

## Launder Pesticide-Soiled Clothing by These Rules

By Ruth R. Gulbrandson

**P**esticides are necessary tools, but like other tools they can be dangerous when mishandled or when accidents occur. Wind drift, accidental spills or carelessness can cause pesticide contact with the user or with his clothing.

When pesticides are absorbed through the skin, they enter the bloodstream and are translocated throughout the entire body. Clothing that comes in contact with a pesticide is considered to be contaminated whether lightly sprayed or saturated.

Treat all pesticides as though they are toxic. Always read the pesticide label. Look for signal words on the label that indicate the human-toxicity level of the pesticide and precautions for use:

**Caution** indicates the pesticide is in the low-toxicity category.

**Warning** indicates the pesticide is moderately toxic and

**Danger** or **Poison** indicates the pesticide is highly toxic to humans.

Other factors that influence a pesticide's toxic effect on an individual are its concentration and physical formulation, and the length of time the person is exposed to it. Commonly used formulations of pesticides are emulsifiable concentrates (EC), granulars (G) and wettable powders (WP). Of these, emulsifiable concentrates are the most difficult to remove from clothing by laundering.

Anyone who accidentally spills a pesticide or is sprayed by a pesticide should change clothes as soon as possible and wash thoroughly with soap and water. If you continue to wear pesticide-contaminated clothing, the residue could be absorbed through your skin and into your bloodstream. Serious health problems could result.

Whenever you handle pesticide-contaminated clothing, wear unlined, water-

proof gloves. Before removing the gloves, wash them thoroughly and use them for this purpose only.

Clothing worn during pesticide applications should be laundered daily, as pesticide residues can build up in clothing and become more difficult to remove. Wash contaminated clothing separately to prevent it from contaminating other clothing. Never store contaminated clothing with family laundry. Pesticide residue could rub off and contaminate other clothing.

### Prerinse Reduces Pesticide

Research at North Dakota State University shows that prerinse is an important step. It reduces the amount of pesticide in contaminated clothing before laundering and it also minimizes contamination of laundry equipment, which could contaminate clothing in future wash loads.

While still outdoors and while wearing unlined rubber gloves, empty pesticide granules from pockets and cuffs. Prerinse clothing at least twice in a bucket or pail of hot water. Since pesticide formulations usually contain some detergent, it is not necessary to add detergents when prerinse.

Dispose of prerinse water away from the house and potable water. Empty it on the ground away from areas where children play or animals are kept. If clothing was contaminated by an herbicide, avoid emptying prerinse water where grass could be damaged.

### Wash in Small Loads

Launder only a few contaminated garments at a time. To thoroughly flush the pesticide from the clothing, use a full water level. This will also decrease the possibility of redepositing the pesticide back on the fabric.

Use hot water and a normal 12-minute wash cycle. Repeated wash cycles

are effective in removing pesticide residue.

Select detergents according to the type of pesticide that contaminated the clothing. Research has shown that heavy-duty liquid detergents are more effective than other detergents in removing emulsifiable concentrate pesticide formulations. Emulsifiable concentrate formulations are oil based. Heavy-duty liquid detergents are known for their oil-removing ability. Granular detergents have been found effective in removing water-soluble pesticide. If it is not possible to determine the pesticide formulations, use a heavy-duty liquid detergent.

Research indicates that neither bleach nor ammonia aids in removal of pesticide residues. You may wish to use them to remove other types of soil or stains, but never mix them together. In combinations they form fatal chlorine gas.

Whenever possible, line dry laundered garments outdoors. Sunlight and air movement help to decompose any pesticide residue not removed during laundering. Line drying also eliminates the possibility of pesticide residue collecting in the dryer where it could contaminate clothes in the future. If you must use a dryer, wipe the dryer with a damp cloth after each use and discard the cloth.

To prevent future wash loads from being contaminated by a pesticide residue, always clean the washer by running it through a complete wash cycle with hot water and the same detergent used for laundering the contaminated clothing. □

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