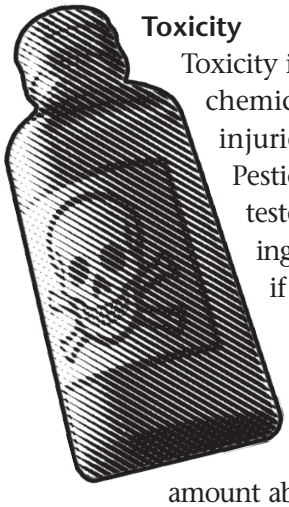
Pesticide Emergency Response

Washington Poison Control Center
1-800-222-1222

Washington State University Urban IPM and Pesticide Safety Education Program

Despite what many of us might think, no substance is inherently safe, or unsafe for that matter. Any substance can be harmful if exposures are high enough. Pesticides are made to be toxic to the target pest. Accidents and misuse can occur and they can cause injury or illness. The potential for a pesticide to cause injury depends upon several factors.



Toxicity

Toxicity is a measure of the inherent ability of a chemical to produce injury, such as external injuries (skin and eyes) or internal injuries. Pesticides vary in their toxicities and each are tested for their effects from skin, lung, and ingestion exposures. Some are more injurious if exposed to the skin than if ingested.

Dose

The greater the dose of a pesticide (that is, the amount absorbed), the greater the risk of injury. Dose is dependent on the amount absorbed compared with the weight of the person. Therefore, an amount that is relatively harmless to an adult may harm a small child, and kill an insect.

Route of entry

The most common route of absorption of pesticides is through the skin, thus skin irritation is the most common pesticide related injury. However, swallowing a pesticide usually creates the most serious problem. Pesticides also can enter through the lungs or eyes.

Duration of exposure

The longer a person is exposed to a pesticide, the more chemical is absorbed by the body.

Physical and chemical properties

Some pesticides evaporate more readily than others, so they can be more easily inhaled. Some break down quickly on surfaces, others last longer. Some products have solvents added which can enhance skin absorption. These qualities affect the potential risk of exposure.

Population at risk

Persons who run the greatest danger of pesticide illness are those whose exposure is highest, such as workers who mix, load, or apply pesticides. However, consumers who use pesticides in their homes also face the possibility of exposure, especially if they do not follow the instructions on the product label carefully.

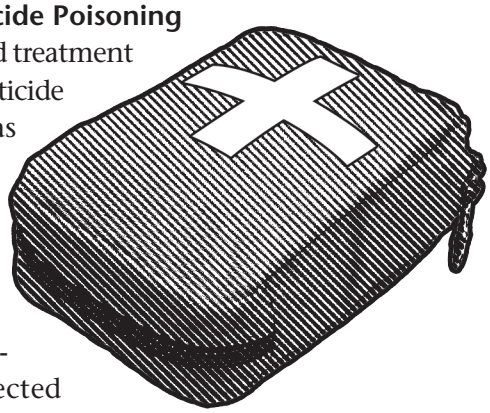
Recognizing Pesticide Poisoning

Like other chemicals, pesticides may produce external or internal injury.

External irritants can cause contact-associated skin irritation, producing redness, itching, or pimples; or they may prompt an allergic skin reaction, with redness, swelling, or blistering. The mucous membranes of the eyes, nose, mouth, and throat also can be quite sensitive to chemicals. Stinging and swelling can occur. Many products can cause skin irritation.

Internal injuries from any chemical may occur depending upon where a chemical is in the body, or what organ is affected. Shortness of breath, excess saliva, and rapid breathing may occur because of lung injury. Other symptoms to watch out for include nausea, vomiting, diarrhea, headache, or dizziness. Pesticides most likely causing internal injuries include the rodenticides and insecticides.

First Aid for Pesticide Poisoning



Appropriate first aid treatment depends on the pesticide used. The label has precautionary statements regarding first aid. Here are some tips about basic treatments. They do not substitute for label directed first aid treatment, or medical advice or treatment.

Skin exposure. Thoroughly wash the area of contact with soap and water. Call physician or poison control center for further treatment advice. If pesticide spills on clothing, remove clothing immediately and wash the affected skin areas. Later, discard contaminated clothing or thoroughly wash it separately from other laundry.

Eye exposure. Open eyelids and wash eye slowly and gently with water. Continue eye wash for 10 to 15 minutes. Call a physician or poison control center for further treatment advice.

Inhalation. Move victim to fresh air. If unconscious, give artificial respiration and call for medical assistance. Call physician or poison control center for further treatment advice.

Swallowed. READ THE LABEL. The label may indicate for the victim to drink some liquids and then vomit; other labels may clearly state do not vomit. Call physician or poison control center for further treatment advice.

After performing initial first aid, get medical help immediately. If someone develops symptoms after working with pesticides, call 911 for medical assistance. It is better to be too cautious than not. Be sure to have the pesticide label when you call. Medical personnel will ask what the chemical is. Exposure to certain chemicals causes characteristic symptoms and the doctor needs to know what the chemical is before prescribing treatment. If you are advised to seek treatment at an emergency room or physician's office, take the product label to show your doctor.

To avoid problems, minimize your exposure when mixing and applying pesticides by wearing gloves, long sleeved shirt, long pants and the protective equipment stated on the label. Also be careful to follow the label instructions for mixing and applying. Safe pesticide use depends on that.

Write the ***Poison Control*** phone number on the front of your phone book or somewhere else close to the phone.

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This material was adapted from CalEPA/CDPR Fact Sheets and the Citizen's Guide to Pest Control and Pesticide Safety, EPA 730-K-95-001, Sept. 1995.