



AGENDA ITEM EXECUTIVE SUMMARY

Agenda Item:	FY25 Mosquito Abatement		
Presenter & Title:	Richard Babica, Director of Public Works		
Date:	April 15, 2024		
Please Check Appropriate Box:			
<input checked="" type="checkbox"/>	Committee of the Whole Meeting	<input type="checkbox"/>	Special Committee of the Whole Meeting
<input checked="" type="checkbox"/>	City Council Meeting	<input type="checkbox"/>	Special City Council Meeting
<input type="checkbox"/>	Public Hearing	<input type="checkbox"/>	Other -
Associated Strategic Plan Goal/Objective: ES I			
Estimated Cost: \$56,444	Budgeted?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Other Funding? <input type="checkbox"/> Yes <input type="checkbox"/> No
<i>If "Other Funding," please explain how the item will be funded:</i>			
Executive Summary:			
<p>The FY25 Budget provides \$60,000 within the General Fund to conduct Mosquito Abatement within the City. The current provider, Clarke Environmental has prepared the attached proposal which includes; conducting an aerial survey to identify breeding sites, maintaining a customer service center to respond to nuisance issues and customer care, maintain traps to surveil adult population for disease vectors, larval control and adulticide applications if necessary. Clarke Environmental has conducted mosquito abatement for the city since 2015 and staff is confident in their ability to continue to provide this service. Also attached are copies of FAQ pages from the CDC, IDPH and Kane County Health Department with additional information.</p>			
Attachments: <i>(please list)</i>			
<ul style="list-style-type: none"> • Resolution • Clarke Environmental Mosquito Management, Inc. Proposal dated 03/25/24 • FAQ pages for CDC, IDPH and Kane County health Department 			
Voting Requirements:			
<p><i>This motion requires a simple majority of affirmative votes for passage. (City Council Only)</i></p> <p><i>The Mayor may vote on three occasions: (a) when the vote of the alderpersons has resulted in a tie; (b) when one half of the alderpersons elected have voted in favor of an ordinance, resolution, or motion even though there is no tie vote; or (c) when a vote greater than a majority of the corporate authorities is required by state statute or local ordinance to adopt an ordinance, resolution, or motion.</i></p>			
Recommendation / Suggested Action: <i>(how the item should be listed on agenda)</i>			
<p>Recommend Approval of a Resolution Authorizing Execution of Service Agreement with Clarke Environmental Mosquito Management, Inc. for the FY25 Mosquito Abatement Program in an amount not to exceed \$56,444.</p>			

RESOLUTION NO. 2024-43

**RESOLUTION AUTHORIZING EXECUTION OF SERVICE AGREEMENT
FOR THE MOSQUITO ABATEMENT PROGRAM**

BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF GENEVA, KANE COUNTY, ILLINOIS, as follows:

SECTION 1: That the City Administrator is hereby authorized to execute, on behalf of the City of Geneva, the Service Agreement for the FY25 Mosquito Abatement Program for the City of Geneva, in the form attached hereto at Exhibit “A,” with Clarke Environmental Mosquito Management, Inc. in an amount not to exceed \$56,444.

SECTION 2: This Resolution shall become effective from and after its passage as in accordance with law.

PASSED by the City Council of the City of Geneva, Kane County, Illinois, this ____ day of _____, 2024

AYES: __ NAYS: __ ABSENT: __ ABSTAINING: __ HOLDING OFFICE: __

Approved by me this ____ day of _____, 2024.

Mayor

ATTEST:

City Clerk



TRANSMITTAL

May 9, 2024

Clarke Environmental Mosquito Management, Inc.
Attn: Jake Thennisch
Control Consultant
675 Sidwell Ct
St. Charles, IL 60174

RE: 2024 Service Agreement
City of Geneva

COPIES	DATE	DESCRIPTION
1	05/07/24	Executed Proposal

MESSAGE:

One (1) Original Executed signed proposals approved by City Council on May 6, 2024. Please sign and return one (1) to my attention.

Thank you,

A handwritten signature in blue ink, appearing to read "Richard Babica", is written over a light blue horizontal line.

