

Mosquito Management

P R O G R A M

Pesticides and Mosquito Control Using Scourge

Revised Edition August 2000

State of
C O N N E C T I C U T

Safe Use of Pesticides to Control Mosquitoes

Mosquitoes can be found in a variety of settings including salt marshes, swamps, catch basins and artificial containers. Some mosquitoes can spread diseases such as West Nile virus (WNV) and Eastern Equine Encephalitis (EEE). The most effective way to eliminate mosquitoes is to follow some basic maintenance practices which includes getting rid of standing water.

However, when there is sufficient evidence for risk of mosquito-borne disease, the application of adulticides (insecticides for the control of adult mosquitoes), either by ground or air, may be the only alternative to suppress populations of infected adult mosquitoes. This fact sheet contains information on basic precautions that can be taken to reduce personal exposures and potential risks.

Currently available adulticides (e.g. pyrethrins) may be applied by hand-held, backpack or truck-mounted Ultra Low Volume (ULV) foggers, or by fixed-wing or rotary aircraft. Each of these methods have strengths and drawbacks that will influence which material is most appropriate for a given situation. All adulticides must be applied according to regulations and label directions.

MOSQUITO CONTROL USING SCOURGE

What is Scourge?

Scourge is the trade name of a pesticide product used to control mosquitoes in outdoor residential and recreational areas. It contains resmethrin, piperonyl butoxide and a petroleum distillate. Resmethrin is a man-made pesticide, similar to a natural group of pesticides called pyrethrins which comes from plants. Piperonyl butoxide does not directly kill insects but acts to increase the ability of resmethrin to kill insects. These pesticide products are also used in pet shampoos, sprays and in products used in horse stables.

When will Scourge be used to control mosquitoes?

The use of Scourge is part of a mosquito management program. When the risk of human exposure to West Nile virus or other mosquito-borne viruses is high; the application of Scourge, either by ground or air, may occur to reduce populations of infected adult mosquitoes. Decisions to use Scourge will be considered carefully.

Is Scourge harmful to my health?

Since Scourge will be applied at very low concentration rates, it is unlikely that anyone will experience health effects as a result of contact with Scourge. The effects of exposure to any chemical depend primarily on the amount of the chemical a person is exposed to (through skin contact, ingestion or inhalation) and the amount of time that the person is exposed to the chemical. The person's age, sex, genetics, life style and general health may also influence the possible health effects.

Scourge is not very toxic following short-term contact and is not very irritating to the skin or eyes. Short-term exposure to very high levels of pyrethroid pesticides can affect the central nervous system causing effects such as incoordination, tremors, or tingling and numbness in areas of skin contact. Short exposures to high levels of petroleum distillates can cause irritation of the eye, skin, nose, throat or lung. Exposures causing these effects are much greater than what might occur during a spraying program. Decreasing the amount of exposure to pesticides is always prudent, especially with respect to young children. To reduce exposure, follow the recommendations listed in the section *"What should I do to reduce exposure."*

What should I do to reduce exposure to pesticides during mosquito control spraying?

Generally, there is no need to relocate during spraying. The following common-sense steps recommended by the EPA will reduce possible exposure to pesticides during spraying.

- Look for notices about spraying in the newspapers and stay tuned to radio and TV for announcements.
- Whenever possible, remain indoors with windows closed and window-unit air conditioning turned off when spraying is taking place.
- Do not let children play near or behind truck-mounted applicators when they are in use.
- People who suffer from chemical sensitivities or feel spraying may aggravate a preexisting health condition, may consult their physician or the DEP's Pesticide Division (see next section) and take additional measures to avoid exposure or its possible consequences to them.

The Mosquito Management Program recommends the following additional common-sense steps to minimize the low-level potential for irritive effects from Scourge and toxicity to fish.

- Avoid direct contact with surfaces that are still wet from pesticide spraying. Do not allow children to play in areas that are still wet until they have dried (approximately one hour).
- If you have to remain outdoors, avoid eye contact with the spray. If you get pesticide spray in your eyes, immediately rinse them with water.
- Cover ornamental fish ponds to avoid direct exposure.

Who do I contact if I am chemically sensitive and concerned about the application of pesticides in my area?

