

Route of Entry

Video Glossary

Absorbent: The movement of a chemical into plants, animals (including humans), microorganisms, or soil.

Active ingredient: The chemical or chemicals in a product responsible for pesticidal activity.

Acute Effect: An illness that occurs shortly after exposure to a pesticide.

Acute Exposure: Is caused by a single, one-time exposure event, showing up within seconds or minutes of exposure.

Acute Onset: The commencement of symptoms of pesticide-related injury that appear soon after the exposure incident.

Allergic Effects /Allergy: A hypersensitivity to a specific substance, often called the allergen. An allergy may cause dermatitis, blisters, or hives; it could also cause illness, asthma, or life-threatening shock. Often the entire body is affected. Pesticide allergy symptoms are similar to other allergy symptoms—reddening and itching of the eyes, respiratory discomfort, and asthma-like symptoms.

Anticoagulant: Any substance that prevents the clotting of blood.

Antidotes: Are available for a few classes of pesticides

such as anticoagulant type.

Atropine (Atropine Sulfate): An antidote used to treat organophosphate and carbamate poisoning.

Brand Name: The registered or trade name, number, or designation given to a specific pesticide product or device by the manufacturer or formulator.

Carbamates: A group of pesticides commonly used for control of insects, mites, fungi, and weeds. N-methyl carbamate insecticides, miticides, and nematicides are cholinesterase inhibitors.

Cardiopulmonary Resuscitation (CPR): Procedure designed to restore normal breathing after breathing and heartbeat has stopped.

CAUTION: Have a lower risk pesticide and present less hazard. Toxicity may be contact, irritation of eyes, skin, of respiratory tract; or systemic.

Chemical Name: The technical name of the active ingredient(s) found in the formulated product. This complex name is derived from the chemical structure of the active ingredient.

Chronic Illness: An illness that will last for long periods of time. Cancer respiratory disorders, and neurological disorders are example of chronic illnesses that

have been associated with exposures to some types of pesticides.

Chronic Toxicity: Is long term exposure, taking place over weeks, months or years.

Contamination: The presence of unwanted substance in or on a plant, animal, soil, water, air, or structure.

Contact Effects: Injury at the point of contact, including skin discoloration and irritation (dermatitis) such as itching, redness, rashes, blisters, and burns. Also, swelling, stinging, and burning of the eyes, nose, mouth, or throat are contact effects.

Corrosive Poison: A poison containing a strong acid or base that will severely burn the skin, mouth, stomach, or respiratory tract.

DANGER: Indicates the potential for permanent damage to skin, eyes, or lungs.

DANGER POISON: Is poison through any route of entry. Toxicity may be oral, dermal or inhalation. It has skull and crossbones.

Decontaminate: To remove or degrade a chemical residue from the skin or a surface. defoaming agent An adjuvant used to reduce the foaming of a spray mixture due to agitation.

Delayed Toxicity: Illnesses or injuries that do not appear immediately after exposure to pesticides. The effects generally occur between 24 hours and several days after exposure.

Dermal: Pertaining to the skin.

Dermal Toxicity: The ability of a pesticide to cause injury to a human or animal when absorbed through the skin.

Dermatitis: The inflammation, itching, irritation, or

occurrence of a rash after exposure to a chemical.

Diagnosis: The positive identification of a problem and its cause.

Dilution/Diluent: Any inert liquid, solid, or gaseous material that is combined with a pesticide active ingredient during the manufacturing process. Also, the water, petroleum product, or other product, or other liquid in which the formulated product is mixed before application. Also referred to as Carrier.

Directions for Use: The instructions found on pesticide labels indicating the proper use of the pesticide product.

Dusts (Applications): A finely ground, dry pesticide formulation containing a small amount of active ingredient and a large amount of inert carrier or diluent such as clay or talc.

Emulsifiable Concentrates: A pesticide formulation produced by mixing and active ingredient and an emulsifying agent in a suitable petroleum solvent. When it is added to water, a milky emulsion is usually formed.

Environmental and Special Warning Statements: Help you avoid contaminating the environment.

Exposure: Unwanted contact with pesticides or pesticide residues by people, other organisms or the environment.

Eyes (ocular): Exposure to pesticides or unwanted chemicals or substance through the eyes.

First Aid: The immediate assistance provided to someone who has been exposed to a pesticide or chemical. First aid for pesticide exposure usually involves removal of contaminated clothing and washing the affected area of the body to remove as much of the pesticide material as possible.

Formulation: The Pesticide Product as purchased, containing a mixture of one or more active ingredients, carries (inert ingredients), and other additives diluted for safety and ease of application.