Richard Babica
Director, Geneva Public Works

Cc: File



Clarke Environmental Mosquito Management, Inc. 2024 Service Agreement | City of Geneva

Part I. General Service

- A. Aerial Survey and Geographic Information System (GIS) Mapping
- B. Computer System and Record Keeping Database
- C. Public Relations and Educational Brochures
- D. Mosquito Hotline Citizen Response – citizens may report nuisance mosquitos at www.clarkeportal.com/hotline or 800-942-2555
- E. Comprehensive Insurance Coverage naming the City of Geneva additionally insured
- F. Program Consulting and Quality Control Staff
- G. Monthly Operational Reports, Periodic Advisories, and Annual Report
- H. Regulatory compliance on local, state, and federal levels

Part II. Surveillance and Monitoring

- A. Floodwater Mosquito Migration Model:
The use of weather data and computer model to predict the arrival of *Aedes vexans* brood (hatch) and peak annoyance periods. (Clarke will contact the City of Geneva representative and inform him of the impending brood arrival.)
- B. Survey & Mapping
 - 1. Program provides for larval site survey map of potential mosquito breeding areas for the community.
- C. Arbovirus Surveillance:
 - 1. Gravid Trap: Operation of one (1) traps to collect *Culex* mosquitoes. Mosquitoes will be collected, identified to species, and pooled for disease assay. Samples will be tested at Clarke laboratories utilizing RAMP technology for West Nile Virus.
 - 2. Clarke New Jersey Light Trap Network: Operation of four (4) traps within the City of Geneva to monitor and evaluate adult mosquito activity.
 - 3. Clarke New Jersey Light Trap Network to monitor and evaluate adult mosquito activity.
- D. Weather Monitoring – Operational Forecasts



Clarke Environmental Mosquito Management, Inc. 2024 Service Agreement | City of Geneva

Part III. Larval Control

- A. Targeted Mosquito Management System (TMMS™) computer database and site management.
- B. Larval Site Monitoring:
 - 1. One (1) complete inspections of all sites as outlined by most recent Clarke GIS Survey.
 - 2. Three (3) targeted inspections of all breeding areas as determined by the Clarke Targeted Mosquito Management System™.
 - 3. Inspections of sites called in by residents on the Mosquito Hotline.
- C. Prescription Larval Control treatments will be performed with *Bacillus sphaericus*, *Bacillus thuringiensis israelensis* - Bti, methoprene, temephos, and/or Natular® (Spinosad) mosquito larvicide as described in the following sections.
 - 1. Helicopter Larval Control: Treatments using a single brood product of all acres for floodwater mosquito control.
 - 2. Catch Basins: One treatment of all catch basins, inlets and manholes using an extended residual slow release insecticide for up to 150 day control.

Part IV. Adult Control will be performed with Duet, Biomist, or other pyrethroid mosquito adulticide as described in the following sections.

- A. Adulticiding in mosquito harborage areas:
 - 1. Four (4) scheduled truck Ultra Low Volume (ULV) treatments using a pyrethroid insecticide for any community special events. (Swedish Days)
- B. Adulticiding in Residential Areas:
 - 1. Four (4) community-wide truck ULV treatments of all streets using Duet, Biomist®, or other pyrethroid insecticide.
- C. Adulticiding Operational Procedures
 - 1. Notification of community contact.
 - 2. Weather limit monitoring and compliance.
 - 3. Notification of residents on Clarke Call Notification List.
 - 4. ULV particle size evaluation.
 - 5. Insecticide dosage and quality control analysis.

Total 2024 Estimated Price

\$56,444.00



Clarke Environmental Mosquito Management, Inc.
 2024 Service Agreement | City of Geneva

Agreement Payment Plan:

For Parts I, II, III and IV as specified in the 2024 Service Agreement, the total for 2024 program is \$56,444.00. Any additional treatments beyond the core program will be invoiced when the treatment is completed. City of Geneva has the option to extend this program for 2025 and 2026 at rates not to exceed the annual Cost of Living Allowance C.O.L.A.

