



Promoting Agricultural Health & Safety

## Dispose of pesticides properly

*A young boy was searching for clothing and other items at an outdoor collection bin used by a local charity. While looking through a bag of odds and ends, he found some small white tablets that looked like candy. He put them in his pocket and later, at home, he took out the tablets and began to chew on them. They weren't very good so he didn't eat much but, within hours, his parents found him slumped over and unconscious. They rushed him to the hospital where he fell into a coma and died the next day. Doctors identified the mysterious tablets: they were tablets of the pesticide Lindane.*

The importance of proper pesticide disposal is illustrated by this tragic but true story of a young Iowa boy. Improper pesticide disposal can lead to the death of humans or animals. It also may lead to irreversible environmental harm.

Since pesticides are toxic, every household or farm pesticide must be disposed of with caution and concern for others, particularly small children. Half of the pesticide-related deaths each year in the United States involve children under the age of 10. Improper disposal or storage is the main factor.

Small quantities of pesticides also have been detected in some groundwater samples in Iowa. The contamination often can be traced to one source where illegal or improper disposal occurred. Unfortunately, it only takes one ounce of pesticide to contaminate 7,800 gallons of groundwater to a potentially dangerous level of one part per million.

Safe pesticide disposal is of vital importance to you, your family, the community, and the environment. Whenever you have excess or unwanted pesticides, please take the extra time to dispose of them properly.

### On the farm

**Always store pesticides in a locked storage area** to keep out animals, vandals, or children. In addition, pesticides should never be stored near animal feed, which could become contaminated by vapors or be accidentally mixed with the pesticide.

**Always keep pesticides in their original, labeled container.** The label has important information on the legal uses for the product, and other matters like first aid. A pesticide should never be stored in an unlabeled bottle or jug. A child may see the bottle and think it contains soda pop, and become poisoned.

**Never keep pesticides that have been banned**, such as DDT, chlordane, or Silvex. A person who uses banned pesticides is breaking federal and state laws, and is endangering his or her own health and the environment.

Some pesticides may have been stored so long or in hot or cold conditions that the applicator is afraid to use them. The concern is justified, since lengthy or poor storage may alter the chemical efficacy of the pesticide with unknown results. Avoid this by only ordering enough pesticide for the current season.

## Pesticide disposal safety

### How much do you know ?

Test your knowledge with this quick quiz.

1. Of the pesticide deaths in the United States, what percentage occur to children under age 10?
  - a) about 25 percent
  - b) about 50 percent
  - c) about 75 percent
2. If one ounce of pesticide entered the groundwater, how many gallons would be contaminated to 1 part per million?
  - a) 1,200 gallons
  - b) 3,500 gallons
  - c) 7,800 gallons
3. Banned pesticides can be used if the container is still labeled. True or false?
4. Pesticides should be stored:
  - a) in locked storage areas.
  - b) away from livestock feed.
  - c) in empty jars or pop bottles.
  - d) a and b are correct

See answers on back.

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If you have banned, unlabeled, or unwanted pesticides, properly store them until you can take them to the next Toxic Cleanup Day in your area. All pesticides collected during Toxic Cleanup Days are disposed of by professionals. For information on these activities, contact the Department of Natural Resources or your Extension office. In the meantime, be sure that your unwanted pesticides are stored in watertight containers that can withstand excess heat, cold, or moisture.

### **In the field**

Occasionally, even the best farm manager will end up with 10 or 15 gallons of leftover pesticide spray. If you are applying pesticides at less than the labeled rate, you might want to go over the field until the tank is empty. You also can apply the product on another similar field.

The worst scenario is to dump gallons of excess or unwanted pesticide solution on the ground. Although the soil and weather normally degrade most pesticide sprays, dumping large amounts of pesticide overloads nature's ability to break down the chemicals. In fact, some pesticides may leach through the soil and contaminate the groundwater. Certain areas are particularly vulnerable. Pesticide dumping is illegal and unethical.

Practice caution when using granular pesticides, too. There are numerous examples of farm children or animals tasting small piles of granules left in the field or shed and becoming poisoned. No matter how they are made, all pesticides should be disposed with care.

### **For more information**

For more information on proper pesticide disposal, contact the Iowa Department of Natural Resources or get these publications from your extension office:

- *1991 Private Pesticide Applicator Study Guide*, PAT-1.
- *Pesticide Spills: Are You Ready or Not?* Pm-1444.

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### **Mixing pesticides**

When mixing pesticides, applicators should always triple rinse or pressure rinse empty pesticide containers immediately, and pour the rinse water into the spray tank. By rinsing at this time, pesticide concentrate will not dry on the container and become difficult to clean. The spray tank also acts as the perfect disposal site for rinse water.

### **Pesticide containers**

Some landfills in Iowa accept for recycling empty pesticide containers that are rinsed and clean. The pesticide label also contains information on proper container disposal.

Never use an empty pesticide container for other purposes. Even though it may seem clean, small amounts of residue may remain in the container. Transporting water or feed in a pesticide container could have disastrous results.

### **The law and pesticide disposal**

Federal and state laws govern pesticide disposal. In most situations, the pesticide label gives the applicator sufficient information on methods to legally dispose of small quantities. The label is the law.

Legal disposal of large amounts of pesticides may be complicated. Contact the Department of Natural Resources or the regional Environmental Protection Agency office for how to dispose large amounts of hazardous waste.

Written by Wendy Wintersteen, extension entomology, and Laura Miller, extension communications. Design by Valerie King.

- *Rinsing and Recycling Pesticide Containers*, PAT-1442.
- *Toxic Cleanup Day Community Planning Guide*, Pm-1364.
- *Work Toward Zero Pesticide Storage*, Pm-1518a.
- *WPS: New Rules for Pesticide Safety*, Pm-1563b.

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## **Pesticide disposal safety**

### **What can you do?**

Safe pesticide disposal is vitally important for you, your family, the community, and the environment. Always follow these rules when storing or disposing of pesticides.

- Collect banned, unlabeled, or unwanted pesticides and take them to the next Toxic Cleanup Day activity in your area.
- Triple rinse pesticide containers as you empty them, pouring rinse water into the spray tank.
- Never dump pesticides in a field, ravine, or stream.
- Keep pesticides in original containers in locked storage area.
- Mix pesticides with care.

Answers to quiz: 1-b; 2-c; 3-False; 4-d



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