

## Glossary

**Acaricide** — A pesticide used to control mites.

**Active ingredient** — Any substance that will prevent, destroy, repel, or mitigate any pest, or that functions as a plant regulator, desiccant, defoliant, synergist, or nitrogen stabilizer.

**Acute illness** — An illness that becomes apparent soon after an exposure to a pesticide occurs.

**Acute onset** — The commencement of symptoms of pesticide-related injury that appear soon after the exposure incident.

**Agricultural employer** — Any person who is an owner of, or is responsible for the management or condition of, an agricultural establishment, and who employs any worker or handler for a salary or wages (financial compensation).

**Agricultural establishment** — Any farm, forest operation, or nursery engaged in the outdoor or enclosed space production of agricultural plants. An establishment that is not primarily agricultural is an agricultural establishment if it produces agricultural plants for transplant or use (in part or their entirety) in another location instead of purchasing the agricultural plants.

**Agricultural plant** — Any plant, or part thereof, grown, maintained, or otherwise produced for commercial purposes, including growing, maintaining or otherwise producing plants for sale, trade, for research or experimental purposes, or for use in part or their entirety in another location. Agricultural plant includes, but is not limited to, grains, fruits and vegetables; wood fiber or timber products; flowering and foliage plants and trees; seedlings and transplants; and turf grass produced for sod. Agricultural plant does not include pasture or rangeland used for grazing.

**Agricultural worker** — Any person, including a self-employed person, who is employed for a salary or wages (financial compensation) and who is performing activities relating to the production of agricultural plants on an agricultural establishment. See definitions for worker and handler.

**Agricultural worker training** — Specific training mandated by the U.S. Environmental Protection Agency to assist agricultural workers in protecting themselves from pesticide and pesticide residues when they work in areas that have received pesticide applications.

**Application exclusion zone (AEZ)** — The area surrounding the application equipment that should be free of all persons other than appropriately trained and equipped handlers during pesticide applications.

**Attractant** — A substance that attracts a specific species of pest. Attractants are considered to be pesticides when they are manufactured to attract pests for trapping or are used in poisoned bait.

**Brand name** — The registered or trade name given to a pesticide by its manufacturer or formulator. A specific pesticide may be sold under several brand names.

**Cardiopulmonary resuscitation (CPR)** — A procedure designed to restore normal breathing after breathing and heartbeat has stopped.

**Caution** — The signal word used on labels of pesticides having the least capacity for hazards.

**Certified applicator** — A person who is certified to use or supervise the use of any restricted-use pesticide covered by his certification.

**Chemical name** — The official name given to a chemical compound to distinguish it from other chemical compounds.

**Chemigation** — The process of applying pesticides or fertilizers through irrigation systems.

**CHEMTREC** — A chemical industry-supported organization that provides assistance and advice on pesticide emergencies. The telephone number of CHEMTREC is 800-424-9300.

**Chronic illness** — An illness that will last for long periods of time. Cancer, respiratory disorders, and neurological disorders are examples of chronic illnesses that have been associated with exposures to some types of pesticides.

**Chronic onset** — The commencement of symptoms of pesticide poisoning that occur days, weeks, months, or years after the actual exposure.

**Closed system** — An engineering control used to protect handlers from pesticide exposure hazards when mixing and loading pesticides.

**Commercial pesticide handler employer (CPHE)** — Any person, other than an agricultural employer, who employs any handler to perform handler activities on an agricultural establishment. A labor contractor who does not provide pesticide application services or supervise the performance of handler activities, but merely employs laborers who perform handler activities at the direction of an agricultural or handler employer, is not a commercial pesticide handler employer.

**Commercial pesticide handling establishment** — Any enterprise, other than an agricultural establishment, that provides pesticide handler or crop advising services to agricultural establishments.

**Common name** — The recognized name of a pesticide, separate from the brand name and chemical name.

**Compatible** — When two or more chemicals can be mixed together without reducing the effectiveness or characteristics of any individual chemical in the mixture.

**Confined area** — An area, such as a building or greenhouse that may have restricted air circulation and, therefore, promotes the buildup of toxic fumes or vapors from a pesticide application.

**Corrosive material** — A chemical that reacts with metals or other materials. Some pesticides are corrosive and special handling requirements are needed when using these.

**Crop advisor** — Any person who is assessing pest numbers or damage, pesticide distribution, or the status or requirements of agricultural plants.

**Danger** — The signal word used on labels of pesticides having serious health and environmental hazards. This signal word is used on pesticides having an oral LD<sub>50</sub> less than 50 mg/kg or a dermal LD<sub>50</sub> less than 200 mg/kg.

