Central States Center for Agricultural Safety and Health

Farm Chemical & Pesticide Safety

Chemicals and pesticides are used on farms for a multitude of reasons. Pesticides are used to get rid of pests and weeds. If used correctly and according to directions, chemicals can be safe. When directions aren't followed, they can be dangerous. The Environmental Protection Agency (EPA) estimates there are over 10,000 poisonings each year, but just over a quarter of them occur on the job. Most take place in the home where many chemicals exist.



COMMON CHEMICALS AND PESTICIDES ON THE FARM

- Insecticides to kill insects
- Fertilizers to enhance plant growth
- Herbicides to stop plant growth
- Fungicides to kill fungus
- Fuels to provide heat or energy
- Lubricants to grease parts
- Solvents to dissolve substances

CHEMICAL AND PESTICIDE EXPOSURE CAN TAKE PLACE MANY WAYS

- Swallowed- drank or eaten
- Inhaled breathed through nose into lungs
- Skin exposure absorption accounts for 97% of exposure
- Eye exposure splashing liquid chemicals
 Injection cuts or needles

SYMPTOMS OF CHEMICAL EXPOSURE

If exposed to pesticides, the body may react by heightening sensitivity, causing an immediate or long-term illness. If any of the following symptoms occur after handling chemicals are severe, call 911 or go to the closest emergency room. If they happen, but not severe, contact your doctor.

- Headaches
- Fever/sweating
- Dilated eyes
- Nausea
- Poisoning
- Difficulty breathing

Burns Tip:

Take the label (or a picture of it) with you to the medical facility.





Central States Center for Agricultural Safety and Health

Farm Chemical & Pesticide Safety

Preventing Harm from Farm Chemicals and Pesticides

A chemical label is your friend. **Read the label before using any chemical or pesticide**. Follow instructions about mixing, application, and clean-up.

LABEL COMPONENTS & PURPOSES

Personal Protective Equipment (PPE)

- Listing of what PPE should be used when working with the specific chemical. It might be gloves, eye protection, coveralls, and/or respirators. It's different for each chemical.
- Replace respirator masks and cartridges when suggested on the label. Respirator cartridges are not interchangeable.
- Some PPE have expiration dates. If they have expired, replace them.
- If you don't have the required PPE, don't apply the chemical.
- Ensure that everyone on the farm knows about the hazards posed by chemicals.

Toxicity Level

- Danger most dangerous
- Warning
- · Caution least dangerous



How to apply the chemical

Dosages and mixing instructions will help ensure a safe amount is used.

Disposal

- How to get rid of the container safely according to EPA's recommendations.
- Dispose of used PPE as indicated on the label.

Conventional work clothing is often used when applying chemicals. This clothing needs to be handled, sorted, and washed carefully so residue is not transferred to the rest of the family

CLEANING TIPS - if wearing non-disposable clothing when applying chemicals

- Wash gloves with water before taking them off
- Remove clothing used for chemical application outside
- Wash clothing as soon as possible after applying chemicals using detergent and hot water
- Wash chemical exposed clothing separately from the family's laundry
- Decontaminate the washing machine before using for family laundry
- Dry clothing outside so residue is not spread to dryer

STORAGE TIPS

- Store chemicals and pesticides in their original containers in a locked facility
- Keep PPE in its sealed package until use and never store PPE with pesticides or personal clothing.
- Don't use empty chemical containers for storing other items and properly dispose of the empty container.

TRAINING - If applying farm chemicals, take a class on safe applying application. Check with your state Department of Agriculture for requirements and schedules.



