
- Yellow Fever
- Zika

How do mosquito-borne diseases spread?

Mosquitoes become infected when they feed on birds or mammals carrying the disease. Infected mosquitoes can then spread the disease to people and other animals such as horses.

Rarely, some mosquito-borne diseases can be spread through blood transfusion, organ transplantation, unprotected sex, breastfeeding and pregnancy.



What are the symptoms of mosquito-borne diseases?

Most people infected with a mosquito-borne illness do not show any symptoms. Depending on the disease, if symptoms do appear, they may be mild. However, symptoms can sometimes be severe and result in death. Symptoms of a mosquito-borne disease typically appear 2-14 days after exposure.

Mild Illness	
Fever	Joint pain
Chills	Body aches
Headache	Rash

Severe Illness			
High fever	Paralysis		
Stiff neck	Coma		
Seizures	Heavy bleeding		
Confusion	Brain swelling		



Who is at risk for mosquito-borne diseases?

Anyone can get a mosquito-borne illness, but people who spend more time outside have a higher risk of becoming infected. Older adults and people with weak immune systems may



develop more severe illness.

How are mosquito-borne diseases diagnosed?

Visit a healthcare provider if you develop any symptoms of a mosquito-borne illness. Make sure to mention recent travel and outdoor activities. A healthcare provider



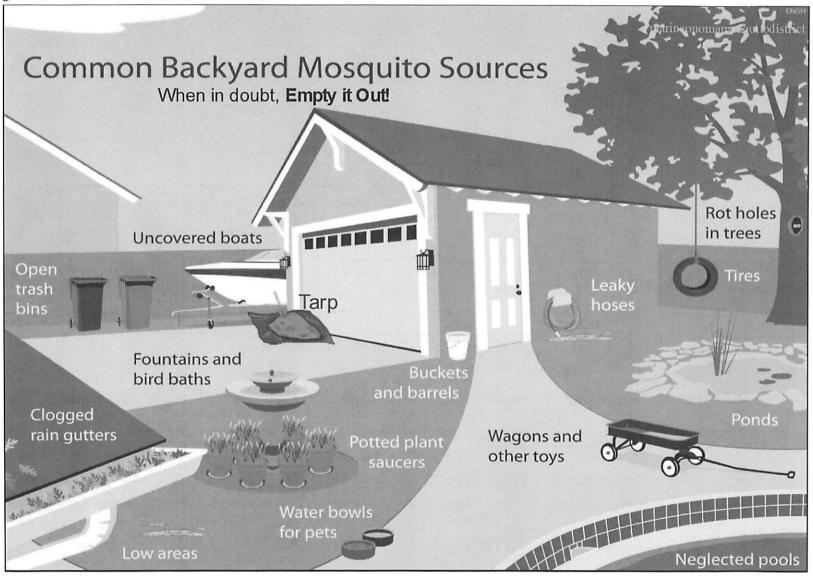
can order blood tests to look for infection based on your symptoms and exposure.

What is the treatment for mosquito-borne diseases?

There are no vaccines or specific treatments for most mosquito-borne diseases. Mild cases usually improve on their own. In severe cases, patients may need to be hospitalized. If you think you or a family member may have a mosquito-borne disease, call or visit a healthcare provider.



STOP Mosquitoes where they GROW... Mosquito Proof your Yard and Home



For More Information:
Morris County Mosquito Commission
973-285-6450
www.morrismosquito.org

West Nile Virus

West Nile virus **(WNV)** is a mosquito-borne disease caused by the bites of infected mosquitoes, and it is the main mosquito disease in the continental United States. Cases of WNV arise in the summer and continue through the fall. Everyone is at risk for WNV infection, but the risk for developing severe illness is greater among those those 50 years and older, individuals with a weakened immune system, or those with a medical history of chronic diseases such as cancer, diabetes, and high blood pressure.

HOW DOES WNV SPREAD?

This virus spreads by mosquito bites. WNV does not spread by person-to-person contact.

WHAT ARE THE SYMPTOMS OF WNV?

Usually, people do not develop symptoms; mild symptoms are flu-like, while severe cases present with high fever, stiff neck, muscle weakness, nausea, seizures, confusion, paralysis, and rash. Symptoms could develop between **3-14** days after the infection. If you are experiencing severe symptoms, contact your healthcare provider immediately. One of the most severe complications of WNV is **meningitis**.

HOW IS WNV TREATED?

There is no specific treatment for WNV, nor is there a preventive vaccine. However, people with severe symptoms may require hospitalization because the virus can affect the **central nervous** system.

WHAT CAN YOU DO TO PREVENT WNV?

- Protect yourself and your loved ones from mosquito bites. Mosquitos that spread WNV are more active during the evening to early morning hours.
- Use Environmental Protection Agency (EPA) registered insect repellents and wear long-sleeved shirts and pants. You can also treat clothing and gear with insect repellent.
- Protect your home by ensuring your window screens are in good shape, and drain any standing
 water (from pots, pet bowls, birdbaths, trashcans, tarps and other containers) every 2-3 days to
 avoid mosquito breeding. Check for water-holding containers both indoors and outdoors.
- Clean out gutters and drains and dispose of old tires.
- To report standing water, contact the Morris County Mosquito Control at 973.285.6450.
- If you have any questions, or need additional information please contact the Health Department.









Warning West Nile Virus was found in your area!

Protect Yourself Against Mosquito Bites!



Virus del Nilo Occidental

El virus del Nilo Occidental (**VNO**) es una enfermedad transmitida por la picadura de mosquitos infectados. Esta es la principal enfermedad transmitida por mosquitos en el país. Los casos de VNO predominan en el verano y continúan durante el otoño. Todo el mundo corre el riesgo de contraer VNO, sin embargo, el riesgo de síntomas graves es mayor para las personas de 50 años o más, personas con un sistema inmune debil o aquellas con antecedentes médicos de enfermedad crónica como cáncer, diabetes e hipertensión.