**Decontaminate** — To remove or degrade a chemical residue from the skin or on a surface.

**Defoamer** — An additive that eliminates foaming of a pesticide mixture in a spray tank.

**Defoliant** — A pesticide used to remove leaves from target plants, often as an aid in harvesting the plant.

**Dermal** — Pertaining to the skin. One of the major ways pesticides can enter the body to possibly cause poisoning.

**Desiccant** — A pesticide that destroys target pests by causing them to lose body moisture.

**Designated representative (DR)** — Any persons designated in writing by a worker or handler to exercise a right of access on behalf of the worker or handler to request and obtain a copy of the pesticide application information and safety data sheets.

**Directions for use** — The instructions found on pesticide labels indicating the proper use of the pesticide product.

**Dose** — The measured quantity of pesticide. Often the size of the dose determines the degree of effectiveness, or, in the case of poisoning of nontarget organisms, the degree of injury.

**Drift** — The movement of pesticide dust, spray, or vapor away from the application site.

**Early entry** — Entry by a worker into a treated area on the agricultural establishment after a pesticide application is complete, but before any restricted-entry interval for the pesticide has expired.

**Early-entry worker** — An employee who enters a pesticide treated area on an agricultural establishment after a pesticide application is complete, but before any restricted-entry interval for the pesticide has expired, to conduct worker tasks.

**Emergency exemption from registration** — A federal exemption from regular pesticide registration sometimes issued when an emergency pest situation arises for which no pesticide is registered that has a tolerance on the crop in question.

**Employ** — To obtain, directly or through a labor contractor, the services of a person in exchange for a salary or wages, including piece-rate wages, without regard to who may pay or who may receive the salary or wages. It includes obtaining the services of a self-employed person, an independent contractor, or a person compensated by a third party, except that it does not include an agricultural employer obtaining the services of a handler through a commercial pesticide handler employer or a commercial pesticide handling establishment.

**Employer** — See definitions for agricultural employer and commercial pesticide handler employer.

**Enclosed cab** — A cab with a nonporous barrier that totally surrounds the occupant(s) of the cab and prevents dermal contact with pesticides that are being applied outside of the cab.

**Enclosed space production** — Production of an agricultural plant indoors or in a structure or space that is covered in whole or in part by any nonporous covering and that is large enough to permit a person to enter.

**Establishment number** — A number assigned to registered pesticides by the U.S. Environmental Protection Agency which indicates the location of the manufacturing or formulation facilities of that product.

**Exposure** — Contact with pesticides or pesticide residues by people, other organisms, or the environment.

**Field worker** — An employee of a farming operation who engages in agricultural production tasks. See definition for agricultural worker.

**Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)** — The Federal law that governs the registration, sale, and use of pesticide products in the U.S.

**First aid** — The immediate assistance provided to someone who has been exposed to a pesticide. 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. First aid is not a substitute for qualified medical treatment.

**Foliage** — The leaves of plants.

**Formulation** — A mixture of active ingredient combined with inert materials during the pesticide manufacturing process. Inert materials are added to improve the mixing and handling qualities of a pesticide.

**Fumigant** — Vapor or gaseous form of a pesticide used to penetrate porous surfaces for control of soil dwelling pests or pests in enclosed areas or storage.

**Fungicide** — A pesticide used for control of fungi.

**Fungi (Fungus)** — A multicellular lower plant lacking chlorophyll, such as a mold, mildew, or plant rust.

**Hand labor** — Any agricultural activity performed by hand or with hand tools that causes a worker to have substantial contact with plants, plant parts, or soil or other surfaces that may contain pesticide residues, except that hand labor does not include operating, moving, or repairing irrigation or watering equipment or performing crop advisor tasks.

**Handler** — Any person, including a self-employed person, who is employed by an agricultural employer or commercial pesticide handler employer and performs any of the following activities:

- Mixing, loading or applying pesticides,
- Disposing of a pesticide,
- Handling opened containers of pesticides, emptying, triple-rinsing, or cleaning pesticide containers according to pesticide product labeling instructions or disposing of pesticide containers that have not been cleaned,
- Acting as a flagger,
- Cleaning, adjusting, handling, or repairing the parts of mixing, loading or application equipment that may contain pesticide residues,
- Assisting with the application of pesticides,
- Entering an enclosed space after the application of a pesticide and before the inhalation exposure level listed in the labeling has been reached or one of the ventilation criteria established by WPS or the labeling has been met to operate ventilation equipment, monitor air levels, or adjust or remove coverings used in fumigation,
- Entering a treated area outdoors after application of any soil fumigant during the labeling-specified entry-restricted period to adjust or remove coverings used in fumigation, and
- Performing tasks as a crop advisor during any pesticide application or restricted-entry interval, or before the inhalation exposure level listed in the pesticide product labeling has been reached or one of the ventilation criteria established by WPS or the pesticide product labeling has been met.