PAYMENT PLAN

Month	2024
June 1	\$28,222.00
July 1	\$28,222.00
TOTAL	\$56,444.00

Approved Contract Period and Agreement:

Please check one of the following contract periods:

2024 thru 2026 Season

(New areas to be covered in 2025 - 2026 will be pro-rated to the program price at the rates in effect at the time.)

****NPDES Permit:** A National Pollutant Discharge Elimination System (NPDES) permit is necessary for the execution of the work for mosquito control effective October 31, 2011. Any additional costs associated with activities and/or services that may be required by Clarke in order to comply with an NPDES permit are not included in this proposal.

For City of Geneva:

Sign Name: *Stephanuk* Title: CITY ADMINISTRATOR Date: 04-15-24

For Clarke Environmental Mosquito Management Inc.:

Name: *Jack Thennisch* Title: Control Consultant Date: 3/25/24
 Jack Thennisch



Clarke Environmental Mosquito Management, Inc.
 2024 Service Agreement | City of Geneva

Administrative Information (Please complete the information below to update your files):

Invoice Address:

Name: _____

Address: _____

City: _____ State: _____ Zip _____

Office Phone: _____ Fax: _____ P.O. # _____

E-Mail Address for Invoices: _____ County: _____

****In an effort to be sustainable, please provide an email address where invoices will be sent.**

Treatment Address (if different from above):

Address: _____

City: _____ State: _____ Zip _____

County: _____

Contact Details:

Name: _____ Title: _____

Office Phone: _____ Fax: _____ E-Mail: _____

Home Phone: _____ Cell: _____ Pager: _____

Alternate Contact Details:

Name: _____ Title: _____

Office Phone: _____ Fax: _____ E-Mail: _____

Home Phone: _____ Cell: _____ Pager: _____

Please sign and return a copy of the complete contract for our files to:
 Clarke Environmental Mosquito Management, Inc., Attn: Jack Thennisch
 675 Sidwell Ct. St Charles, IL 60174 or Fax at (630) 443-3070



West Nile Virus

Aerial Spraying

What You Need to Know About Aerial Spraying

Airplanes and helicopters can be used to treat very large areas with [larvicides](#) or [adulticides](#) to kill mosquito larvae or adult mosquitoes. This process is called aerial spraying. Aerial spraying is used to:

- Control and reduce the number of mosquitoes that can spread viruses. This can reduce your chances of getting sick.
- Control and reduce the number of nuisance mosquitoes that bother people but do not spread viruses.

Mosquito control districts or local government departments track both nuisance mosquitoes and mosquitoes that can spread viruses. When large numbers of nuisance or infected mosquitoes are found or when people in a large area are getting sick, airplanes and helicopters can treat very large areas with insecticides safely, quickly, and efficiently.

What does insecticide spraying do?

Airplanes and helicopters spray products that quickly kill either adult mosquitoes or mosquito larvae to reduce the number of mosquitoes in an area.

- Spraying larvicides kills mosquito larvae that hatch from eggs.
- Spraying adulticides quickly kills flying mosquitoes.
- Both larvicides and adulticides temporarily reduce the number of mosquitoes in an area, but do not permanently get rid of them.

How does aerial spraying work?

- Aerial spraying uses very low volumes of either adulticide or larvicide in areas where mosquitoes are present.
- Aerial spraying of larvicides can occur at any time. Aerial spraying of adulticides occurs when mosquitoes are most active and when pollinating insects are not active.
- Aerial spraying is more effective and faster than truck-mounted or handheld sprayers in treating large areas of land.

How will I know aerial spraying is going to take place?

The dates and times of aerial sprayings are typically announced in the local newspaper, on district websites and social media, through public service announcements, by telephone, or through door-to-door campaigns.

Do I need to leave the area during aerial spraying?

No. You do not need to leave an area during aerial spraying. When applied by a licensed vector control professional who follows label instructions, aerial spraying poses minimal risk to people, pets, animals, and the environment.

Because aerial spraying uses very low volumes of either adulticide or larvicide, you aren't likely to breathe or touch anything that has enough insecticide on it to harm you. There is a possibility that spraying larvicides, like Bti, or adulticides can cause eye irritation if a person is outside when spraying takes place.

