



# AGRICULTURAL SAFETY AND HEALTH NEWS

Department of Agricultural and Biological Engineering    Volume 10, Number 5    September/October 1998

## *I N T H I S I S S U E*

**New FSHW Web Site, Old Statistics**

**"Precision Farming Includes Safety and Health"**

**Grain Bin Safety**

**Upper Limb Limitations**

**Rx for Highway Safety: Be Conspicuous!**

**New Lighting and Marking Display**

**Farm Safety 4 Just Kids**

**Have a Safe Harvest in 1998**

### **New FSHW Web Site, Old Statistics**

The National Safety Council has changed the way that they will be distributing information about National Farm Safety Week in 1998. The new materials will be posted on the NSC's web site at ([www.nsc.org/farmsafe.htm](http://www.nsc.org/farmsafe.htm)). You will be able to easily download and copy these materials so information can be customized to your community's needs.

Unfortunately, final 1997 farm injury data statistics for Pennsylvania - which are usually available by now - are not available at press time. The hold up is in obtaining the necessary data from official sources.

It is hoped that the data will be available by the next issue of F.S.H.N. In the meanwhile, all I have available to share for Farm Safety and Health Week promotion is the 1996 injury data summary. If you need a copy of the 1996 data for your Farm Safety Week preparations, contact Marsha Hull at (814) 865-7685.

**Dennis J. Murphy**  
**Professor of Agricultural and Biological Engineering**

## **National Farm Safety and Health Week September 20-26, 1998: "Precision Farming Includes Safety and Health"**

The National Safety Council announces National Farm Safety and Health Week September 20-26, 1998. Precision Farming Includes Safety and Health" is the theme of the 1998 observance. The theme stresses the importance of including safety and health as a management decision on the farm and ranch. This year marks the 55th year of focusing on safety and health on the farm.

Safety and health in precision farming refers to providing farmers and ranchers with more information about their operations so they may increase control over their operations profitability. This information includes identifying injuries, illnesses and close calls as well as identifying hazards on the farm or ranch. Other information includes the importance of using safety devices, personal protective equipment, following safe work practices and more.



**1998 Marks the 55th year of National Farm Safety and Health Week**

## Planning Guide

### SEPTEMBER

Theme:  
*Grain Bin Safety*

Although automated equipment has made the storage and handling grain faster and easier than ever, the storage structures and handling equipment create hazardous work areas. Farm workers should make sure they take the proper steps to prevent illnesses, injuries and even death.

#### Ideas:

- ◆ Label grain bins to warn of the hazards of entrapment.
- ◆ Lock entrances to grain handling areas to keep bystanders and children out.
- ◆ Install ladders inside bins.
- ◆ Do not enter bins that are being loaded or unloaded. Flowing grain can trap and suffocate you in seconds.
- ◆ If it is necessary to enter a bin, shut off and lock out power before entering. Use a safety harness and a safety line. Have several people outside who can lift the person out of the bin.

### OCTOBER

Theme:  
*Beware of Silo Gas*

Silo gas is a confined space hazard that is formed after chopped silage is loaded into the silo. Nitrogen dioxide (NO<sub>2</sub>) and carbon dioxide (CO<sub>2</sub>) are released from the natural fermentation of the chopped plant matter. NO<sub>2</sub> is toxic while CO<sub>2</sub> displaces the oxygen supply in a silo.

#### Ideas:

- ◆ Label silo to warn of the gas hazards.
- ◆ Be aware of signals of silo gas such as a yellow-brown color or a bleach-like odor.
- ◆ Do not enter silos after filling has started. Lethal concentrations of these gases may exist for up to three weeks after filling in poorly ventilated silos.
- ◆ Run the blower at least 20 minutes before entering.
- ◆ Use monitoring equipment to determine the levels of NO<sub>2</sub>, CO<sub>2</sub> or O<sub>2</sub> present. If dangerous levels exist, do not enter.

## Farming With Upper Limb Limitations

Arm and hand limitations, including reduced strength or ability to function, may be caused by finger, hand or arm amputation; or tendon, muscle, nerve or joint damage. Decreased padding or scar tissue around the stump increases risk of additional injury from bumping or brushing against farm machinery or buildings. Other risks come from prosthetic entanglements and susceptibility to frostbite in areas with nerve damage or decreased circulation.

Farmers who have returned to work after suffering an arm injury offer the following safety tips:

✓Wear a custom-made padded glove to protect injured fingers and hands with decreased tissue and padding around bony areas. Unprotected, these areas are susceptible to skin breaks and infection when bumped into objects on the farm.

✓Use pocket hand warmers to protect injured fingers and hands with poor circulation from possible frostbite.

