

Passaic County Mosquito Control

Questions and Answers

Municipalities are encouraged to share this information with all residents in their community.

Mosquito control in New Jersey is mandated under Title 26, Chapters 3 and 9, of the New Jersey Health Statutes. Each county in New Jersey is responsible for providing mosquito control for its citizens. Passaic County Mosquito Control aims to reduce the number of nuisance and disease-transmitting mosquitoes throughout Passaic County. In providing this service to residents, we employ a number of methods collectively referred to as Integrated Mosquito Management (IMM). These methods can be summarized as follows:

Public Education – Passaic County Mosquito Control educates the public about the role that residents share in mosquito control through the use of the county website, frequent talks to senior citizens groups and school students, monthly meetings with local health officials, participation in local health fairs, and publication and dispersal of informative brochures and door hangers.

Water Management – After mosquito eggs hatch, mosquitoes begin their life as larvae in stagnant water. Passaic County Mosquito Control carries out extensive efforts to remove blockages from waterways in the county, maintaining drainage systems as needed. Water management is done carefully, while recognizing the potential environmental impact of such work.

Larval Control – In areas where water management is not feasible, larval control is necessary. One example of larval control employed is biological control, or “bio-control.” The stocking of mosquitofish and/or copepods are a couple of examples of bio-control. But in areas not suitable for bio-control, larvicides may be used to eliminate mosquito larvae. Applied by licensed operators/applicators, larvicides are used in areas showing large numbers of mosquitoes which may pose a threat to populated regions.

Adult Control – As a last resort of controlling mosquitoes, Passaic County Mosquito Control employs a technique of adulticiding known as “ULV.” When adult control is needed because of a severe mosquito infestation, or findings of viral activity, licensed personnel use a truck-mounted or ATV-mounted sprayer to apply an ‘ultra-low volume’ of insecticide.

Q: What can the general public do to reduce mosquito incidence?

A: Since mosquito larvae require stagnant water as their habitat, elimination of standing water will result in decreased mosquito populations. Anything capable of holding water for several days or longer should be considered a potential mosquito habitat. Some examples of artificial

containers that can serve as ideal larval habitat for mosquitoes are: unmaintained swimming pools, kiddie pools, cans, buckets, wheel barrows, trash cans, recycling containers, bird baths, ornamental ponds, tarps, children's toys, clogged roof gutters, flexible downspouts, dishes under flowerpots, and tires. Passaic County Mosquito Control can offer control advice for specific situations. Individual municipalities can offer their residents advice on tire recycling.

Q: How can I protect myself from mosquitoes?

A: The following steps can be taken to reduce the frequency of mosquito bites and the risk of mosquito-borne disease transmission:

- Avoid mosquito habitat such as shaded area where mosquitoes rest
- Limit outdoor activity during peak mosquito activity
- Wear protective clothing such as long sleeved shirts and pants
- Use insect repellents, following the manufacturer's recommendations/instructions

Q: Why does Passaic County Mosquito Control perform adult mosquito control (adulticiding)?

A: Passaic County Mosquito Control employs an Integrated Mosquito Management (IMM) approach to control mosquitoes. Education, source reduction, water management, stocking of mosquito-eating fish, and mosquito larval control are all utilized in an attempt to control mosquitoes before they reach the adult stage. Even though control of mosquitoes is generally most efficiently accomplished in the immature stages, conditions may sometimes necessitate the use of adulticides (adult mosquito control pesticides). Adult mosquito control is a small portion of our entire mosquito control procedure and is the last resort of our program after all other methods have been attempted.

Q: How is adulticiding done?

A: The technique of ultra-low volume (ULV) spraying is employed, using properly calibrated equipment mounted onto a truck or all-terrain vehicle (ATV), under label mandated and state recommended conditions.

Q: Which adulticides are utilized?

