Public Health & Pesticides: What is an antimicrobial?

Antimicrobials are any substances of natural, semi-synthetic or synthetic origins that kills or inhibits the growth of microorganisms but causes little or no damage to the host. Antimicrobial products contain about 275 different active ingredients and are marketed in many types of formulations including: sprays, liquids, concentrated powders, and gases. The U.S. Environmental Protection Agency (EPA) regulates antimicrobial products as pesticides.

Types of antimicrobial products:

The products are divided into two categories, based on the type of microbial pest against which the product works.

**Non-public health products.** These are used to control growth of microorganisms that are not concerned a threat to human health

- algae,
- odor-causing bacteria
- bacteria which cause spoilage, deterioration or fouling of materials and microorganisms infectious only to animals. This general category includes products used in:
  - cooling towers
  - jet fuel
  - paints
  - treatments for textile and paper products.

**Public health products.** These are used to control microorganisms that prove to be a threat to human health.

- Sterilant: Used to eliminate or destroy:
  - fungi
  - fungal spores
  - viruses
  - vegetative bacteria
  - bacterial spores

There are three main types of public health antimicrobial pesticides: sanitizers, disinfectants, and sterilizers.
Sterilizers are the most effective and strongest type of public health antimicrobial product. They are mostly used in medical facilities to insure a clean environment. They are also used in other areas such as:

- bathrooms
- kitchens
- homes
- hospitals
- restaurants

Many products require different methods for use, so it is critical to always read the product labels. Be sure to reduce your exposure to antimicrobial pesticides. Some products can be harmful when touched or inhaled.