Granular: A dry pesticide formulation. The Active Ingredient is either mixed with or coated onto an inert carrier to form a small, ready-to-use, low concentrate particle that does not normally present a drift hazard.

Hazard: The likelihood that injury or death will occur from a given level and duration of exposure to a toxic chemical.

Heat Stress: A potentially life-threatening over- heating of the body.

Hygiene: As it applies to pesticide exposure or chemical exposure, ensure to wash exposed body areas right away to remove pesticide residue.

Inhalation: The property of a pesticide to be poisonous to humans or animals when breathed in through the nose and mouth into the lungs.

LC50: The concentration of a pesticide, usually in air or water, that can kill 50 percent of a test population of animals. LC50 is usually expressed in parts per million (ppm). The lower the LC50 value, the more acutely toxic the chemical.

LD50: The dose or amount of a pesticide that can kill 50 percent of the test animals when eaten or absorbed through the skin. LD50 is expressed in milligrams of chemical per kilogram of body weight of the test animal (mg/kg). The lower the LD50 value, the more acutely toxic the chemical.

Label: All printed material attached to or part of a pesticide container. The label is a legal document.

Lethal Concentration: See LC50.

Lethal Dose: See LD50.

Lungs (inhalation): Exposure to pesticides or unwanted chemicals or substance through inhalation into the lungs (breathing).

Material Safety Data Sheet (MSDS): A safety data sheet available from the manufacturer that provides information on chemical properties, toxicity, first aid, hazards, personal protective equipment, and emergency procedures to be followed in the event of a spill, leak, fire, or transportation crisis.

Mouth to Mouth Resuscitation: Rescue Breathing, given mouth to mouth, to assist or restore breathing to a person who is not breathing or is experiencing breathing difficulty.

Non-soluble chemicals: Chemicals that cannot break down and are eventually stored in fatty deposits in the body and breast milk.

Ocular: Pertaining to the eyes. This is one of the routes of entry of pesticides into the body.

Oral Exposures: Exposure to pesticides or unwanted chemicals or substance through the mouth.

Oral Toxicity: The occurrence of injury when a pesticide is taken by mouth.

Organophosphate: A large group of pesticides that contain the element phosphorus. Most are non-persistent insecticides, miticides, and nematocides. Many are highly toxic.

Personal Protective Equipment (PPE): Devices and clothing that protect pesticide applicators, handlers, and workers from exposure to pesticides.

Pesticide: Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, bacte-

ria, or weeds, or any other forms of life declared to be pests; and any other substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant.

Pesticide Use Hazard: The potential for a pesticide to cause injury or damage during handling or application.

Poison Control Center: An agency, generally a hospital, that has current information on proper first-aid techniques and antidotes for poisoning emergencies.

Precautionary statements: Help you decide how to protect yourself, other people, or animals from exposure and can be found in several sections of the label.

Protective Clothing: Garments that cover the body, arms and legs.

Recognition and Management of Pesticide Poisonings Manual: A manual used to help recognize and manage pesticide poisonings that can be purchased through the EPA website.

Restricted Use Pesticides, RUP: A highly hazardous Pesticide that can only be purchased, possessed or used by a person who is a certified applicator or under the supervision of a certified applicator.

Rodenticides: A chemical used to control rodents. Signal word: Words required to appear on every pesticide label to denote the relative acute toxicity of the product.

Route of exposure: The way a pesticide gets onto or into the body. The four routes of exposure are dermal (skin), ocular (eyes), respiratory (lungs), and oral (mouth).

Sensitization: An allergic reaction to pesticides.

Signal Words: Words that are required to appear on every pesticide label to denote the relative acute tox-

icity of the product. The signal words are DANGER—POISON used with a skull and crossbones symbol for potentially lethal products, DANGER for severe skin and eye damage, WARNING for moderately toxic, or CAUTION for slightly toxic compounds.

Skin (dermal): The exposure to pesticides, chemicals or other substance through the skin into the blood stream or other organs.

Special Toxicity Statements: Say if the product is hazardous to wildlife and what precautions to take.

Specific Action Statements: gives precautions and PPE.

Symptom: Any detectable change in an organism resulting from the activities of a pathogen or other pest. Also, an indication of pesticide poisoning in humans and other animals.

Toxicity: The degree to which a substance is poisonous.

Unclassified General Use: Typically have lower toxicity and are less harmful to humans and the environment. Anyone can purchase these without permits or restrictions.

WARNING – AVISO: Are moderately hazardous pesticides.

Water soluble: A liquid pesticide formulation that dissolves in water to form a true solution.

Wettable powders: A dry pesticide formulation in powder form that forms a suspension when added to water.