A: Rutgers, The State University of New Jersey, is the official body charged with recommending "Insecticides for Mosquito Control in New Jersey." Passaic County Mosquito Control utilizes two pesticides for controlling adult mosquitoes: "Fyfanon® ULV" and "DUET® Dual-Action" adulticides. Fyfanon® ULV contains the active ingredient *malathion*, whereas DUET® Dual-Action contains the synthetic pyrethroids *prallethrin* and *sumithrin*, and a synergist, *piperonyl butoxide*. Both pesticides are recommended for adulticiding in the Rutgers recommendations. These pesticides are also registered for mosquito adulticiding by both the Environmental Protection Agency (EPA) and the NJ State Department of Environmental Protection (NJDEP). All personnel applying pesticides are licensed by the NJ Department of Environmental Protection.

Q: What are the possible acute (short-term) health effects that may occur immediately or shortly after exposure to malathion?

A: Contact may possibly irritate eyes and the respiratory tract, and in severe cases may cause headaches, sweating, nausea, and vomiting. Consult your physician for any health evaluations. Generally, community residents are at a much lower risk than mosquito control workers since the likelihood of becoming sick from chemicals is increased as the amount of exposure increases. This is determined by the length of time and the amount of material to which someone is exposed. The New Jersey Poison Information and Education System (NJPIES) phone number is **1 (800) 222-1222**.

Q: What are the possible acute (short-term) health effects that may occur immediately or shortly after exposure to pyrethroids/piperonyl butoxide?

A: Symptoms of over-exposure can include irritation to skin and eyes, respiratory and nasal irritation, irritability to sound or touch, abnormal facial sensation, sensation of prickling, tingling, or creeping of skin, numbness, headache, dizziness, nausea, vomiting, diarrhea, excessive salivation, and fatigue. The chance of experiencing these symptoms of over-exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1 (800) 222-1222** if you experience these symptoms following a pesticide spraying.

Q: How can exposure to mosquito adulticides be reduced?

A: General advice when mosquito adulticiding is scheduled includes: closing windows, shutting off inward blowing fans and air conditioners, sheltering pets for their comfort, suspending outdoor activities during the treatment, and removing clothes from outdoor clotheslines. Also bring children's toys inside. If desired, other items left outside can be rinsed with soap and water.

Q: Where can I find more specific information on mosquito adulticiding in Passaic County and how will I be notified of the adulticiding?

A: Passaic County Mosquito Control complies with current state regulations regarding newspaper publishing of pertinent information in two newspapers (a copy of the ad is included in this packet). The newspapers designated by Freeholder resolution for Passaic County are "The Record" and the "Herald News."

When mosquito adulticiding is scheduled in Passaic County, times and locations are listed:

- on the Passaic County website: <http://www.passaiccountynj.org/mosquito>
- in a recorded message on our telephone hotline: (973) 305-5759

Q: Where can more information be obtained?

A: General information can be obtained by calling Passaic County Mosquito Control at (973) 305-5754. There is voicemail at that number so that messages may be left.

Passaic County Mosquito Control

Pesticide Fact Sheet

Municipalities are encouraged to share this information with all residents in their community.

DUET® Dual-Action Adulticide

This fact sheet answers some basic questions about mosquito control products in use in your county. Passaic County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is DUET® Dual-Action Adulticide and how is it used?

DUET® Dual-Action Adulticide contains three (3) active ingredients: ***Prallethrin***, ***Sumithrin***, and a synergistic compound called ***piperonyl butoxide***. Prallethrin and Sumithrin are members of a category of pesticides called *pyrethroids*, which are synthetic versions of pesticides produced by plants called *pyrethrins*. Pyrethroid/piperonyl butoxide mixtures have been recommended for Ultra-Low-Volume (ULV) mosquito control in New Jersey by Rutgers, The State University of New Jersey. The U.S. Environmental Protection Agency's (EPA) current evaluation considers pyrethroid-containing products to be slightly toxic with minimal potential risk to people when used properly as part of an integrated mosquito control program.

This pyrethroid-containing product is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are preferred and most used, the spraying of adult mosquitoes is called for when biting populations reach critical levels or when a disease organism is present in adult mosquitoes. A very fine mist is sprayed into the air since flying mosquitoes must directly contact the pesticide in order for it to be effective. The combination of the two pesticides has been shown to produce what the

manufacturer calls 'benign agitation.' In other words, mosquitoes are agitated from a resting state to a non-biting flying state where they are more vulnerable to pesticide exposure. This makes *DUET*[®] *Dual-Action* adulticide more effective against hard-to-control species like *Aedes albopictus*, which typically rest during the evening hours when adulticiding usually takes place.