Information on insecticides and health

- The Environmental Protection Agency oversees the registration of insecticides.
- The [National Pesticide Information Center \(NPIC\)](#) [🔗](#) provides information online or through a toll-free number, 1-800-858-7378.

- When aerial spraying is done correctly, it does not cause asthma attacks.
- When applied according to label instructions, EPA-registered insecticides do not pose a risk to human health or the environment.
- If people prefer to stay inside when spraying takes place they can, but it is not necessary.

Page last reviewed: September 24, 2020

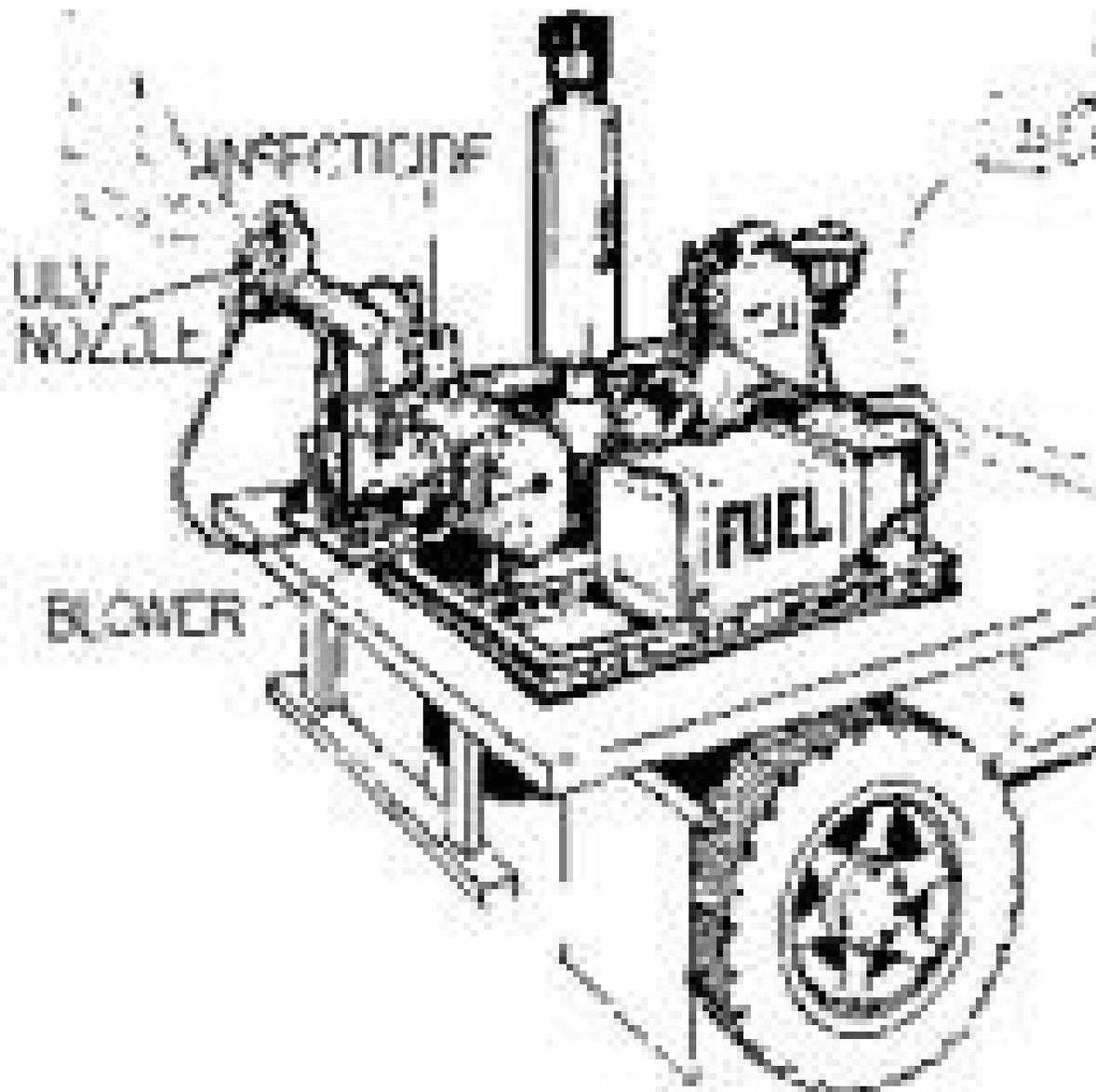
FAQs: Spraying for Adult Mosquitoes

How are adult mosquitoes controlled?