**Handler employer** — Any person who is self-employed as a handler or who employs any handler.

**Herbicide** — A pesticide used to control weeds.

**Hygiene** — As it applies to pesticide exposure, hygiene involves washing exposed body areas promptly to remove pesticide residues.

**Incompatible** — Two or more materials that cannot be mixed or used together.

**Immediate family** — Is limited to the spouse, parents, stepparents, foster parents, father-in-law, mother-in-law, children, stepchildren, foster children, sons-in-law, daughters-in-law, grandparents, grandchildren, brothers, sisters, brothers-in-law, sisters-in-law, aunts, uncles, nieces, nephews, and first cousins. “First cousin” means the child of a parent’s sibling, i.e., the child of an aunt or uncle.

**Inert ingredient** — Any substance other than an active ingredient that is intentionally added to a pesticide product, such as solvents, stabilizers, spreaders or stickers, preservatives, surfactants, defoamers, etc.

**Insect growth regulator (IGR)** — A type of pesticide used for control of certain insects. Insect growth regulators disrupt the normal process of development from immature to mature life stages.

**Insecticide** — A pesticide used for the control of insects. Some insecticides are also labeled for control of ticks, mites, spiders, or similar pests.

**Labeling** — The pesticide label and all associated materials, including supplemental labels, and manufacturer’s information.

**Labor contractor** — A person, other than a commercial pesticide handler, who employs workers or handlers to perform tasks on an agricultural establishment for an agricultural employer or a commercial pesticide handler employer.

**LC<sub>50</sub>** — The lethal concentration of a pesticide that will kill half of a test animal population. LC<sub>50</sub> values are given in micrograms per milliliter of air or water (mg/ml).

**LD<sub>50</sub>** — The lethal dose of a pesticide, applied to the skin or taken internally, that will kill half of a test animal population. LD<sub>50</sub> values are given in milligrams per kilogram of test animal body weight (mg/kg).

**Long-term health problem** — A pesticide-related illness or disease which may extend over months, years, or a lifetime.



**Medical facility** — A clinic, hospital, or physician's office where immediate medical care for pesticide-related illness or injury can be obtained.

**Miticide** — A pesticide used to control mites.

**Mitigate** — The process of making a problem less severe.

**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.

**Nematicide** — A pesticide used to control nematodes.

**Nematode** — Elongated, cylindrical, nonsegmented worms. Nematodes are commonly microscopic; some are parasites of plants or animals.

**No observable effect level (NOEL)** — The NOEL is the maximum dose or exposure level of a pesticide that produces no noticeable toxic effect on test animals.

**Ocular** — Pertaining to the eye. This is one of the routes of entry of pesticides into the body.

**Oral** — Pertaining to the mouth. This is one of the routes of entry of pesticides into the body.

**Offsite movement** — Any movement of a pesticide from the location where it was applied. Offsite movement occurs through drift, water runoff, crop harvest, blowing dust, and by being carried away on people, animals, or equipment.

**Outdoor production** — Production of an agricultural plant in an outside area that is not enclosed or covered in any way that would obstruct the natural airflow.

**Owner** — Any person who has a present possessory interest (fee, leasehold, rental, or other) in an agricultural establishment. A person who has both leased such an agricultural establishment to another person and granted that same person the right and full authority to manage and govern the use of such an agricultural establishment is not an owner under the WPS.

**Personal protective equipment (PPE)** — Devices and garments that protect handlers from exposure to pesticides. These include coveralls, eye protection, gloves and boots, respirators, aprons, and hats.

**Pesticide** — Any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any insects, rodents, nematodes, fungi, bacteria, 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.

**Plant growth regulator (PGR)** — A pesticide used to regulate or alter the normal growth of plants or development of plant parts.

**Posting** — The placement of warning signs around a pesticide treated area, if required by the pesticide label or by the WPS based on the length of the REI. This serves to provide information about treated areas under an REI.

**Precautionary statement** — The section on pesticide labels where human and environmental hazards are listed. Personal protective equipment requirements are listed here, as well as first aid instructions and information for physicians.

**Protective clothing** — Garments that cover the body, including arms and legs.

**Registration number** — Identification numbers assigned by the U.S. Environmental Protection Agency and found on pesticide labels.

**Repellent** — A pesticide used to keep target pests away from a treated area by saturating the area with an odor that is disagreeable to the pest.

**Residue** — Traces of pesticide that remain on treated surfaces after a period of time.

**Respiratory equipment** — A device that filters out pesticide dusts, mists, and vapors to protect the wearer from respiratory exposure during mixing and loading, application, or while entering treated areas before the restricted-entry interval expires.

