



DEPARTMENT OF HEALTH AND HUMAN SERVICES
Division of Health
Office of Mosquito Control
150 Morris Turnpike
Newton New Jersey 07419
Telephone: (973) 940-5225
FAX: (973) 940-5227
Email: mosquito@sussex.nj.us

County of Sussex

March 19, 2026

Hamburg Borough
Municipal Building
16 Wallkill Avenue
Hamburg, NJ 07419

To whom it may concern,

Pursuant to regulatory requirements, as set forth in N.J.A.C. 7:30-9.10 (e), the Sussex County Office of Mosquito Control is hereby providing your municipality with this year's annual municipal information packet. The packet contains a NJDEP approved question and answer sheet as well as pesticide product fact sheets that may be used in your municipality for mosquito adulticiding purposes.

The link to the municipality packet and additional information can be found on our website at www.sussex.nj.us. Please find us under Mosquito Control in the Department heading.

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

If you have any questions regarding this packet or services, do not hesitate to contact our office at 973-940-5225.

Sincerely,

Paige Lockburner, Superintendent
Sussex County Office of Mosquito Control



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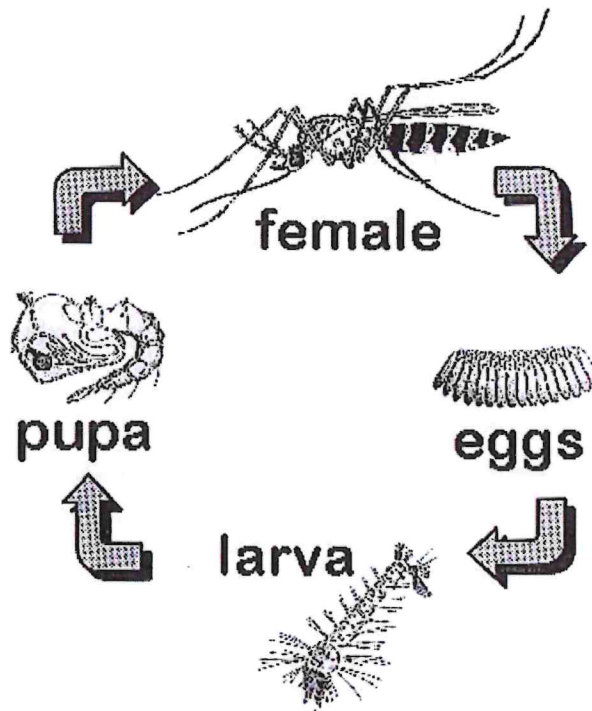
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MOSQUITOES....WHAT EVERYONE SHOULD KNOW

Questions & Answers

What is the life cycle of mosquitoes?

All mosquitoes have four stages of development-egg, larva, pupa, and adult. Mosquitoes spend their larval and pupal stages in water. The females of some mosquito species deposit eggs on moist surfaces, such as mud or fallen leaves that may be near water but dry. Later, rain refloods these surfaces and stimulates the eggs to hatch into larvae. The females of other species deposit their eggs directly on the surface of still water in such places as ditches, street catch basins, tire tracks, streams that are drying up, and fields or excavations that hold water for some time. This water is often stagnant and may be close to homes in discarded tires, ornamental pools, unused wading and swimming pools, tin cans, bird baths, plant saucers, and even gutters and flat roofs. The eggs deposited on such waters soon hatch into larvae. In the hot summer months, larvae grow rapidly, become pupae, and emerge one week later as flying adult mosquitoes. A few important spring species have only one generation per year. However, most species have many generations per year, and their rapid increase in numbers becomes a problem.



management activities. Winter provides us time to update information on breeding sites in our database, analyze the season's data and produce the annual reports and permits required of our office by NJ DEP, the National Park Service, USFWS, Sussex County, and Rutgers University. In addition, equipment maintenance is performed, as well as "right of way" work, if time permits.

What can homeowners do?

