



# County of Passaic

Department of Health Services

1310 State Route 23 • Wayne, New Jersey 07470

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Mosquito Control Superintendent

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March 25, 2025

Borough of Ringwood  
c/o Municipal Clerk  
60 Margaret King Avenue  
Ringwood, NJ 07456

Dear Municipal Clerk:

Pursuant to NJAC 7:30-9.10(e), Passaic County Mosquito Control is submitting the enclosed information packet in the event that spraying for adult mosquitoes is deemed necessary within your municipality. Municipalities are encouraged to share this information with all residents in their community.

Area wide notification is required for any applications of insecticides used for the control of adult mosquitoes. This does not include applications of insecticides for larval mosquito control. Applications of an insecticide for adult mosquito control, done from the ground by hand-held or truck-mounted sprayer, are possible during any given year in any municipality within Passaic County. Of course, mosquito populations are influenced by rainfall and by the effectiveness of our larval mosquito control efforts, including source reduction, fish stocking, and use of insecticides in the waters containing mosquito larvae. Insecticide applications to control adult mosquitoes may be necessary in your municipality, but this is impossible to predict. Therefore, this packet is being sent to every municipality.

Included in this packet are 1) a 'Questions and Answers' sheet for the Passaic County Mosquito Control program, 2) 'Fact Sheets' for each pesticide that would be used in Passaic County for the control of adult mosquitoes in the current year, and 3) the legal display advertisement that Passaic County Mosquito Control will publish in two area newspapers during the current year.

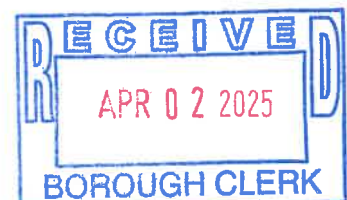
Lastly, in keeping with previous practice, your police and health departments will continue to be notified of adult mosquito control spray events. Spray schedules will also be posted to our website ([www.passaiccountynj.org/mosquito](http://www.passaiccountynj.org/mosquito)). Residents may sign up to receive an e-mail alert when our division is performing mosquito adulticiding by visiting the following webpage:

<https://www.passaiccountynj.org/our-county/news> or by clicking on "Subscribe to News" at the bottom right of the main webpage at [www.passaiccountynj.org](http://www.passaiccountynj.org).

Sincerely,

Joseph Pezzillo  
Superintendent

Enclosures





## Questions and Answers

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*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, talks to senior citizens groups and school students, 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 cycle 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 waterbodies containing immature, larval mosquitoes.

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



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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 areas where mosquitoes rest
- Limit outdoor activity during peak mosquito activity
- Wear protective clothing such as long-sleeved shirts and pants
- Use an insect repellent, following the manufacturer's recommendations/instructions

**Q: Why does Passaic County Mosquito Control perform adult mosquito control?**

**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 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 program and is the last resort 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 that may be handheld, or mounted onto a truck or all-terrain vehicle (ATV), under label mandated and state recommended conditions.

**Q: Which adulticides are utilized?**

**A:** Passaic County Mosquito Control may utilize any of three pesticides for controlling adult mosquitoes: "Fyfanon® ULV", "Fyfanon® EW", and/or "DUET® Dual-Action" adulticides. Fyfanon® ULV and Fyfanon® EW contain the active ingredient **malathion**, whereas DUET® Dual-Action contains the synthetic pyrethroids **prallethrin** and **sumithrin**, and a synergist, **piperonyl butoxide**. These pesticides are 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



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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?**

**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, 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 state regulations regarding newspaper publication of pertinent information in two area newspapers, "The Record" and "Herald News." When mosquito adulticiding is scheduled in Passaic County, times and locations are listed on the Passaic County website: [www.passaiccountynj.org/mosquito](http://www.passaiccountynj.org/mosquito)

**Q: Can residents be notified via e-mail when spraying is scheduled in Passaic County?**

**A:** Yes, residents can subscribe to receive 'Mosquito Control updates' by visiting: <https://www.passaiccountynj.org/our-county/news> or, by clicking on the "Subscribe to News" link located at the bottom-right of the main website, [www.passaiccountynj.org](http://www.passaiccountynj.org)

**Q: Where can more information be obtained?**

**A:** Further 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.





## Pesticide Fact Sheet

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*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 to be effective.