Mosquito control agencies use truck-mounted fogging units to apply insecticides as an ultra-low-volume (ULV) spray. ULV spray units dispense very fine aerosol droplets (fog) that stay aloft and kill mosquitoes on contact. The amount of insecticide sprayed by ULV units is small compared to the area treated, usually about 3 to 5 ounces per acre, which minimizes exposure and risks to people and the environment. Some communities have thermal foggers that use an oil carrier that is heated to disperse the pesticide in a dense smoke-like fog.

What agency conducts mosquito control in my town?

With a few exceptions, where mosquito control is conducted, it is locally funded and carried out by village or city governments. Some communities are part of a local government agency called a mosquito abatement district that receives local property taxes to conduct mosquito control operations.



Ultra-low-volume fogging unit

Why is the local government fogging for mosquitoes in my community?

Some communities decide to fog because of the nuisance caused by hoards of biting mosquitoes. In some situations, officials may decide to fog because testing of mosquitoes and wild birds may have shown that mosquito-borne West Nile virus or St. Louis encephalitis virus is present in the community. Contact your local government or mosquito control agency to determine why that agency has decided to fog for mosquitoes.

Why do they fog for mosquitoes when I am out taking my evening walk?

The best time to kill adult mosquitoes by fogging is at dusk, when they are most active and looking for food (mosquitoes feed on human or animal blood). The aerosol fog primarily targets flying mosquitoes, which is why the timing of the spray is critical.

Will local officials notify me before fogging?

There is no law in Illinois that requires local governments to notify citizens before fogging for mosquitoes. However, many mosquito control agencies will notify individuals who request notification before fogging begins. Contact your local government office or mosquito control agency if you wish to be notified.

What insecticides are used to fog for mosquitoes?

The most commonly used products are synthetic pyrethroid insecticides (such as Scourge[®] and Anvil[®]), pyrethrins and malathion. All insecticides used for mosquito control in Illinois must be registered with the U.S. Environmental Protection Agency (USEPA) and the Illinois Department of Agriculture (IDA). You can find fact sheets about some insecticides commonly used to kill mosquitoes on the USEPA web site,

<<http://www.epa.gov/opp00001/factsheets/skeeters.htm>>.

How long does the fog kill mosquitoes?

During the fogging, flying mosquitoes within the treated area are killed. Although the local mosquito population is reduced for a few days, fogging does not prevent mosquitoes from re-entering the area.

If the city has been fogged for mosquitoes, are all mosquitoes in my area eliminated?

Fogging will kill only part of the mosquitoes in your area for a few days. Consequently, individuals should always use personal protection when mosquitoes are present:

- When possible, avoid places and times when mosquitoes bite.
- Wear light-colored protective clothing. Tightly woven materials that cover arms and legs provide some protection from mosquito bites. Keep trouser legs tucked into boots or socks, and collars buttoned.

- Make sure door and window screens fit tightly and all holes are repaired.
- Use mosquito netting when sleeping outdoors or in an unscreened structure, and to¹⁰⁶ protect small babies any time they are outside.
- If participating in outdoor activities when mosquitoes are biting, wear protective clothing (shoes, socks, shirt and long pants). For additional protection from mosquitoes, use an insect repellent. The more DEET a product contains, the longer the repellent can protect against mosquito bites. However, concentrations higher than 50 percent do not increase the length of protection. For most situations, 10 percent to 25 percent DEET is adequate. Apply repellents to clothes whenever possible; apply sparingly to exposed skin if label permits. Consult a physician before using repellents on young children.

Are the insecticides used for fogging safe?

