

## South Dakota Department of Health

# Fast Facts on Pesticides Used for Mosquito Control

### What is used to spray?

Several different products are used. Some control programs will use US Environmental Protection Agency (EPA) approved **larvicides** to kill immature mosquitoes. These are applied directly to the water sources which generally host mosquito eggs or larvae. When used properly, larvicides can greatly limit the number of adult mosquitoes by killing the eggs or larvae before they are hatched. This reduces or eliminates the need to kill adult mosquitoes with ground or aerial applications.

Sometimes **adulticides** are sprayed to kill adult mosquitoes. The adulticides, which come in a variety, may be administered by either by hand-held, truck-mounted or airplane sprayers.

In 2003, the state used a pesticide called Anvil 10-10 which breaks down quickly in the environment, and at the low concentrations used, makes the likelihood of any adverse effects very low. The product is approved by the EPA and commonly used for mosquito control.

### When will counties begin spraying for mosquitoes?

Each county has its own plan. For information on which product your community uses, please contact your local control program. Depending on weather factors, application time is usually after sunset and before sunrise when people are more apt to be indoors.

### Is it safe?

The EPA conducts a wide variety of tests to determine the effect on people, wild and domestic animals, fish, plants and organisms. Their decisions are based on the balance of risks or benefits to the general public from diseases that could be transmitted. Last year South Dakota was the only state in the nation that reported human West Nile in every county in the state. Therefore a proactive approach for 2004 is being encouraged to prevent and eliminate breeding habitats of the mosquito. The results of preventing the disease outweigh the risks. However, because no pesticide is considered

100% safe, the EPA urges standard safety precautions to reduce risks.

### **Is exposure to pesticides harmful?**

The EPA's stance is that pesticides for mosquito control do not pose an unreasonable risk to human health. Pesticides can kill potential disease carriers such as mosquitoes. However, most pesticides create some risk of harm to humans, animals, or the environment because they are designed to kill or otherwise adversely affect living organisms. Though the risks are minimal the EPA recommends avoiding direct exposure to pesticides.

### **Who is most at risk for side effects?**

Most residents will not have to curtail any of their routine outdoor activities. It is advised not to come into immediate contact with a sprayed area for 2 to 4 hours afterward (for instance, touching freshly sprayed grass with bare feet or hands). Individuals with allergies or a low tolerance to pesticides should consider staying inside during spraying hours from dusk to midnight.

### **What about pets?**

Dogs and cats have similar susceptibility to pesticides as humans, but of course do not wear clothing which can give some protection. Pets also groom themselves thus increasing the risk of exposure. Pets such as birds, fish or amphibians, may be much more sensitive to certain pesticides. The smaller the animal, the higher the risk of exposure to pesticides. When you know your area will be sprayed, keep pets indoors for at least 2 to 4 hours afterward. Pet dishes and water bowls should not be left outside during spraying hours.

### **What if I feel side effects from pesticides used in my area?**

Contact your healthcare provider promptly. If your problems become severe, contact emergency medical assistance right away or get to an emergency room.

### **Related Links**

[www.npic.orst.edu/wnv/pesticideinfo](http://www.npic.orst.edu/wnv/pesticideinfo)

[www.epa.gov/pesticides/factsheets](http://www.epa.gov/pesticides/factsheets)