How can I reduce my exposure to DUET[®] Dual-Action?

Because of the very small amounts of active ingredients released per acre, the risk to the general public from the use of pyrethroid-containing products is minimal. Avoiding exposure is always the safest course of action. Any possible exposure risk can be reduced by following some common sense actions:

- Pay attention to notices about spraying found through newspapers, websites, automated telephone messages, or distributed by municipal, county, or state agencies.
- Plan your activities to limit time spent outside during times of possible pesticide treatments.
- Move your pets, their food, and water dishes inside during ULV application. Also bring clothing and children's toys inside.
- Stay away from application equipment, even when not in use.
- Remain indoors with windows closed, window air conditioners closed to the outside air, and window fans turned off during spraying.
- Avoid direct contact with surfaces that are wet from pesticide spraying. Do not allow children to play in areas that have been sprayed until they have completely dried (approximately one hour).
- If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, flush and rinse with water.

What are the symptoms of exposure to DUET[®] Dual-Action?

Symptoms of over-exposure can include irritation to skin and eyes, respiratory and nasal irritation, irritability to sound or touch, abnormal facial sensation, sensation of prickling, tingling, or creeping of skin, numbness, headache, dizziness, nausea, vomiting, diarrhea, excessive salivation, and fatigue. The chance of experiencing these symptoms of over-exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at 1 (800) 222-1222 if you experience these symptoms following a pesticide spraying.

How long will DUET® Dual-Action last in the environment?

Pyrethroids have a soil half-life of twelve (12) days. They have an extremely low pesticide movement rating because they bind tightly to the soil. Pyrethroids are unstable in light and air. They rapidly degrade in sunlight at the soil surface and in water. Piperonyl butoxide has a soil half-life of approximately four (4) days.

Where can I get more information?

The following are resources for more information regarding pesticides and mosquito control in your area.

For pesticide-specific information:
National Pesticide Information Center
(800) 858-7378
<http://npic.orst.edu/>

For pesticide health information and possible exposures:
NJ Poison Information & Education System
(800) 222-1222
<http://www.njpies.org/>

For New Jersey pesticide regulations and misuse complaints:
NJDEP Pesticide Control Program
(609) 984-6568
<http://www.pcpnj.org>

For Federal pesticide regulations:
USEPA Region 2 Office of Pesticide Programs
(732) 906-6809
<http://www.epa.gov/pesticides>

For mosquito control insecticide recommendations:
Rutgers University, Center for Vector Biology
(848) 932-6853
<http://vectorbio.rutgers.edu>

For information about mosquito control in Passaic County:
Passaic County Mosquito Control
(973) 305-5754
www.passaiccountynj.org/mosquito

For state-wide mosquito control information:
NJDEP Office of Mosquito Control Coordination
(609) 292-3649
www.nj.gov/dep/mosquito

For local health information:
Passaic County Department of Health
(973) 881-4396
www.passaiccountynj.org/health

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Fyfanon[®] ULV Mosquito Insecticide

This fact sheet answers some basic questions about mosquito control products in use in your county. Passaic County Mosquito Control, along with several other resources (listed at the end of this sheet), can provide more detailed information.

What is Fyfanon[®] ULV Mosquito Insecticide and how is it used?

Fyfanon[®] ULV is an insecticide product that is recommended for Ultra-Low-Volume (ULV) mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the active ingredient *malathion*. The U.S. Environmental Protection Agency's (EPA) current evaluation considers this malathion-containing product to be slightly toxic with minimal potential risk to people when used properly as part of an integrated mosquito control program.

This malathion-containing product is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are preferred and most used, the spraying of adult mosquitoes is called for when biting populations reach critical levels or when a disease organism is present in adult mosquitoes. A very fine mist is sprayed into the air since flying mosquitoes must directly contact the pesticide in order for it to be effective.

How can I reduce my exposure to Fyfanon® ULV?