The DEP has a registry available to concerned citizens, including chemically sensitive individuals. To be included in the registry, you need to send in your name and address and the names and addresses of your neighbors to **DEP's Pesticide Division at 79 Elm Street, Hartford, CT 06106**. The registry is typically used when someone has hired the services of a pesticide contractor to do the work on their property. The contractor is required to check DEP's registry database prior to applying the pesticides and notify nearby residents listed on the database. This list will be drawn by state and local officials if mosquito spraying in your area.

If I am on the registry, will the DEP notify me prior to ground spraying?

Prior to performing ground spraying, the DEP or your local town official will notify everybody listed on the database in the area of the scheduled spraying.

What happens to Scourge in the environment?

Scourge spray stays in the air for a very short period of time until droplets land on surfaces. Scourge breaks down or degrades very quickly on surfaces exposed to sunlight. Rain washes away any remaining Scourge. Scourge binds with soil particles and is broken down by bacteria.

Should I be concerned about cancer because of the spraying program?

Available information suggests that Scourge is not likely to cause cancer in humans. Resmethrin did not cause cancer in rats or mice given large doses for their entire lifetime, and so is considered unlikely to cause cancer in humans. Experimental studies have reported that piperonyl butoxide causes liver tumors in rats and mice when they are fed high levels of piperonyl butoxide every day for a long period of time. The amount of piperonyl butoxide given to these animals in these studies far exceeds the amount a human might be exposed to as a result of the use of Scourge to control mosquitoes.

If I'm pregnant, can the spraying affect this pregnancy or harm my baby?

Neither resmethrin nor piperonyl butoxide are likely to affect pregnancy outcomes if people are exposed during or following the spraying program. Although some effects occurred in laboratory animals that were given large amounts of either resmethrin or piperonyl butoxide, these amounts far exceeded any amounts that individuals are likely to contact from spraying with Scourge.

Are some people at greater risk of experiencing symptoms after they have been in contact with Scourge?

Most people would not be expected to experience any symptoms. However, there could be some individuals who are particularly sensitive to chemicals including those found in Scourge. These sensitive individuals could experience short-term, reversible effects such as eye, skin, nose or throat irritation or breathing problems. Children, in particular, may be more likely than adults to experience adverse effects since they may have the potential for greater exposure. These are less likely to occur if practical and simple things are done to minimize contact with the pesticide. Steps to reduce exposure are outlined below. Chemically sensitive people should see *"Who do I contact if I am chemically sensitive."*

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

If you suspect that you or your child is reacting to Scourge, call your physician. If you feel that it is an emergency, call 911 or your local emergency service. You and your doctor can get specific medical information about active ingredients in pesticides by calling:

- National Pesticide Telecommunications Network (NPTN) at **1-800-858-7378**. NPTN operates from 6:30 a.m. to 4:30 p.m. (Pacific Time) 9:30 a.m. to 7:30 p.m. (Eastern Time) seven days a week.
- Information can also be obtained from the Connecticut Poison Control Center, 24-hours a day, 7 days a week at **1-800-343-2722**.

If you have any additional questions about Scourge and health:

Call the DPH's Division of Environmental Epidemiology and Occupational Health at 860-509-7742.

If you believe there was a misuse of pesticides you should contact the DEP's Pesticide Division at 860-424-3369 from Monday - Friday, from 8:30 a.m. to 4:40 p.m.

After hours and on weekends you should contact DEP's Emergency Dispatch Center at 860-424-3333, this line will forward a pesticide misuse report to the appropriate DEP response personnel.

Mosquito Management Program Information:

Department of Environmental Protection

Website - <http://dep.state.ct.us>

(860) 424-4184 - *Latest information on test results, spray locations, protective measures.*

(860) 642-7630 - *Technical questions regarding mosquitoes, mosquito control measures.*

Connecticut Agricultural Experiment Station

Website - <http://www.state.ct.us/caes>

(203) 974-8500 - *Mosquito trapping.*

Department of Public Health

Website - <http://www.state.ct.us/dph>

(860) 509-7994 - *WNV infections in people.*

(860) 509-7742 - *Effects of pesticides on people.*

Department of Agriculture

Website - <http://www.state.ct.us/doag>

(860) 713-2505 - *WNV infections in domestic animals, including livestock, poultry, and pets.*

Call your local health department to report dead birds. You can find the number in the blue pages of your local phone book.

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This brochure was written by the Connecticut Department of Public Health, Division of Environmental Epidemiology and Occupational Health, for the Mosquito Management Program.



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