The USEPA reviews and approves insecticides (and other pesticides) and their labeling to ensure those used to protect public health are applied by methods that minimize the risk of human exposure and adverse health and environmental effects. Generally, there is no need to relocate during mosquito control fogging. The insecticides have been evaluated for this use and have been found to pose minimal risk to human health and the environment when used according to label directions. For example, USEPA has estimated the exposure and risks to both adults and children posed by ULV aerial and ground applications of the insecticides malathion and naled.

For all the scenarios considered, exposures ranged from 100 to 10,000 times below the amount of pesticide that might pose a health concern. These estimates assumed several spraying events over a period of weeks and also assumed that a toddler would ingest some soil and grass in addition to dermal exposure. Other mosquito control insecticides pose similarly low risks. Nevertheless, because insecticides are inherently toxic, no pesticide is absolutely risk free. The likelihood of experiencing adverse health effects as a result of exposure to any pesticide depends primarily on the amount of pesticide that a person contacts and the amount of time the person is in contact with that pesticide. In addition, a person's age, sex, genetic makeup, lifestyle and/or general health characteristics can affect his or her likelihood of experiencing adverse health effects as a result of exposure to insecticides. Although mosquito control insecticides pose low risks, some people may prefer to minimize or to avoid exposure to these chemicals. Here are some common sense steps to help reduce possible exposure to insecticides:

- Listen and watch for announcements in the local media about fogging for mosquitoes and remain indoors during the application in your neighborhood.
- If possible, remain inside whenever fogging takes place.
- People who suffer from chemical sensitivities or feel fogging could aggravate a preexisting health condition should consult their doctor or local health department and take special measures to avoid exposure.

- Close windows and doors and turn off your air conditioning (or set it to circulate indoor air) when fogging is taking place in the immediate area. 107
- Do not let children play near or behind truck-mounted applicators when they are in use. To ensure the fogging trucks have left the area, keep children inside during fogging and for about one hour after fogging.
- Bring pets inside and cover ornamental fish ponds to avoid direct exposure.
- Consult your doctor if you think you are experiencing health effects from the fogging.
- More information about spraying for adult mosquitoes may be found on the USEPA's Web site: <<http://www.epa.gov/pesticides/citizens/pmcfcs.pdf>>.

Do I need to wash home-grown fruits and vegetables after the mosquito fogging?

The amount of insecticide used to fog for adult mosquitoes is much smaller than that used to spray fruit and vegetable insect pests. However, it is always a good idea to wash fruits and vegetables before eating them to remove soil and other contaminants.

What should I do if I have medical questions about insecticides?

- If you suspect that you are reacting to an insecticide, call your physician or local poison control center. The Illinois Poison Center emergency telephone number is **1-800-222-1222**; 312-906-6185 (TTY/TDD).
- Additional information about the active ingredients in insecticides may be obtained from the National Pesticide Information Center (NPIC) at 1-800-858-7378 from 8:30 a.m. to 6:30 p.m. (Central time) seven days a week, excluding holidays; or visit NPIC's Web site at <<http://npic.orst.edu/>>.

Will the fogging kill birds or other large animals?

During the pesticide registration process, USEPA considers the effect of insecticides on wildlife. If the insecticide is applied according to label directions, wildlife should not be killed or injured with the exception of insects similar in size to mosquitoes. If you have any concerns about this issue after they have sprayed in your area, contact IDA.

Are individuals who do mosquito control required to be licensed?

Yes, all individuals who use insecticides to control mosquitoes are required to be licensed by IDA. There are two exceptions: homeowners who fog for mosquitoes on their own residential property

and individuals who use certain insecticides to treat tires for mosquitoes at tire shops, tire recycling sites and similar businesses. For information about mosquito control licensing, call IDA at 217-785-2427.

Can I fog my backyard for mosquitoes?

If you choose to fog your yard for mosquitoes, be sure to use only insecticides labeled for control of adult mosquitoes. Be sure to follow the label directions exactly. However, spraying your backyard with an insecticidal fog or mist is effective only for a short time. If the insecticide label permits, spraying dense vegetation like that found along the edge of a woods where mosquitoes rest will last somewhat longer. Mosquitoes will return when the effect of the spray has ended.

