

***Beneficial facts for Farmers from***

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**CHILD SAFETY ON  
THE FARM**

By Michelle Bross, Burlington County Master Gardener  
Raymond J. Samulis, County Agricultural Agent

According to the National Children's Safety Network, about **150,000 to 200,000 children are injured** on U.S. farms and ranches each year. Approximately **300 die each year.**

To children who live on farms, their homes are places to live, work and play. Thus,

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there are risks that require precautions not

### Why Are Children At Risk?

Children on farms work at ages younger and older than in other industries. They live and play around the farm, and are exposed to hazards most children would never see. Most accidents occur when a child is doing something beyond his or her mental, physical, or emotional ability; children who are too young are driving tractors, riding on the backs of trucks, driving adult-sized ATV's at high speeds and riding on top of loads of hay or grain. They often play unattended around livestock.

### Common Dangers to Children on the Farm

1. **Machinery:** tractors, grain augers, PTOs, mowers, ATVs;
2. **Chemicals:** pesticides, fuels, lubricants, soaps, disinfectants, solvents;
3. **Grain Bins/Storage Facilities:** danger of suffocation, inhalation of dust, molds and fungi;
4. **Water:** ponds, irrigation and drainage ditches;
5. **Farm Animals:** females with young, animals that kick;
6. **Electricity:** electrical boxes, open wires;
7. **Noise:** running tractors, machinery, tools, livestock;

normally associated with raising children.

8. **Sun/Heat:** heat exhaustion, skin cancer.

### Prevention of Injuries to Children

To make your farm safer for children, hazards must be spotted before children discover them.

1. **Machinery:** Make machinery off-limits to kids. Don't allow children to ride on tractors, even in a parent's arms or on a lap. Never leave a running machine unattended. Engage the parking brake, and take the key. When starting machinery, know where the children are.
  2. **Chemicals:** Keep pesticides, fuels, lubricants, soaps, disinfectants, solvents and other chemicals in a locked storage facility (never in food containers). Put warning labels on containers and storage receptacles. Keep children out of orchards after spraying.
  3. **Grain Bins/Storage Facilities:** Keep children away from and out of grain bins and storage facilities.
  4. **Water:** Fence in ponds and other water areas. Don't leave buckets of water around.
  5. **Farm Animals:** Teach children about handling animals safely. Keep children away from
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animals that may kick and females with their young.

6. **Electricity:** Keep electrical cords rolled up. Lock up electrical boxes.
7. **Noise:** Keep children away from loud machinery, drying bins and mowers when motors are running. Supply them with hearing protection devices if they are in the vicinity of loud noises.
8. **Sun/Heat:** Dress kids appropriately to give them protection from the sun.
9. **Preventing Other Hazards:** Teach children about good sanitation. Keep ladders out of reach of children. Assign chores that are age and ability appropriate. Designate safe play areas, and provide appropriate play things (swings, sand box, etc.). Keep a first aid kit available, and have an emergency plan for serious accidents.

Accidents happen because parents don't suspect danger until it is too late. Children are curious, and lack the fear and understanding of danger. Therefore, nothing is better than **good supervision**, even for 18 year olds. For very young children, child care (babysitter or neighbor) may be necessary during busy planting and harvesting seasons.

Children who live on farms are at greater risk than the adults who work there. In order to make your farm safer for children, it is important to spot hazards before children discover them, and to assign age appropriate jobs for them.

#### References:

- Cooperative Extension University of California, Davis
- Farm Safety for Children ([ohioline.osu.edu](http://ohioline.osu.edu))
- Farm Safety for Children, Safety 1<sup>st</sup> ([www.farmsafety.com](http://www.farmsafety.com))
- Farm Safety 4 Just Kids ([www.fs4jk.org](http://www.fs4jk.org))
- National Ag Safety Database ([www.cdc.gov/nasd](http://www.cdc.gov/nasd))
- Rutgers Cooperative Extension Fact Sheet FS937
- University of Minnesota Extension Service ([www.extension.umn.edu](http://www.extension.umn.edu))

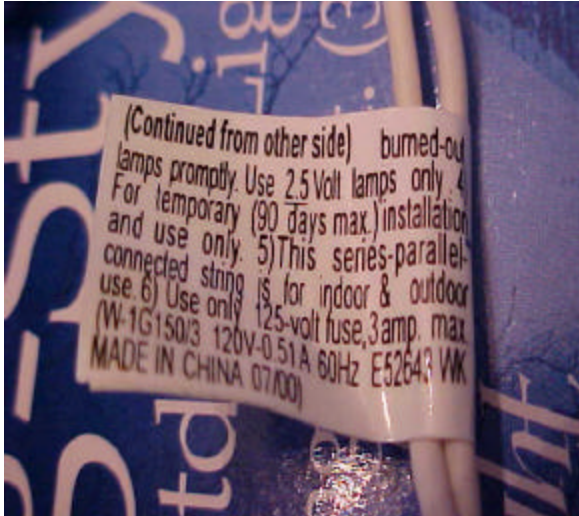
## FIRE SAFETY NOTES FOR THE FARM

By Barry Luckenbill, Fire Safety Instructor

### Holiday Lighting

A series of Holidays is almost upon us during which decorative lighting is used. Many of us have noticed that decorative lighting is now used on Halloween, Thanksgiving, Christmas, St. Patrick's Day, and Easter. These decorations may pose a fire hazard if used improperly or if they are worn from years of use around the farm. Before we plug them in, we need to check the cords, sockets, and plugs for general condition. Look for bare

wires, cracked insulation, and bad sockets. If you find any problems, such as a bulb socket that is unusable, discard the decoration. Remember, **“When in doubt, throw it out.”**



Don't operate light sets that are short bulbs or have non-functioning bulbs. Light sets are engineered to have a specific number of functioning bulbs so that the heat energy released by each bulb is minimal.

