Selection and Care of Clothing Used for Pesticide Application

Most pesticides on the market today are potentially harmful to humans if they get on or into the body. However, proper selection and care of clothing can help reduce the hazard of pesticide application. Pesticides are classified into three levels of toxicity. The more toxic a pesticide, the more care should be taken in protecting against contamination and in laundering clothes.

Look for the words in the following table to determine toxic level.

### Key Words To Determine Pesticide Danger

<table>
<thead>
<tr>
<th>Key Word</th>
<th>Toxicity</th>
<th>Examples*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Danger</td>
<td>Highly toxic/Concentrated</td>
<td>Counter, Disyston parathion, Furadan, Dyfonate</td>
</tr>
<tr>
<td>Poison</td>
<td>Poison</td>
<td>Diazinon, Treflan, chlordane</td>
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<tr>
<td>Warning</td>
<td>Warning</td>
<td>2,4-D, Sevin, atrazine, malathion</td>
</tr>
<tr>
<td>Caution</td>
<td>Caution</td>
<td></td>
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</tbody>
</table>

*Toxicity of the pesticide may vary depending on the formulated product. Use the key word as an indicator of the toxicity level.

Pesticides can enter your body in several ways... through the skin, mouth, lungs, and eyes. Skin contamination is the number one cause of pesticide-related illness; so you need special protective gear to keep pesticides off your skin.

Anytime you work with pesticides, you’ll need at least minimum protection. In some cases you’ll need much more. Always read pesticide labels for information on what to wear.

### Protective Clothing

Protective clothing includes: coveralls or long-sleeved shirt and pants, waterproof gloves, waterproof boots, waterproof hat with wide brim, and lightweight raincoat or apron (waterproof).

**Coveralls**

Coveralls should have long sleeves and a collar that fits snugly when buttoned. Wear sleeves outside gloves and pant legs outside boots. Waterproof and disposable coveralls are now available. The waterproof coverall gives complete protection. Disposable coveralls give good protection and can be laundered several times before being discarded.

**Long-Sleeved Shirt**

The fabric of the shirt should be firmly woven. The shirt should have a collar that fits snugly when buttoned. Tuck shirt into pants. To prevent pesti-
cides from getting inside gloves, wear sleeves outside gloves.

**Pants**

The fabric of pants should be firmly woven. To prevent pesticides from running inside boots, wear pants legs on the outside.

**Gloves**

Select unlined waterproof gloves that reach at least halfway to the elbow. *(Note: When handling concentrated or highly toxic pesticides, wear waterproof neoprene gloves. However, fumigants are readily absorbed by neoprene and should not be used when applying a fumigant. Check fumigant labels for appropriate gloves to use. Avoid wearing cotton or leather gloves or gloves with fabric lining or cuffs, as these are very hard to clean.)*

**Boots**

Select unlined waterproof boots that reach at least halfway to the knee. Rinse boots after use and wear only when using pesticides. Do not wear leather boots! If a pesticide is spilled or sprayed on leather, it cannot be cleaned thoroughly. If leather boots get wet by being worn in wet grass, or by any other means, the pesticide in the leather will be reactivated.

**Hat**

Select a wide-brimmed, waterproof hat that will protect the neck, eyes, mouth, and face. Plastic “hard hats” with plastic sweatbands are a good choice. They are waterproof and are cool in hot weather. Wash and dry after each use. Avoid hats with a cloth or leather sweatband. Cloth headbands are hard to clean and leather headbands cannot be cleaned thoroughly.

**Protective Clothing**

- Waterproof hat with wide brim
- Snug collar
- Long sleeves
- Tuck shirt into pants
- Gloves halfway to elbow
- Boots halfway to knee
- Coveralls

**Lightweight Raincoat or Apron (Waterproof)**

For added protection when handling very toxic pesticide concentrates, wear a lightweight waterproof raincoat or apron.

**Protective Clothing and Safety Equipment**

![Diagram of protective clothing and safety equipment]

**Safety Items for Additional Protection**

Two items for further protection against pesticides are goggles or face shield and a respirator.

**Goggles or Face Shield**

Your eyes can absorb many pesticides. If there is any chance of getting pesticides in your eyes, wear goggles or a face shield. Goggles can be worn separately or in combination with a respirator.

**Respirator**

When there is any risk of inhaling toxic pesticides, wear a well-fitting respirator that has been approved by the National Institute of Occupational Safety and Health, the U.S. Bureau of Mines, or the U.S. Department of Agriculture. Carefully follow directions on how to clean and store the respirator, and remember to change the cartridge as recommended.
Care of Contaminated Clothes

When laundering pesticide-contaminated clothes, take the following precautions to protect other family members:

• Have a separate covered container for contaminated clothes. Do not put them with other clothes to be laundered. A plastic garbage can works well.

• Wash pesticide-contaminated clothes after each use. The longer the pesticide is in the clothes, the harder it is to remove.

• Prerinse clothes in one of these ways:
  — Spray or hose them as they hang on a line outdoors. Be sure children and pets are out of the way.
  — Soak them in a tub or bucket. Dispose of water properly.
  — Use the presoak cycle on your automatic washer. Let the presoak water drain, and then refill with fresh water for detergent washing.

• Wear rubber gloves when handling contaminated clothes. Carefully wash after each use and use only for this purpose.

• Wash pesticide-contaminated clothes in hot water 140°F with a heavy duty laundry detergent.

• Don’t wash too many clothes at one time and use the full water level on the machine. Contaminated clothes need plenty of water and room to clean properly.

• Wash for 12-14 minutes and use a double rinse cycle if possible.

• If highly toxic pesticides were used, wash the item two or three times.

• If your washer has a suds-saver system, DO NOT use it when laundering contaminated clothes.

• Line dry the clothes to keep from contaminating the dryer.

• Before washing the family’s clothes, clean washing machine by running an empty load using hot water and detergent.

• Thoroughly wash all boots, hats, gloves, aprons, and goggles inside and out in detergent and hot water after each use.

Wash With Hot Water and Detergent

• Test gloves for leaks by filling them with water and gently squeezing.

• If respirators are used, clean and care for them according to manufacturer’s instructions.

General Precautions

• Keep clothes, hats, boots, gloves, etc., worn for pesticide application separate from others, and wear only for that purpose.

• Inspect clothes often to make certain there are no rips or tears that will allow pesticides to get to your skin.

• Always wash hands thoroughly before eating, smoking, or going to the bathroom. Pesticide residue could be transferred to food, cigarettes, or other parts of the body.

• Immediately after applying a pesticide, shower and wash your hair. Don’t forget to scrub under fingernails and to clean ears.
• If clothes get wet with pesticides, change immediately. If the pesticide was highly toxic, carefully bury or burn the clothes as high concentration of toxic pesticides is almost impossible to remove.

• Avoid wearing watches or any other jewelry that may become contaminated.

• Avoid a leather watch band, as it cannot be properly cleaned.

References

Protective Clothing for Handling Pesticides, North Dakota State University Extension Service
Laundering Pesticide Contaminated Clothing, University of Nebraska Cooperative Extension Service

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