

## TOXICITY VS HAZARD: HOW THEY DIFFER

In today's increasingly complex world, the use of pesticides brings with it a whole vocabulary of technical terms. One of the more important distinctions to make is the difference between toxicity and hazard.

Toxicity is a property of all chemical compounds. A simple definition: The relative capacity of a chemical to produce injury to a living organism. That injury can be caused by the chemical itself or by other substances formed when the original chemical is transformed within the organism.

The plant or animal species exposed to a chemical has its own individual response. For instance, a chemical dosage which is lethal to rabbits may have a lesser or no impact on chickens or rats. The effects resulting from chemical exposure vary depending on a number of factors such as sex, age, species, size, frequency of dosage, etc.

There is no such thing as a nontoxic material. Even water and some of the more common vitamins are toxic if taken in a large enough dose.

## HAZARDOUS

A substance is potentially hazardous if people are exposed to it in large enough amounts to cause injury.

Hazard is present everywhere in our real-life situations. For instance, if you drive through a red light going 55 MPH you have created a hazard for not only yourself by other drivers. Likewise, if you treat a turf with four times the labeled rate of insecticide you may create a hazard.

The word "toxic" has become a household term linked directly with chemical hazard. That is a misrepresentation, however.

To ensure that the toxic substances you are handling do not become hazardous, it is imperative to practice safe handling and usage methods. That minimizes exposure to applicators and members and most importantly minimizes the hazardous potential of that substance.

A chemical which is packaged and labeled properly stored carefully and applied according to labeled directions reduces the potential for hazard. That theme is very important to carry in all membership communications.