Because of the very small amount of active ingredient released per acre, the risk to the general public from the use of malathion-containing products is minimal. Avoiding exposure is always the safest course of action. Any possible exposure risk can be reduced by following some common sense actions:

- Pay attention to notices about spraying found through newspapers, websites, automated telephone messages, or distributed by municipal, county, or state agencies.
- Plan your activities to limit time spent outside during times of possible pesticide treatments.
- Move your pets, their food, and water dishes inside during ULV application.
- Stay away from application equipment, even when not in use.
- Remain indoors with windows closed, window air conditioners closed to the outside air, and window fans turned off during spraying.
- Avoid direct contact with surfaces that are wet from pesticide spraying. Do not allow children to play in areas that have been sprayed until they have completely dried.
- If you must remain outdoors, avoid eye and skin contact with the spray. If you get spray in your eyes or on your skin, flush and rinse with water.

What are the symptoms of exposure to Fyfanon® ULV?

Symptoms of over-exposure to this malathion-containing product can include headache, nausea, dizziness, excessive sweating, salivation, excessive tearing, and a runny nose. The chance of experiencing these symptoms of over-exposure with proper use is low. You should contact your physician, other medical providers, or the New Jersey Poison Information and Education System (NJPIES) at **1-800-222-1222** if you experience these symptoms following a pesticide spraying.

How long will Fyfanon® ULV last in the environment?

The malathion-containing spray stays in the air for a short time until it lands on surfaces. Malathion has a low persistence and breaks down in water and soil within 1 to 25 days. Malathion breaks down faster in sunlight.

Where can I get more information?

The following are resources for more information regarding pesticides and mosquito control in your area.

For pesticide-specific information:
National Pesticide Information Center
(800) 858-7378
<http://npic.orst.edu/>

For mosquito control insecticide recommendations:
Rutgers University, Department of Entomology
(848) 932-6853
<http://vectorbio.rutgers.edu>

For pesticide health information and possible exposures:
NJ Poison Information & Education System
(800) 222-1222
<http://www.njpies.org/>

For information about mosquito control in Passaic County:
Passaic County Mosquito Control
(973) 305-5754
www.passaiccountynj.org/mosquito

For New Jersey pesticide regulations and misuse complaints:
NJDEP Pesticide Control Program
(609) 984-6568
<http://www.pcpnj.org>

For state-wide mosquito control information:
NJDEP Office of Mosquito Control Coordination
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For Federal pesticide regulations:
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For local health information:
Passaic County Department of Health
(973) 881-4396
www.passaiccountynj.org/health

PUBLIC NOTICE

In compliance with section 9.10 of the New Jersey Pesticide Control Code (N.J.A.C. Title 7, Chapter 30), NOTICE IS HEREBY GIVEN that Passaic County Mosquito Control, 1310 State Route 23, Wayne, NJ, 07470, may be applying insecticides for the control of adult mosquito populations on an area-wide basis, as needed, throughout Passaic County, during the period from May 15th, 2018 through October 31st, 2018. The pesticides used will be those recommended by the New Jersey Agricultural Experimentation Station for the control of adult mosquitoes, which includes: Fyfanon® ULV Mosquito Insecticide (active ingredient: malathion) and/or Duet™ Dual-Action Adulticide (active ingredients: prallethrin, sumithrin, and piperonyl butoxide), applied by truck mounted and/or all-terrain vehicle (ATV) mounted Ultra Low Volume (ULV) equipment. All persons interested in obtaining additional information on this spray program are requested to contact Joseph Pezzillo, superintendent (CPA license #29528B), at the above address, or by calling (973) 305-5754. For updated information on time and location of applications, please visit the following website: www.passaiccountynj.org/mosquito. For emergencies, call NJ Poison Information and Education System at (800) 222-1222. For routine health inquiries, and to obtain information about signs and symptoms of pesticide exposure, call National Pesticide Information Center at (800) 858-7378. Call NJ Pesticide Control Program, (609) 984-6568, for pesticide regulation information, pesticide complaints, and health referrals. Upon request, the pesticide applicator or applicator business shall provide a resident with notification at least 12 hours prior to the application, except for Quarantine and Disease Vector Control only, when conditions necessitate pesticide applications sooner than that time. It is suggested (but not mandatory) that such requests be submitted, in writing, to the above address, including the resident's name, address, and telephone number.

Louis E. Imhof III
Clerk to the Board of Chosen Freeholders
County of Passaic