The most efficient method of controlling mosquitoes is reducing the availability of water suitable for larval and pupal growth. Large lakes, ponds, and streams that have waves, contain mosquito-eating fish, and lack aquatic vegetation around their edges do not contain mosquitoes; mosquitoes thrive in smaller bodies of water in protected places. Examine your home and neighborhood and take the following precautions:

- Dispose of unwanted buckets and tires.
- Clean clogged roof gutters and drain flat roofs.
- Flush sump-pump pits weekly.
- Stock ornamental pools with fish.
- Change water in birdbaths, fountains, and troughs twice a week.
- Clean and chlorinate swimming pools; when not regularly used, they should be emptied.
- Turn over unused wading pools and other containers that tend to collect rainwater.
- Cover containers tightly with window screen or plastic when storing rainwater for garden use during drought periods.

What do I do if there are adult mosquitoes or standing water around my home?

If mosquitoes present a problem in your area, contact the office at 973-948-4545. Our staff will investigate your service request. Each area is inspected to verify the presence of adult mosquitoes and to locate the breeding source(s) to facilitate controlling the mosquitoes in their immature stages in the future. If warranted, spraying for adult mosquitoes may be carried out. *What triggers adult spraying? The number of mosquitoes trapped, species trapped, disease presence, weather conditions, location of bodies of water, location of bee hives, and other factors.

What pesticides are used to control mosquitoes?

The majority of the pesticides used are products to control mosquito larvae in water, some of which may be applied by aircraft in a granular form. Also, it is sometimes necessary to use pesticides to control adult mosquitoes. For more information regarding the pesticides which may be applied by aircraft or the pesticide used for adult control, please refer to the accompanying NJ Department of Environmental Protection approved Fact Sheet. All pesticides used by the Sussex County Office of Mosquito Control are registered with both the USEPA and the NJDEP, which means that they are legal for use in New Jersey. All employees of Sussex County Mosquito Control are licensed by the NJDEP.

What do I do if exposed to pesticide?

See enclosed NJDEP pesticide Fact Sheets.

Where can I find more specific information on mosquito spraying and how will I be notified of the spraying?

You can find on our Web Site at www.sussex.nj.us/mosquito for updated information on time and location of application(s).

4.

Prevent mosquito bites:

- Use an Environmental Protection Agency (EPA)-registered insect repellent with one of the following active ingredients. All EPA-registered insect repellents are evaluated to make sure they are safe and effective.

Active ingredient

Higher percentages of active ingredient provide longer protection

DEET

Picaridin (known as KBR 3023 and icaridin outside the US)

IR3535

Oil of lemon eucalyptus (OLE) or para-menthane-diol (PMD)

2-undecanone



Find the insect repellent that's right for you by using [EPA's search tool](#)*.

* The EPA's search tool is available at: www.epa.gov/insect-repellents/find-insect-repellent-right-you



Keep rain barrels covered tightly.



Weekly, empty standing water from fountains and bird baths.

- Always follow the product label instructions.
- Reapply insect repellent every few hours, depending on which product and strength you choose.
- Do not spray repellent on the skin under clothing.
- If you are also using sunscreen, apply sunscreen first and insect repellent second.
- Treat clothing and gear (such as boots, pants, socks, and tents) with permethrin or purchase permethrin-treated clothing and gear.
 - Treated clothing remains protective after multiple washings. See product information to find out how long the protection will last.
 - If treating items yourself, follow the product instructions carefully.
 - Do **not** use permethrin products, intended to treat clothing, directly on skin.
- Wear long-sleeved shirts and long pants.



Keep septic tanks sealed.



Install or repair window & door screens.

For more information, visit:
www.cdc.gov/dengue, www.cdc.gov/chikungunya, www.cdc.gov/zika



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County of Sussex

"Anvil®"

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

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

What is Anvil® and how is it used?

Anvil® is an imitation mimic of a naturally occurring insecticide that is produced by certain chrysanthemum flowers. It is an adulticide that is recommended for mosquito control in New Jersey by the Agricultural Experiment Station of Rutgers University. It contains the active ingredients of "**sumithrin, also known as 3-phenoxybenzyl-(1RS, 3RS; 1R, 3SR)-2,2-dimethyl-3-(2-methylprop-1-enyl) cyclopropanecarboxylate, and piperonyl butoxide**". The U.S. Environmental Protection Agency's (EPA) current evaluation considers **sumithrin and piperonyl butoxide**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Anvil® applications are made with Ultra Low Volume (ULV) equipment, which put out very small drops of the material at very low levels. While habitat management and measures to control immature mosquitoes in water are the preferred routine approaches, the spraying of adult mosquitoes is called for when biting populations reach critical levels or when a disease organism is present in adult mosquitoes. The application of **Anvil®** will only be conducted if deemed absolutely necessary. A very fine mist is sprayed into the air since flying mosquitoes must directly contact the pesticide in order for it to be effective. **Anvil®** is not residual and breaks down rapidly in sunlight, minimizing the buildup of this product in the environment.