**Restricted-entry interval (REI)** — A period of time that must lapse between application of an agricultural pesticide and when it is safe to allow agricultural workers into the treated area without requiring they wear personal protective equipment and receive early-entry worker information.

**Restricted-use pesticide (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.

**Restricted-use statement** — A statement on a pesticide label that restricts the use of that pesticide to specific areas or by designated individuals.

**Rodenticide** — A pesticide used for control of rats, mice, gophers, squirrels, and other rodents.

**Route of exposure** — The way a pesticide gets onto or into the body. The four routes of exposure are dermal (on or through the skin), ocular (on or in the eyes), respiratory (into the lungs), and oral (through swallowing).

**Runoff** — The liquid spray material that drips from the foliage of treated plants or from other treated surfaces. Also the rainwater or irrigation water that leaves an area.

**Safety data sheet (SDS)** — A document 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.

**Sensitization** — An allergic reaction to pesticides.

**Signal word** — One of three words (danger, danger-poison, warning, or caution) found on pesticide labels to indicate the relative hazard of the chemical.

**Skin absorption** — The passage of pesticides through the skin into the blood stream or other organs of the body.

**Supplemental label** — Additional instructions and information that are not found on the pesticide label but is considered to be part of the pesticide labeling.

**Symptom** — Any abnormal condition that can be caused by a pesticide exposure that can be seen or felt or can be detected by examination or laboratory tests.

**Tolerance** — The maximum amount of pesticide residue that may legally remain on or in food or feed commodities at harvest or slaughter; established by the EPA for each crop and every pesticide used on a specific crop.

**Toxicity** — The potential the pesticide has for causing harm.

**Toxicity testing** — A process in which known doses of a pesticide are given to groups of test animals and the results observed.

**Training record** — A document intended to record the date, type of pesticide safety training, and names of the attendees. This requirement varies from state to state; contact state and local pesticide regulatory agencies for guidance.

**Treated surface** — The surface of plants, soil, or other items that were treated with pesticides.

**Treated area** — Any area to which a pesticide is being directed or has been directed. In some places, the manual further limits the definition of a treated area as any site where a pesticide has been applied and a REI has been in effect within the last 30 days.

**Use** — As in “to use a pesticide” means any of the following:

- Pre-application activities, including, but not limited to:
  - Arranging for the application of the pesticide,
  - Mixing and loading the pesticide,
  - Making necessary preparations for the application of the pesticide, including responsibilities related to worker notification, training of workers or handlers, providing decontamination supplies, providing pesticide safety information and pesticide application and hazard information, use and care of personal protective equipment, providing emergency assistance, and heat stress management.
- Application of the pesticide.
- Post-application activities intended to reduce the risks of illness and injury resulting from handlers’ and workers’ occupational exposures to pesticide residues during and after the restricted-entry interval, including responsibilities related to worker notification, training of workers or early-entry workers, providing decontamination supplies, providing pesticide safety information and pesticide application and hazard information, use and care of personal protective equipment, providing emergency assistance, and heat stress management.
- Other pesticide-related activities, including, but not limited to, transporting or storing pesticides that have been opened, cleaning equipment, and disposing of excess pesticides, spray mix, equipment wash waters, pesticide containers, and other pesticide containing materials.

**Warning** — The signal word used on labels of pesticides having an oral  $LD_{50}$  between 50 mg/kg and 500 mg/kg and a dermal  $LD_{50}$  between 200 mg/kg and 2000 mg/kg.

**Worker** — Any person, including a self-employed person, who is employed for a salary or wages (financial compensation) and performs activities directly relating to the production of agricultural plants on an agricultural establishment. See agricultural worker.

**Worker housing area** — Any place or area of land on or near an agricultural establishment where housing or space for housing is provided for workers or handlers by an agricultural employer, owner, labor contractor, or any other person responsible for the recruitment or employment of agricultural workers.

**Worker Protection Standard (WPS)** — Regulation in 40 CFR Part 170 which contains a national standard designed to reduce the risks of occupational illness or injury resulting from worker and handler exposure to pesticides used in the production of agricultural plants on farms or in nurseries, greenhouses, and forests and also from the accidental exposure of workers and other persons to such pesticides. It requires workplace practices like the pesticide safety training of agricultural workers and pesticide handlers, central information postings, and procedures for responding to exposure-related emergencies.



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Pesticide Educational Resources Collaborative

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Davis, CA 95618  
[pesticideresources.org](http://pesticideresources.org)



U.S. Environmental Protection Agency  
Office of Pesticide Programs (MC 7506C)

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EPA 730-B-16-001

Publication date:

November 2016