Can I treat a depression that floods in my backyard for mosquitoes?

If the depression floods for 10 or more days, it can produce mosquitoes. However, use ONLY insecticides that are labeled for treating water for mosquitoes. Small impoundments of water can be treated for mosquito larvae with "Bti," a bacterial insecticide. One product that is available at many hardware stores for this purpose is doughnut-shaped Bti briquets (Mosquito Dunks[®]). Be sure to follow the insecticide label directions exactly.

Can communities use other methods to control mosquitoes besides fogging?

Yes, some communities conduct community-wide mosquito abatement programs. Whenever possible, the primary effort of such programs should be identification of mosquito-breeding sites, followed by removal or treatment of these sites with an insecticide used for control of mosquito larvae (the immature form of a mosquito). Also, homeowners should remove old tires and other unused water-holding containers, change the water in birdbaths, and drain wading pools weekly. Insect light electrocutors ("bug zappers") or sound devices do little to reduce biting mosquitoes in an area. Installing bird or bat houses to attract these insect-eating animals has been suggested as a method of mosquito control. However, there is little scientific evidence that this significantly reduces the mosquito population around homes. More information about mosquito control methods may be found at <<http://www.epa.gov/pesticides/citizens/mosquitojoint.htm>>.

Where can I get more information on West Nile virus?

Call your local health department or the Illinois Department of Public Health at the telephone numbers listed below, or visit the [Department's Web site](#), and the U.S. Centers for Disease Control and Prevention's West Nile virus Web site: <http://www.cdc.gov/ncidod/dvbid/westnile/index.htm>



Select Language ▼

[Employee Sign In](#)

DISEASE EMERGENCY PREP ENVIRONMENTAL HEALTH PROMOTION RESOURCES PRESS RELEASES

West Nile Virus Information

[West Nile Virus Statistics for Kane County](#)

To report dead birds, contact Kane County Health Department at: 630-444-3040.

Dead birds are picked up Monday thru Friday, 8:30 a.m. to 4:30 p.m.

Contact your local City/Village/Township Administrator to learn more about your local Mosquito Abatement Program.

Most common birds to carry West Nile virus:

CROWS

Adult crows are about 17 to 21 inches in length, while juvenile crows are about 10 inches in length, or about the length of a person's forearm. Juvenile crows have brownish-black feathers. Crows are all black, including feathers, beak, legs and feet. The crow's nostrils are covered with bristles.

BLUE JAYS

Blue jays are 10 inches long and have a black sturdy bill and blue crest. They have a black eyeline and breastband and a greyish-white throat and underparts. The wings are bright blue with black bars and white patches. Blue jays have a long blue tail with black bars and white corners. Their legs are dark.

Help prevent breeding mosquitoes that carry West Nile & Zika

- ✓ Don't let standing water collect on your property!
- ✓ Check turned up garbage can lids, grill covers, and children's toys.
- ✓ Empty, clean & refill birdbaths & wading pools frequently.



Links & Resources

[Are you prepared? What you need to know about West Nile virus](#)

[West Nile Fact Sheet IDPH](#)

[West Nile Fact Sheet CDC](#)

[West Nile Poster from IDPH - English](#)

[West Nile Poster from IDPH - Spanish](#)

[Illinois Department of Health Website West Nile Page](#)

[Centers for Disease Control \(CDC\) West Nile Page](#)

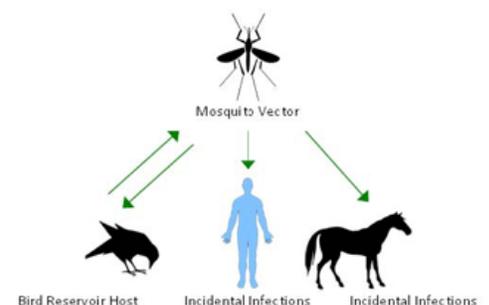
El virus del Nilo Occidental:

- [Prevención y control](#)
- [Síntomas y tratamiento](#)

FAQ

What Is West Nile?