Where can I get more information on Anvil®?

The following are resources for more information regarding **Anvil®** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

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

For pesticide health information & possible exposures – 24 hours:

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

For New Jersey pesticide regulation & misuse complaints:

NJDEP Bureau of Pesticide Compliance **609-984-6568**

For Federal pesticide regulation:

USEPA Region 2 Office of Pesticide Programs **877-251-4575**

For statewide mosquito control information:

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

For mosquito control recommendations:

Rutgers University, Department of Entomology **732-932-9437**

For local mosquito control information:

Sussex County Office of Mosquito Control **973-940-5225**

For local health information:

Sussex County Health Department **973-579-0370**

Spraying for adult mosquitoes is a last resort. Most mosquito control work goes on “behind the scenes”, using water management, fish, and other products to control immature mosquitoes in the water where they begin their life cycle. Controlling adult mosquitoes is more difficult because they are spread out and moving.

If you have questions about Anvil or any other mosquito control related products or practices, please feel free to call the Sussex County Office of Mosquito Control at 973-534-5225 (mon-Fri; 8:00 AM – 4:30 PM), or visit our web site at www.sussex.nj.us/mosquito.

How can I reduce my exposure to Etofenprox?

Because of the very small amounts of active ingredients released per acre, the risk to the general public from the use of non-ester 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 applications. Also bring clothing and children's toys inside.
- Stay away from application equipment, whether or not it is in use.
- Whenever possible, remain indoors with windows closed, window air conditioners on non-vent (closed to the outside air), and window fans turned off during spraying.
- Avoid direct contact with surfaces still 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, immediately flush and rinse with water.

What are the symptoms of exposure to Etofenprox?

Symptoms of over-exposure can include irritation to skin and eyes. 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 Etofenprox last in the environment?

The non-ester pyrethroid in Etofenprox has a half-life of 1.7 days in water and 4.4 days in soil. The Etofenprox molecule rapidly degrades in sunlight at the soil and water surface into its constituent elements Carbon, Hydrogen, and Oxygen.

Where can I get more information on this adulticide?

The following are resources for more information regarding Etofenprox and mosquito control in your area (unless otherwise noted, available during normal business hours):



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County of Sussex

"DUET" Dual Action Adulticide

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

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

What is Duet and how is it used?

Duet is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticides called **"Prallethrin (ETOC), d-Phenothrin (Sumithrin), Piperonyl Butoxide."** The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Prallethrin, d-Phenothrin and Piperonyl Butoxide**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Duet is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are the preferred routine approaches, 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 avoid exposure to Duet?

Risk to the general public from the use of **Duet** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

For overall pesticide-specific information – 9:30am to 7:30pm:
National Pesticide Information Center **800-858-7378**

For pesticide health information & possible exposures – 24 hours:
New Jersey Poison Information & Education System **800-222-1222**

For New Jersey pesticide regulation & misuse complaints:
NJ DEP Bureau of Pesticide Compliance **609-984-6568**

For Federal pesticide regulation:
USEPA Region 2 Office of Pesticide Programs **877-251-4575**

For state-wide mosquito control information:
NJDEP Office of Mosquito Control Coordination **609-292-3649**

For mosquito control recommendations:
Rutgers University, Department of Entomology **732-932-9437**

For local mosquito control information:
Sussex County Mosquito Control **973-940-5225**

For local health information:
Sussex County Health Department **973-579-0370**

Spraying for adult mosquitoes is a last resort. Most mosquito control work goes on “behind the scenes”, using water management, fish, and other products to control immature mosquitoes in the water where they begin their life cycle. Controlling adult mosquitoes is more difficult because they are spread out and moving.

If you have questions about Duet or any other mosquito control related products or practices, please feel free to call the Sussex County Office of Mosquito Control at 973-534-5225 (mon-Fri; 8:00 AM – 4:30 PM), or visit our web site at www.sussex.nj.us/mosquito.