#### ***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 commonsense actions:

- Pay attention to notices about spraying found through newspapers, websites, automated telephone messages, or distributed by municipal, county, or state agencies.
- Plan activities by limiting time spent outside during times of pesticide treatments.
- Bring your pets and their food/water dishes inside before pesticide application.
- Bring clothing and children's toys inside before pesticide 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 (approximately one hour).



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- 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 **(800) 222-1222** if you experience these symptoms following a pesticide spraying.

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

DUET® Dual-Action Adulticide stays in the air for a short time until it lands on surfaces. Pyrethroids are unstable in light and air, and rapidly degrade in sunlight. Prallethrin, Sumithrin, and Piperonyl Butoxide have a low persistence and last no longer than 25 days in water and soil. Prallethrin, Sumithrin, and Piperonyl Butoxide break down faster in sunlight.

***Where can I get more information?***

The following are resources for more information regarding pesticides and mosquito control:

For overall pesticide-specific information:

**National Pesticide Information Center** (800) 858-7378

For pesticide health information & possible exposures:

**New Jersey Poison Information & Education System** (800) 222-1222

For New Jersey pesticide regulations & misuse complaints:

**NJDEP Pesticide Control Program** (609) 984-6568

For Federal pesticide regulations:

**USEPA Region 2 Help Desk** (877) 251-4575

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination** (609) 292-3649

For mosquito control insecticide recommendations:

**Rutgers University, Center for Vector Biology** (848) 932-3146

For local mosquito control information:

**Passaic County Mosquito Control** (973) 305-5754

For local health information:

**Passaic County Department of Health Services** (973) 881-4396



## Pesticide Fact Sheet

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

### ***Fyfanon®EW Insecticide***

This fact sheet answers some basic questions about a mosquito control product 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®EW Insecticide and how is it used?***

Fyfanon®EW Insecticide is an insecticide product that is recommended for 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®EW Insecticide?***

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 commonsense actions:

- Pay attention to notices about spraying found in newspapers, websites, automated telephone messages, or distributed by municipal, county, or state agencies.
- Plan activities by limiting time spent outside during times of pesticide treatments.
- Bring your pets and their food/water dishes inside before pesticide application.
- Bring clothing and children's toys inside before pesticide 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 (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 *Fyfanon®EW Insecticide*?***

Symptoms of 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 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 **(800) 222-1222** if you experience these symptoms following a pesticide spraying.

***How long will *Fyfanon®EW Insecticide* last in the environment?***

Fyfanon®EW 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 overall pesticide-specific information:

**National Pesticide Information Center**

**(800) 858-7378**

For pesticide health information & possible exposures:

**New Jersey Poison Information & Education System**

**(800) 222-1222**

For New Jersey pesticide regulations & misuse complaints:

**NJDEP Pesticide Control Program**

**(609) 984-6568**

For Federal pesticide regulations:

**USEPA Region 2 Help Desk**

**(877) 251-4575**

For statewide mosquito control information:

**NJDEP Office of Mosquito Control Coordination**

**(609) 292-3649**

For mosquito control insecticide recommendations:

**Rutgers University, Center for Vector Biology**

**(848) 932-3146**

For local mosquito control information:

**Passaic County Mosquito Control**

**(973) 305-5754**

For local health information:

**Passaic County Department of Health Services**

**(973) 881-4396**



## **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 apply pesticides for the control of adult mosquito populations on an area-wide basis throughout Passaic County, as needed, during the period of May 1, 2025 through November 30, 2025. The pesticides used for the control of adult mosquitoes may include: Fyfanon® EW ULV Mosquito Insecticide (active ingredient: malathion) and/or Duet™ Dual-Action Adulticide (active ingredients: prallethrin, sumithrin, and piperonyl butoxide). Products may be applied from the ground by truck, all-terrain vehicle, and/or handheld spray equipment, all using ultra-low volume (ULV) techniques. All persons interested in obtaining additional information on this spray program are requested to contact Joseph Pezzillo, superintendent (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](http://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, Passaic County Mosquito Control shall provide a resident with notification at least 12 hours prior to the application, except for Quarantine and Disease Vector Control, when conditions may 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 County Commissioners  
County of Passaic