¿CÓMO SE PROPAGA EL VNO?

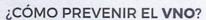
Este virus se transmite por picaduras de mosquitos. No se transmite por el contacto de persona a persona.

¿CUÁLES SON LOS SÍNTOMAS DEL VNO?

Por lo general la infección es asintomática; algunos pueden desarrollar síntomas leves similar a una gripe, pero los casos graves se presentan con fiebre alta, cuello rígido, debilidad muscular, náuseas, convulsiones, confusión, parálisis y sarpullido. Los síntomas pueden desarrollarse de 3 a 14 días luego de la infección. En caso de tener síntomas graves, comuníquese de inmediato con su médico. Una de las complicaciones más graves del VNO es la meningitis.

¿CÓMO SE TRATA EL VNO?

No hay un medicamento específico para el VNO ni una vacuna preventiva. Sin embargo, las personas con síntomas graves pueden requerir hospitalización, ya que el virus afecta el sistema nervioso.



- Protégete y protege a tus seres queridos de las picaduras de mosquitos. Los mosquitos que transmiten el VNO son más activos en la tarde hasta las primeras horas de la mañana.
- Utilice repelentes de insectos registrados por la Agencia de Protección Ambiental (EPA), use camisa manga larga y pantalones; también puede aplicar repelente en su ropa.
- Proteja su hogar asegurándose de que las mallas de ventanas estén en buen estado y drene el agua estancada (de macetas, recipeintes de mascotas, bebederos para pájaros, botes de basura, lonas y otros contenedores) cada 2 o 3 días para evitar la reproducción de mosquitos. Verifique si hay recipientes que contengan agua tanto en el interior como en el exterior.
- Limpie canaletas y desagües y deseche los neumáticos viejos.
- Comuníquese con Control de Mosquitos del Condado de Morris al 973.285.6450, para informar sobre areas de agua estancada.
- Si tiene alguna pregunta o necesita información adicional, comuníquese con el Departamento de Salud al.









Advertencia ¡Se encontró el virus del Nilo Occidental en su área! ¡Protégete contra las picaduras de mosquitos!



Morris County Mosquito Control

973-285-6450



www.morrismosquito.org

Our Services

Yard Inspections

Larval Control (immature, water borne stage of the mosquito)

- hand held
- helicopter

Adult Mosquito Control

ATV, truck, backpack sprayer

Water Management

- ditch and stormwater maintenance
- tree removal from streams
- hand cleaning of ditches, streams, etc.

Surveillance

- mosquito trapping
- disease testing

Education and Outreach

Fish Stocking

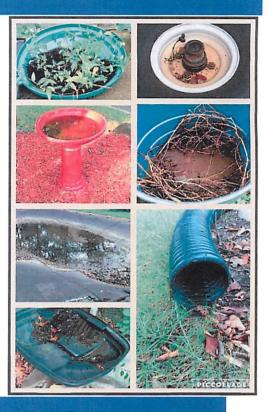
Tire Collection

Adult & Larval Mosquito Collections





Mosquito Habitat—Around the Home



Service Requests

How Can We Help?

Residents Call or email a service request

An inspector will come out and set up a plan of action— Free for County Residents

Action Plans by Mosquito Control Staff

Yard inspection—to locate possible larval mosquito sources

Treat standing water for mosquito larvae

Set a trap to collect adult mosquitoes or do a landing rate

Schedule an adult mosquito spray for either the neighborhood, street or yard

Sometimes woods or surrounding habitat are treated

Other recommendations for source reduction will be made (empty containers, have water management staff come hand clean a ditch, suggest cleaning gutters, etc.)

NOT EVERY SERVICE REQUEST WILL RESULT IN AN ADULT MOSQUITO SPRAY

CHOOSING A REPELLENT THAT'S RIGHT FOR YOU

	DEET	Picaridin	IR3535	Oil of lemon eucalyptus	Permethrin
How do I apply it?	Follow labeApply direcAvoid eyes,Spray on ha	Never apply directly to skin! Apply only to clothes, shoes, tents, & other fabrics. Avoid use around pets - toxic to cats!			
Can I use it on my kids?	Recommended for use on children 2 months & older. Adults should apply. Recommended for use on children 3 use on children 3 years and older. Adults should apply.				All ages can wear treated clothes. Follow label instructions.
Is it effective? How long does it last?	Highly effective. Lasts 2 to 8 hours, depending on concentration.	Highly effective. Lasts 3 to 10 hours, depending on concentration.	Moderately effective. Lasts 4 to 6 hours.	Highly effective. Lasts up to 2 hours.	Highly effective repellent & contact insecticide. 0.5% sprays applied to clothing can last for 5 to 7 washes.
What can it repel? 🐞	Mosquitoes, ticks, fleas, black flies, biting midges	Mosquitoes, ticks, fleas, black flies, biting midges	Mosquitoes, ticks, black flies	Mosquitoes, ticks, fleas, black flies, biting midges, gnats	Mosquitoes, ticks, fleas, black flies,human lice, chiggers
Other names for ingredient	N, N-diethyl-meta- toluamide	Icaridin, Piperidine, Propidine, INCI, KBR 3023	Ethyl butyl acetyl aminopropionate	P-methane-3, 8-diol, PMD	* *



Products with lower concentrations of these ingredients may not be as effective at repelling ticks. Always look on the product label to see what pests are effectively targeted by the active ingredient. Visit www.epa.gov/insect-repellents/find-repellent-right-you for more product-specific information.