- 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 children's toys out of application areas.
- Move animals and their food and water dishes out of application areas.
- Stay away from application equipment, whether in use or not.
- Whenever possible, remain indoors with windows closed and with window air conditioners on non-vent (closed to the outside air) and window fans turned off during spraying.
- Avoid direct contact with surfaces that are still 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, immediately flush and rinse with water.

What are the symptoms of exposure to Duet HD?

Irritation or sensitization sometimes occurs after exposure, causing an asthmatic condition or skin rash, nausea, vomiting and diarrhea may also occur. 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 **1-800-222-1222** if you experience these symptoms following a pesticide spraying. Bring this sheet with you if you visit a physician or other medical provider.

How long will Duet HD last in the environment?

Pyrethroids are unstable in light and air, and rapidly degrade in sunlight. The **Duet HD** spray stays in the air for a short time until it lands on surfaces. **Prallethrin, d-Phenothrin, and Piperonyl Butoxide** has a low persistence and lasts no longer than 25 days in water and soil. **Prallethrin, d-Phenothrin, and Piperonyl Butoxide** breaks down faster in sunlight.

Where can I get more information on Duet?

The following are resources for more information regarding **Duet** and mosquito control in your area (unless otherwise noted, available during normal business hours):



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County of Sussex

"Fyfanon"

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

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

What is Fyfanon and how is it used?

Fyfanon is an insecticide product that is recommended for mosquito control in New Jersey by Rutgers, The State University of New Jersey. It contains the pesticide called "**Malathion.**" The U.S. Environmental Protection Agency's (EPA) current evaluation considers **Malathion**-containing products to be slightly toxic with minimal potential risk to people when used properly as part of a complete mosquito control program.

Fyfanon is used for the control of adult mosquitoes. While habitat management and measures to control immature mosquitoes in water are the preferred routine approaches, 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 avoid exposure to Fyfanon?

Risk to the general public from the use of **Fyfanon** is minimal. Avoiding exposure is always the safest course of action, particularly for populations that may be at higher risk such as pregnant women, children, the elderly and those with chronic illnesses. Any possible exposure risk can be reduced by following some common sense actions:

For New Jersey pesticide regulation & misuse complaints:
NJ DEP Bureau of Pesticide Compliance **609-984-6568**

For Federal pesticide regulation:
USEPA Region 2 Office of Pesticide Programs **877-251-4575**

For state-wide mosquito control information:
NJDEP Office of Mosquito Control Coordination **609-292-3649**

For mosquito control recommendations:
Rutgers University, Department of Entomology **732-932-9437**

For local mosquito control information:
Sussex County Mosquito Control **973-940-5225**

For local health information:
Sussex County Health Department **973-579-0370**

Spraying for adult mosquitoes is a last resort. Most mosquito control work goes on "behind the scenes", using water management, fish, and other products to control immature mosquitoes in the water where they begin their life cycle. Controlling adult mosquitoes is more difficult because they are spread out and moving.

If you have questions about Fyfanon or any other mosquito control related products or practices, please feel free to call the Sussex County Office of Mosquito Control at 973-534-5225 (mon-Fri; 8:00 AM – 4:30 PM), or visit our web site at www.sussex.nj.us/mosquito.

- 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 applications. Also bring clothing and children's toys inside.
- Stay away from application equipment, whether or not it is in use.
- Whenever possible, remain indoors with windows closed, window air conditioners on non-vent (closed to the outside air), and window fans turned off during spraying.
- Avoid direct contact with surfaces still 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, immediately flush and rinse with water.

What are the symptoms of exposure to deltamethrin?

Symptoms of over-exposure can include irritation to skin and eyes. 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 deltamethrin last in the environment?

The Type II pyrethroid deltamethrin has a half-life of 1-2 weeks in soil and is rapidly adsorbed by sediment in surface water. It is insoluble in water and is immobile in the environment. Deltamethrin is nontoxic to plants and residues are not present after 10 days.

Where can I get more information on deltamethrin?

The following are resources for more information regarding **deltamethrin** and mosquito control in your area (unless otherwise noted, available during normal business hours):

For overall pesticide-specific information – 9:30am to 7:30pm:

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

For pesticide health information & possible exposures – 24 hours:

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

For New Jersey pesticide regulation & misuse complaints:

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

For Federal pesticide regulation:

USEPA Region 2 Office of Pesticide Programs **877-251-4575**