✓Use a one-handed nail starter.

✓When climbing with a prosthetic device, don't rely on the terminal device for grasping an overhand rung on a ladder. It may be safer to wrap the forearm of

your prosthesis around the outside of the ladder.

✓Be careful not to catch prosthetic devices on chains, collars, ropes, halters or other items when working around livestock. If using a prehensile hand, use the furthest grip when grasping an animal's chain so that you can let go more easily.

✓Do not touch electric fences with the terminal device of a prosthesis. The electrical current may travel through the metal cable in the device, causing a shock to the back or shoulder.

✓Use one-handed tools and other labor-saving devices to help prevent additional injuries to the affected limb as well as potential injuries to your other hand or arm.

"Farming with Upper Limb Limitations" is one of a series of tip sheets that addresses continuing to farm safely with a specific disability. For more information about receiving this or other tip sheets dealing with specific disabilities, contact *Agribility for Pennsylvanians* at (814)863-7868.

-Doug Schaufler

# New Lighting and Marking Resources

## Rx for Highway Safety: Be Conspicuous

The new fact sheet concerning PA requirements for lighting and marking of slow moving vehicles, as well as lighting and marking recommendations by the American Society of Agricultural Engineers (ASAE) is now available.

This fact sheet illustrates the advantages of new SMV fluorescent and retroreflective materials over the older style emblems, and explains why SMV emblems and markings should be replaced on a regular basis.

Photos of properly marked tractors and implements, along with a chart detailing both PA requirements and ASAE recommendations, make this fact sheet a valuable resource for all agricultural professionals.

Lighting and marking requirements and recommendations for animal-drawn vehicles are also included, as are accident statistics involving slow moving vehicles on PA roadways for years 1994-1996.

Contact your county extension office or the address at the bottom of this newsletter for a copy.

## Display Explaining New Lighting and Marking Materials Now Available

A poster board display that includes pictures of the new lighting and marking materials for agricultural equipment will be available by October 1. This display can be borrowed for use at any meeting or gathering of farmers or rural motorists. For more information about borrowing this display, phone (814) 865-7685.



## YOUTH SAFETY



# Farm Safety 4 Just Kids™

The following Teaching Tip appeared in the Farm Safety 4 Just Kids April 1998 newsletter. For information about becoming a Farm Safety 4 Just Kids member, visit their website at [www.fs4jk.org](http://www.fs4jk.org) or call 1(800) 423-KIDS.

**Concept:** Loud rock music is not the only thing that can damage the future hearing ability of our next generation of farmers. Hearing loss is usually associated with the elderly but it doesn't happen overnight. Family members who live and work on the farm are in close proximity to many loud noises such as running tractors, machinery, tools and livestock.

**Objectives:** Children will stay away from areas on the farm that have high decibel levels. Children will encourage family members to take precautionary measures when working around loud noises on the farm.

### Activities:

☛ Explain the importance of hearing by playing a game where the kids cover their ears and play telephone. This is played by starting a message in a circle of kids and whispering to the next person. Repeat the exercise and have them do it with fingers in their ears. See what the message ends up like at the end of the circle. Discuss what loud things they should stay away from on the farm (machinery, squealing pigs, power tools, etc.)

☛ Collect 35mm film containers. Develop a slogan such as "I want you to hear me say *I love You* when you're old." Have kids decorate the slogans and tape them around the film containers. Place donated ear plugs inside the containers and attach a chain to the lid so it can be attached to the tractor keys.

# Have a Safe Harvest in 1998

Harvest time is probably the most potentially dangerous season of the year for farmers and farm workers. Trying to beat the clock to get crops in before winter comes often causes even the most safety-minded person to take unnecessary risks and push themselves beyond the limits of endurance. These are several steps that can be taken to make the harvest safer.

☛ Combines and other large harvesting equipment should be inspected for missing safety guards and shields. All pinch points, shear points and PTO's should be covered with shielding.

☛ Take the time to properly fix everything that was jerry-rigged last year to get through the harvest. Consult the equipment's operating manual to make sure everything is up to the manufacturer's specifications.

☛ Check road lighting to make sure flashers show the entire width of the equipment. Replace faded or missing SMV emblems and reflective tape on all machinery. Make sure the reflective tape extends the entire width of the equipment.

☛ If farm equipment takes up more than one lane on the roadway, have escort vehicles ahead and behind the bulky equipment to warn motorists of the oncoming hazard.

☛ Use cellular phones or C.B. radios to regularly check-in with workers in the field. If an accident does happen, scheduled check-in times will ensure that the victim is found quickly.

☛ REMEMBER: One rider per seat.

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This publication is available on alternative media on request.

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