West Nile virus is an arthropod-borne virus (arbovirus) most commonly spread by infected culex mosquitoes. West Nile virus can cause febrile illness, encephalitis (inflammation of the brain) or meningitis (inflammation of the lining of the brain and spinal cord). West Nile virus transmission has been documented in Europe and the Middle East, Africa, India, parts of Asia, and Australia. It was first detected in North America in 1999, and has since spread across the continental United States and Canada.



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.

Who is at risk for infection with West Nile virus?

Anyone living in an area where West Nile virus is present in mosquitoes can get infected. West Nile virus has been detected in all lower 48 states (not in Hawaii or Alaska). Outbreaks have been occurring every summer since 1999. The risk of infection is highest for people who work outside or participate in outdoor activities because of greater exposure to mosquitoes.

Is there a vaccine available to protect people from West Nile virus?

No. Currently there is no West Nile virus vaccine available for people. Many scientists are working on this issue, and there is hope that a vaccine will become available in the future.

How soon do people get sick after getting bitten by an infected mosquito?

The incubation period is usually 2 to 6 days but ranges from 2 to 14 days. This period can be longer in people with certain medical conditions that affect the immune system.

What are the symptoms of West Nile virus disease?

- **No symptoms in most people.** Most people (70-80%) who become infected with West Nile virus do not develop any symptoms.
- **Febrile illness in some people.** About 1 in 5 people who are infected will develop a fever with other symptoms such as headache, body aches, joint pains, vomiting, diarrhea, or rash. Most people with this type of West Nile virus disease recover completely, but fatigue and weakness can last for weeks or months.
- **Severe symptoms in a few people.** Less than 1% of people who are infected will develop a serious neurologic illness such as encephalitis or meningitis (inflammation of the brain or surrounding tissues). The symptoms of neurologic illness can include headache, high fever, neck stiffness, disorientation, coma, tremors, seizures, or paralysis. Recovery from severe disease may take several weeks or months. Some of the neurologic effects may be permanent. About 10 percent of people who develop neurologic infection due to West Nile virus will die.

Who is at risk for serious illness if infected with West Nile virus?

People with certain medical conditions, such as cancer, diabetes, hypertension and kidney disease are also at greater risk for serious illness. What should I do if I think a family member might have West Nile virus disease? Consult a healthcare provider for evaluation and diagnosis.

How is West Nile virus disease diagnosed?

Diagnosis is based on a combination of clinical signs and symptoms and specialized laboratory tests of blood or spinal fluid. These tests typically detect antibodies that the immune system makes against the viral infection.

What is the treatment for West Nile virus disease?

There are no medications to treat or vaccines to prevent West Nile virus infection. Over-the-counter pain relievers can be used to reduce fever and relieve some symptoms. People with milder symptoms typically recover on their own, although some symptoms may last for several weeks. In more severe cases, patients often need to be hospitalized to receive supportive treatment, such as intravenous fluids, pain medication, and nursing care.

When do most cases of West Nile virus disease occur?

Most people are infected from June through September.

How can people reduce the chance of getting infected?

The most effective way to avoid West Nile virus disease is to prevent mosquito bites:

- Use insect repellents when you go outdoors. Repellents containing DEET, picaridin, IR3535, and some oil of lemon eucalyptus and para-menthane-diol products provide longer-lasting protection.
- Wear long sleeves and pants from dusk through dawn when many mosquitoes are most active.
- Install or repair screens on windows and doors. If you have it, use your air conditioning.
- Help reduce the number of mosquitoes around your home. Empty standing water from containers such as flowerpots, gutters, buckets, pool covers, pet water dishes, discarded tires, and birdbaths.

 **COVID-19 UPDATES**

 General Information

 Vaccine Information

 Vaccination Appointments



© Kane County, Illinois Government Website

Aurora, IL 60506

Elgin, IL 60123

24-hour phone
630-208-3801

24-hour phone
630-208-3801

Non-emergency calls received after working hours
will be answered the next business day.

Contact
Employment
Services A-Z
FOIA
Kane County Government