

Questions and Answers about 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 1 to 2 ounces per acre, which minimizes exposure and risks to people and the environment.

Why do they truck spray 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 spray primarily targets flying mosquitoes, which is why the timing of the spray is critical.

Will local officials notify me before spraying?

There is no law in MA that requires local governments to notify citizens before spraying for mosquitoes. However, the North Andover Health Department will use all local tools to attempt to contact you or your neighbors prior to spraying such as news papers and phone calls via the public notification system. You may also opt out of having your yard sprayed by contacting the Northeast Mosquito Control Program. Call 978 815-8709.

What insecticides are used to spray 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 MA must be registered with the U.S. Environmental Protection Agency (USEPA) and the MA Department of Agriculture.

How long does the spray kill mosquitoes?

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

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

Spraying 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 to 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 spraying 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 spraying. 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 spraying for mosquitoes and remain indoors during the application in your neighborhood.
- If possible, remain inside whenever spraying takes place.
- People who suffer from chemical sensitivities or feel spraying 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 spraying is taking place in the immediate area.
- Do not let children play near or behind truck-mounted applicators when they are in

use. To ensure the spraying trucks have left the area, keep children inside during spraying 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 spraying?

The amount of insecticide used to spray 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.
- 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 spraying 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.