



Florida Department of Agriculture & Consumer Services  
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## Frequently Asked Questions about Naled

### What is naled?

Naled is a type of organophosphate insecticide registered for use in the U.S. and in Florida by both the U.S. Environmental Protection Agency (EPA) and the Florida Department of Agriculture and Consumer Services (DACCS). Naled can be used to control a number of insect pests, including mosquitoes and dog flies. Pesticide makers sell naled to control mosquitoes under the product name "Dibrom" and "Trumpet."

### How may naled be applied?

Mosquito control programs carried out or guided by state or local agencies often use aircraft to spray naled. It is applied as an ultra-low volume (ULV) spray. ULV sprayers put out very fine droplets that are small enough to stay airborne. Naled kills mosquitoes when they contact the droplets. The small droplet size improves the control of insects and also reduces how much may settle where someone may contact it. ULV sprayers use small amounts of naled to treat large areas.

### Why has the EPA reviewed the use of naled?

The EPA carried out "re-registration" reviews on all pesticides registered before 1984. The program was started to review older chemicals based on the latest environmental and toxicity data. The intent of the re-registration program was to make sure that the regulation of a pesticide stands up to today's stricter standards. Under this program, pesticide makers must submit the latest data and update the safety data to keep the registration current. This process makes sure that the product can be safely used. EPA continues to review pesticides on a routine basis.

### What happens to naled in the environment?

When droplets from a sprayer reach open air, naled quickly begins to break down. Breakdown products of naled only last a short time in the air, water, or soil.

### What are the potential human health effects of naled exposure?

At the levels used in mosquito control, no adverse health effects are expected. According to EPA estimates, the amount of naled used in mosquito control is much less than the amount that could harm people.

At levels far higher than those used to spray for mosquitoes, naled could cause a person to salivate more than usual. Symptoms can include numbness, headaches, dizziness, tremors,

nausea, abdominal cramps, sweating, blurred vision, difficulty breathing, and a slowed heartbeat. Coming into contact with very high levels may lead to loss of consciousness, convulsions or death. Naled can also cause irritation or allergic symptoms, but given the low amount sprayed during mosquito control, that would likely not occur.

The U.S. Centers for Disease Control and Prevention (CDC) has released a report stating that the use of naled to control mosquitoes “did not result in substantial pesticide exposure in humans.” (The report can be found at: <http://www.cdc.gov/mmwr/PDF/wk/mm5421.pdf>)

### **Are the naled breakdown products a risk to human health?**

The EPA concluded that small amounts of naled’s breakdown products form after mosquito control spraying and these should not cause health problems in people.

### **Does naled pose a cancer risk?**

There is no proof that contact with naled can cause cancer in humans.

### **What does the Florida Department of Health (DOH) suggest to protect health?**

The surest way to prevent harm from pesticides is to avoid coming into contact with them. In most cases, it is not essential or practical to leave an area being sprayed. Instead, you can reduce or prevent exposure by staying indoors. Even so, being outside during spraying has very little chance to cause any harm to health.

### **What can I do to reduce exposure to pesticides like naled during spraying?**

EPA has evaluated naled for mosquito and dog fly control and concluded that naled poses little risk to human health when used according to the label. Also, a number of common sense steps can help reduce possible contact with pesticides during spraying:

- Look for spraying notices in the newspapers. Stay tuned for radio or TV announcements.
- If you have to stay outdoors, try to keep the spray out of your eyes. If you get it in your eyes, rinse them right away with water or eye drops.
- Wash exposed skin with soap and water if you come in contact with the spray.
- Wash any fruits and vegetables that were outside during spraying with water before storing, cooking or eating.
- Talk to your doctor if you have major health concerns about the spraying.

### **What if my child puts fingers or unwashed toys in his or her mouth while playing outdoors?**

EPA concluded that the amount of naled that contacts solid surfaces is well below any amount that could cause any harm to health. Naled also breaks down quickly in water or when exposed to sunlight.

### **Will naled harm my pets?**

The amount of naled from mosquito spraying that enters the body of dogs, cats, or other animals is very small. It is not likely to harm pets, even if they are outside during spraying. To further reduce any risk of harm to your pet’s health, you can take the same safety steps as for

humans. Naled is not very toxic to mammals, so it is not likely to harm pets such as dogs or cats when used according to the label.

**Does naled pose risks to livestock?**

Naled is not likely to harm the health of livestock when used for mosquito control according to the label.

**Will naled affect my fishpond?**

Naled can be toxic to fish, but the amount likely to enter an outdoor fishpond or any other water body after spraying for mosquito control is much lower than that shown to be toxic to fish. If you wish to reduce exposure, you can cover your fish ponds with a tarp before spraying. Do not leave tarps on long enough to cause overheating or a decrease in oxygen. Some people may prefer to bring their fish to a tank inside.

**Can I swim in my pool after naled is sprayed?**

Since naled spray droplets are designed to stay airborne for an extended period, little naled is expected to settle in your pool. Also, the water in the pool dilutes and quickly breaks down any naled that might enter the water. If you choose, you can cover your pool before the spraying occurs. You do not need to take special steps or wait before you can use your pool again.

**What effects does naled have on wildlife?**

Naled used for mosquito control does not pose high risks to wildlife or the environment. Naled breaks down quickly in air, water and soil. It is not very toxic to birds and mammals. The small amount needed for mosquito control is not known to cause acute or chronic toxicity to fish. While high doses of naled are toxic to fish, the very low concentrations used for mosquito and dog fly control are not. EPA has set certain safety steps on the label to reduce the risk to invertebrates that live in water from repeated use of naled. Naled may be toxic to bees and other insects besides mosquitoes. However, it is most often sprayed in the early morning or evening hours when bees are not out searching for food, which reduces their chance of contact.

**What can I do if I believe that naled might be making me sick?**

If you are ill, you should call your doctor. You can also call your county health department, or the DOH Bureau of Epidemiology, Pesticide Surveillance Program's toll-free number at 1-800-606-5810. Or you can call the Florida Poison Information Center at 1-800-222-1222.

**How do I get more information about naled?**

You can get more information on the use of naled in mosquito control by calling the Florida DACS Bureau of Entomology and Pest Control at (850) 617-7997. You can also get more technical information about naled by calling the Florida DACS Bureau of Pesticides at (850) 617-7917.