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PRESS RELEASE

For More Information:
ELLEN G. DUYSEN
Central States Center for Agricultural Safety and Health
University of Nebraska Medical Center
College of Public Health, Room 3035
984388 Nebraska Medical Center
Omaha, NE 68198-4388
402.552.3394

FOR IMMEDIATE RELEASE

PLAY IT SAFE
Read and follow pesticide labels.

Read the label. Carefully, thoroughly.

That's the key message Kristine Schaefer, Program Manager of the Pesticide Safety Education Program (PSEP) at Iowa State University tells applicators at pesticide applicator training programs.

This requirement is important because details on product labels indicate specific product precautions related to protecting human health and the environment as well as details related to protective clothing and appropriate application equipment.

"Pesticide labels are often in small print that can be challenging to read," Schaefer says. "But there's a lot more information included in the label regarding product use and chemical safety than just how much product you need to apply."

Some best practices for using and handling pesticides include adequate applicator preparation including wearing proper personal protective equipment (PPE), safe handling, mixing and storage, applying during recommended weather

conditions, effective calibration, cleaning and storage of application equipment, and safe disposal of pesticides and containers.

Handling and mixing pesticides pose a number of exposure risks. Handling and mixing should occur in adequately ventilated areas and the proper, label-specified, PPE should be worn. PPE should also be cleaned and stored properly. Often a main component of PPE is the applicator's work clothes – long sleeve shirt and pants worn for work. These clothing articles should be cleaned and handled properly. Schaefer reminds applicators "For instance, don't put pesticide contaminated clothing in the wash with the baby's clothes. They need to be washed separately to avoid any type of contamination."

Schaefer notes that storing pesticides in a secure, locked building that has good lighting, adequate ventilation, and where no unauthorized individuals or children can enter is important. Weatherproof warning signs should be posted at every entrance to the building or room to indicate the presence of hazardous chemicals.

Storing pesticides in a building with no drain is also important. "If you had a pesticide spill, you don't want that product running down into a drain where it could contaminate water supplies," she says.

Some pesticide products become ineffective if exposed to high heat or freezing temperatures so product labels should be checked for any specific storage requirements.

A pesticide spill kit should be maintained at both the building where pesticides are stored and in any vehicle in which pesticides are transported. "If you're transporting pesticides never place products inside the vehicle. They should be secured in a truck bed," notes Schaefer.

Spill kits should contain adequate equipment to aid and protect anyone involved in a pesticide spill (see equipment list sidebar).

If an accidental spill occurs, safely stopping it to avoid its spread into a water source may be achieved by building a levy around it until the spill can be cleaned up and removed. Containing and cleaning it up should be an immediate priority. Pet litter or sawdust can safely be used to absorb spilled pesticide. No water should be used to flush the spill area. Follow any label directions for cleaning up a spill.

The local Department of Natural Resources (DNR) should be contacted to assist with a thorough and legal cleanup.

Pesticide application equipment requires preparation and care. Before a pesticide sprayer is used, the equipment should be checked and all lines, valves, seals, and the tank should be tested with water to ensure there are no leaks. All nozzle size adjustments and maintenance requirements should be implemented.

“Some products now have specific nozzle requirements to manage droplet size and avoid drift,” Schaefer says. “Product labels will indicate that information or, in the case of some of the newer products, websites should be checked.”

After an application, equipment should be thoroughly cleaned. Many product labels have specific cleaning instructions that should be followed.

In the pesticide safety education programs, Schaefer also addresses sprayer calibration, which is critical in managing product drift and protecting nearby sensitive crops, vegetation or other nontarget organisms, and making an effective application.

“It is often challenging to apply pesticides during suitable weather conditions,” Schaefer says. “Weather conditions and crop growth can really narrow the application window. But it’s important to apply pesticides under the best possible weather conditions to avoid product drift and achieve the best application results.”

When applying pesticides, applicators should be aware of the need to protect nearby beehives, lakes, streams, pastures, houses, school grounds, and other sensitive areas. If spraying in proximity to these types of areas, spraying downwind from the sensitive area and spraying when winds are between 3 and 10 mph and humidity levels are low will help reduce drift concerns.

During a pesticide application attention should be given to any nozzle clogging or changes in nozzle patterns. Keeping extra nozzles with the sprayer can help in quickly correcting nozzle issues. At no time is it advisable to blow on a nozzle or hose to clear it.

“Since label information can be difficult to read, it may be helpful to locate the product label online and read it there or print it out in a larger type,” Schaefer says. “Whatever form is used, applicators need to have the label in their possession and make sure they can easily access it at any time during use of the product.”

Some additional important information included on pesticide labels are the time frames required for safe re-entry and preharvest intervals after product application.

Product safety data sheets are also available online and should be in a handy location in the event that there is a question about using the product or responding to a product spill or accident. “It is a good idea to maintain a notebook with that

information so you can easily retrieve it if necessary," Schaefer says.

To avoid having surplus amounts of pesticide to dispose of, mix only enough for the job at hand. Read label instructions to determine if small amounts of surplus may be diluted and reapplied to other labeled sites.

When finished with a pesticide, proper container handling is important. Empty pesticide containers still hold small amounts of product, even after rinsing. All product containers should be triple rinsed or pressure rinsed, adding the rinse water back into the sprayer tank, prior to disposal. Rinse water cannot be dumped on the ground but must be treated as surplus pesticide and properly disposed of.

Empty pesticide containers cannot be used for any other purpose unless the container is approved for reuse. If not reusable, clean containers should be recycled.

The National Pesticide Information Center (NPIC) provides a wealth of information about pesticide products, pest control, pesticide human health and environmental issues, and pesticide incidents. Their website is www.npic.orst.edu.

SIDEBAR INFORMATION

Chemical spill kits should be labeled and designated for use only in handling pesticide spills. Kits should be placed where spills are most likely to occur. The kit label should list its content. The kit should be sealed to discourage borrowing/removing any of the kit items.

Building Spill Kit
1 instruction sheet
1 55-gallon, open-head drum
4 pairs of nitrile gloves

2 pairs of goggles
2 respirators and pesticide cartridges
2 chemical resistant aprons
2 pairs rubber boots
2 pairs cotton overalls
1 dustpan
1 shop brush
1 square-point ‘D’ handle
shovel
1 dozen polyethylene
bags w/ties
1 push broom with
synthetic fibers
1 gallon liquid detergent
3 gallons household
bleach
80 lbs absorbent material
1 bung wrench
1 drum spigot
1 l-3/8’ open-end wrench
1 drum pump (manual)
30 ft ½” polyethylene
tubing
or 1 25-ft garden hose
blank labels

Vehicle Spill Kit
1 instruction sheet
1 5-gallon pail
2 pairs of nitrile gloves
1 pair goggles
1 respirator and
cartridges
1 pair coveralls
1 dustpan
1 shop brush
10-30 lbs absorbent
material
1 pint liquid detergent
6 polyethylene bags
w/ties
1 portable eyewash
blank labels
1 first aid kit

1 pair rubber boots
1 apron

(Pesticide Environmental Stewardship
www.pesticidestewardship.org - compiled by Ron
Gardner, Cornell University Cooperative Extension)