Mosquitoes can be a nuisance, as well as pose a significant health risk, to humans and animals in many areas of the United States. Mosquito-vectored (transmitted) diseases, such as encephalitis, dengue fever and malaria have been known for many years, and can infect humans, wildlife and domestic animals. In fact, more than one million people die from mosquito-borne diseases each year. One of the newest diseases transmitted by mosquitoes, the West Nile Virus (WNV), is a rapidly spreading dis-ease that infects humans, horses, birds and other animals.

This guide provides general answers to frequently asked questions about products and practices currently used by many mosquito abatement districts, municipalities, homes associations and other private and public organizations to control mosquito populations and protect public health. For more detailed and up-to-date information, please consult your local department of agriculture, mosquito control district or other local or state agencies that oversee pesticide applications.

Frequently asked questions about public mosquito control spraying

Provided by AMVAC, maker of Trumpet® EC and Dibrom® Concentrate
Q: Why is my area being sprayed for mosquitoes?
A: Mosquito-control sprays are made when monitoring activities by local government and public health agencies have determined that:

• Mosquito populations have reached levels that threaten public health
• Incidences of mosquito-transmitted diseases have been reported in the area,
• The nuisance threshold for the general population has been exceeded.

Mosquito control programs have been implemented to reduce mosquito populations and reduce the risk to residents and their animals. Local government, public health agencies, news media and mosquito control specialists work together to inform residents of the mosquito problem and to alleviate the problem as effectively and safely as possible.

Q: What types of insecticides are used to control mosquitoes?
A: In addition to eliminating breeding habitats, a variety of different products may be used to control mosquitoes, including biological and chemical products that control mosquito larvae or adults. Only products approved by the U. S. Environmental Protection Agency (EPA) are used. Most products are applied at extremely low volumes, typically a few ounces or less per acre, by approved aircraft or ground sprayers.

One of the most effective insecticides used to control adult mosquitoes is called naled, the active ingredient in Dibrom Concentrate and Trumpet EC. It has been used around the world for over 40 years on agricultural crops, in greenhouses and in mosquito control. For mosquito control, naled is applied as a very fine aerosol mist at rates less than one ounce per acre. This low rate is highly effective and poses minimal exposure risks to people, animals and the environment.

Q: How, where and when are mosquito control sprays made?
A: Mosquito control sprays are made when monitoring and surveillance assessments indicate that large, growing mosquito populations in an area are a nuisance or threaten public health. Mosquito control pesticides are applied by truck-mounted sprayers or by aircraft that are fitted with especially designed equipment that delivers the very low volumes of compound that are effective for mosquito control. These applications are done under the direct control of licensed professional applicators who, in general, have specific training for this type of public health pest control. Mosquito control sprays are made in areas where adult mosquitoes frequent, including residential and agricultural areas, marshes and woodlands. Larvicidal mosquito control applications can be made at any time to standing water and other larva habitats.

Q: When are mosquito control applications made?
A: Generally, most mosquito species are active in the early morning, evening and nighttime hours when they feed and reproduce. It is also the time when winds are calm and the most effective insecticide applications can be made.

Q: Are these pesticides used to control mosquitoes safe?
A: The EPA evaluates and tests all products thoroughly before they can be used to be sure there is a "reasonable certainty of no harm" to humans, animals and the environment. While no insecticide is 100 percent safe, the products used to control mosquitoes have passed rigorous safety tests required by the EPA. Dibrom Concentrate and Trumpet EC have been used for many years over millions of acres and in hundreds of communities without adverse problems.

With the most current data supplied by AMVAC as part of the Food Quality Protection Act (FQPA), the EPA has concluded that the risk to humans and animals following exposure is minimal. Therefore, the EPA has re-authorized the use of Dibrom Concentrate and Trumpet EC to control adult mosquitoes across the entire United States.

Q: Is it safe to be outside when these applications are made?
A: The local government, public health agencies, news media and mosquito control specialists work together to inform the public of the spray application schedule so that you and your family can go inside during the application. Generally speaking, there is no spray material in the air within 15 minutes after the application equipment has gone out of the area. The material has either passed down wind or has settled out on plants and other surfaces. Once it settles out, the material is absorbed by the surface. A very small fraction of what settles out can be removed from the surface immediately following the application. In a short time, it is not possible to detect any material that can be removed.

All of this indicates that an application should not interfere with or deter normal outside activities and will make that outdoor activity more pleasurable as mosquitoes will be, at least temporarily, not in the area. Unfortunately, mosquitoes do come back from areas that are not treated.

Q: Will my pets or my property be harmed?
A: The facts stated for the previous question are also applicable to pets and property. Dibrom Concentrate and Trumpet pose minimal risk to pets, wildlife or the environment. Naled, the active ingredient in Dibrom Concentrate and Trumpet EC, not only is difficult to remove from plants and other surfaces, it degrades rapidly in the environment. In most cases, it is not possible to detect naled in any plant material within one or two hours of application. Similarly, it will not harm gardens or produce, trees, shrubs or food or water supplies when properly applied.

Q: What steps should I take to reduce exposure during spraying?
A: Generally, applications are made at a time when people are not in the areas being treated. It is prudent to follow the guidance of the public announcements that generally precede public health control activities to protect people of all ages, as well as animals. There is no need for most individuals to take any other special precautionary measures during mosquito control spraying. However, people who suffer from chemical sensitivity may want to remain indoors and take the following special steps:

• Close windows and turn off window air conditioners when spraying is taking place in your immediate area. Generally speaking, there is no material left in the air within 15 minutes after the application equipment has gone out of the area, and sensitive individuals can return to their normal life styles.
• Do not let children play in or near truck-mounted spray equipment.

Q: Where can I get more information?
A: Concerned residents can contact their local public health or mosquito control district for specific program information. General mosquito control or disease information can be obtained from the Centers for Disease Control at 970-221-6400 or their Web site at www.cdc.gov, or the Mosquito Control Association at www.mosquito.org. For questions about products containing naled, call AMVAC Chemical Corporation at 1-888-GO AMVAC (1-888-462-6822).