

Information About Pesticides

Why do we use pesticides?

Pesticides (the generic term for insecticides, herbicides and fungicides) control weeds, insect pests, fungi and other plant diseases. The benefit of pesticides lies in their ability to manage pest problems that otherwise would grow out of control. Without pesticides, your health or the health of your family, pets and plants, or the quality of your home, lawn, school or business would be at risk.

Plague is an infectious disease of animals and humans caused by a bacterium named *Yersinia pestis*. It is just one of the many deadly diseases that has been controlled over the years by using pesticides. According to the Center for Disease Control, people usually get plague from being bitten by a rodent flea that is carrying the plague bacterium or by handling an infected animal. Millions of people in Europe died from plague in the Middle Ages, when human homes and places of work were inhabited by flea-infested rats.

Today, modern antibiotics are effective against plague, but if an infected person is not treated promptly, the disease is likely to cause illness or death. Pesticides also protect roadsides, utilities, rights-of-way, forests and lakes from pest damage. They help to limit the damage that can be caused by insects, weeds and plant diseases. Whether it is an insecticide for controlling termites or fleas in your home, a herbicide for ridding your lawn of dandelions or a fungicide that keeps plants alive during a disease outbreak, pesticides are analogous to the medicines we use to preserve our own health. How safe are the pesticides used by professionals and homeowners? If pesticides are handled and applied with care according to label directions, they do not represent an unreasonable risk to people, non-target organisms or the environment.

Homeowners should be aware that the use of pesticides, as with many household products, does pose some risk, and why label directions must be read and followed closely. The level of risk posed by a chemical depends on its toxicity and the level of exposure. Improper or inappropriate use of pesticides and other household products by either the homeowner or the professional applicator can increase the level of exposure, which in turn increases the level of risk posed to human health and the environment.

Can pesticide applications harm dogs and cats? No, not if label instructions are followed. All pesticides are carefully tested before they can be registered by the Environmental Protection Agency (EPA) and before they are sold. Part of this testing includes determining possible effects on non-target organisms, such as pets. Pesticides which pose an unacceptable risk to non-target organisms cannot be registered. Of course, you should follow the same re-entry procedures for cats and dogs as is recommended for humans. An example of a re-entry procedure would be to wait until the treated area dries (in the case of a liquid application). How do we know that pesticides aren't harmful to humans or wildlife?

The pesticide industry is one of the most highly regulated industries in the United States. Before a product is registered by the EPA, it must be rigorously tested for potential human health and environmental effects. This process can take up to 10 years and involve up to 120 different tests and studies.

Today, manufacturers may invest as much as \$30 to \$50 million or more in product testing before a new pesticide ever comes to the market. These tests are required, designed and reviewed by EPA scientists and are conducted according to EPA standards. The most important step in ensuring the safety of humans or wildlife when using pesticides is proper

mixing & application. In most cases, it is much safer to call a professional rather than apply pesticides on your own using over-the-counter pesticides, as these products are often mis-applied in a way that could be harmful to humans or animals.