

Pesticide Exposure Stats and Facts

FACTS

1. The toxicity of a pesticide is a measure of its capacity or ability to cause injury or illness. The toxicity of a particular pesticide is determined by subjecting test animals to varying dosages of the active ingredient (a.i.) and each of its formulated products. The active ingredient is the chemical component in the pesticide product that controls the pest. By understanding the difference in toxicity levels of pesticides, a user can minimize the potential hazard by selecting the pesticide with the lowest toxicity that will control the pest.
2. Applicators may have little or no control over the availability of low-toxicity products or the toxicity of specific formulated products. However, applicators can minimize or nearly eliminate exposure—and thus reduce hazard—by following the label instructions, using personal protective clothing and equipment (PPE), and handling the pesticide properly.
3. The symptoms of pesticide poisoning can range from a mild skin irritation to coma or even death. Different classes or families of chemicals cause different types of symptoms. Some people may show no reaction to an exposure that may cause severe illness in others.
4. The effects, or symptoms, of pesticide poisoning can be broadly defined as either topical or systemic. Topical effects generally develop at the site of pesticide contact and are a result of either the pesticide's irritant properties (either the active and/or inert ingredient) or an allergic response by the victim. Dermatitis, or inflammation of the skin, is accepted as the most commonly reported topical effect associated with pesticide exposure. Symptoms of dermatitis range from reddening of the skin to rashes

and/or blisters.

STATS

- An average of about 200,000 people die from the toxic exposure of pesticides per year across the world.
- The World Health Organization, estimates the total cases of pesticide poisoning worldwide at between 2 and 5 million workers each year, of which 40,000 are fatal.
- The ILO representative stressed that exposure to pesticides and agrochemicals constitutes one of the major risks faced by farm workers, accounting in some countries for as much as 14% of all occupational injuries in the agricultural sector and 10% of all fatal injuries.
- Developing countries consume more than 20% of the world production of agrochemicals, which are responsible for approximately 70% of the total cases of acute poisoning in the working population, i.e. more than 1.1 million cases.
- An average of 130,136 calls to poison control centers were reported from 2006 to 2010, with an average of 20,116 cases (17.8%) treated in health care facilities annually.