Read the label to determine the wattage of the light set. **Never operate a combination of electrical products**, including decorative lighting, **on a single circuit where the wattage use exceeds 1500 watts.**

Even if the label states that the decorative light set or extension cord is rated for outdoor use, we must be careful to keep them out of wet areas. Replacement of bulbs with the correct type from the

manufacturer prevents overheating and failure of safety devices such as fuses. Household breakers or fuses may not function correctly all the time in an overload situation. Try to label your fuse or breaker boxes so you know what circuits are controlled by each fuse. If you have wiring done or do it yourself, label each circuit or insist that it be done. A good electrician will be very concerned with your electrical safety needs. Once you have labeled the circuits in a breaker box, put a number on the outside of that box. Record what each circuit is for and the number of the box that it is in. Place this record in a safe place for future use.

Unplug all decorations before leaving the property or before going to bed. Don't close doors and windows on decoration or extension cords. Don't staple or nail cords to buildings as this could cause a break in the insulation layer and a possible shock hazards. Be watchful that pets, stock or wildlife does not chew or damage decorations or extension cords. Be electrically safe every day.

## Fuel and Chemical Storage Checks

Now is a good time to check on those above ground fuel tanks and their associated hoses and electrical pump connections. Many farms have multiple sources of fuel to run a variety of equipment. We want to check for leaks, good connections, hoses without cracks or damage,

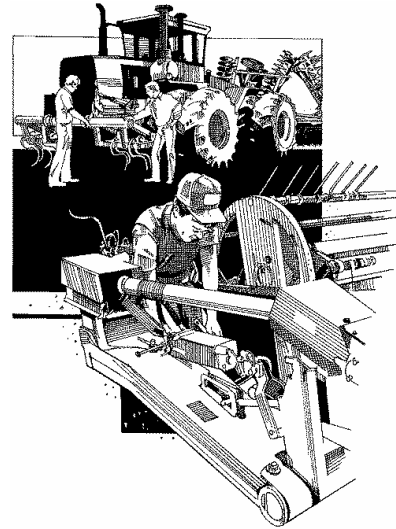
and nozzles that shut off without leaking. Mark the emergency shut off well, and let everybody know its' location.

We also want to look at where we store our portable fuel cans and machinery that uses fuel. We want to store these items away from hay storage, chemicals, heaters, or places where animals might damage them. **Gasoline** and **Propane** are heavier than air and can be ignited from some distance if weather conditions are right and an ignition source exists.

Try to keep chemicals, pesticides, and fuels in separate locations. Storing larger amounts on pallets, and away from moisture and feed products is a must.

Keep a portable dry chemical fire extinguisher (10 lb., Classification 4A 60-B:C) hung in an easily recognizable location. Early extinguisher use may be the key to limiting damage from any potential fire. Incidentally, remember the word **PASS** when using the extinguisher. **P**ull the pin, **A**im the extinguisher, **S**queeze the handle, and **S**weep side to side at the base of the fire. When you are done, call 911 and let the fire department follow-up to be sure the fire is totally out. We really don't want to have any fires, but if we do, we want to put it out early, while it is small.

If we have a routine for safe practices, and a few general rules to go by, then we can have a safe and productive year on our farm.



## AUTUMN ON THE FARM

By Michelle Bross, Burlington County Master Gardener  
Raymond J. Samulis, County Agricultural Agent

Autumn is harvest season on the farm, and farmers are rushing to get their harvests in before the weather becomes cold. During this season, it is important to be aware of the increased possibility of injury, primarily due to **fatigue and inattentiveness**, when using farm machinery.

Now is a good time to go over farm safety again with all farm workers, before harvesting begins. Some simple safety tips are:

- Thoroughly **inspect and test farm equipment.**

- Keep **children off equipment**.
- Be aware of **changes in land slopes**.
- To decrease fatigue, **shut machinery off and walk around** at least once each hour.
- Make sure to **keep hydrated**. Dehydration, even slight, decreases awareness.
- **Have other people around to check on you** periodically, in the event that you need their assistance.
- **Never try to clear clogs while the machinery is running**. It can suddenly move once the clog is cleared.

Most accidents involving machinery occur when the machinery is being used. Knowing this, farmers may be less cautious around machinery that is idle. **Even when the machinery is not in use, accidents can occur.** Because equipment maintenance may be second nature to the farmer, it is extremely important to be extra cautious when doing a **pre-harvest inspection** as to not forget basic safety, such as making sure the brake is on when examining a tractor. Many farm workers have been injured when equipment suddenly moves during maintenance. Some safety measures to follow during machinery maintenance are:

- Make sure **machinery is turned off and in park or neutral with the parking brake engaged** before working on it.

- If a tractor is equipped with a **front loader** or other accessory, which can be raised, **make sure it is lowered** to prevent it from suddenly dropping, and to assure the balance of the machine.
- Before working on any equipment, **wait a few minutes after it is turned off**, to make sure all parts have stopped moving.

Farm injuries and deaths can happen during any season, even during autumn. It is important to think about safety, and to be aware of agricultural dangers all year round. **Most injuries are preventable!**

#### References:

Iowa Department of Public Health  
([www.idph.state.ia.us](http://www.idph.state.ia.us))  
Iowa State University, University Extension  
([www.extension.iastate.edu](http://www.extension.iastate.edu))  
North Carolina A & T State University,  
School of Agriculture and Environmental  
Sciences ([www.ag.ncat.edu](http://www.ag.ncat.edu))



## WINTER FARM SAFETY

By Michelle Bross, Burlington County Master Gardener

Raymond J. Samulis, County Agricultural Agent

Believe it or not, winter can be a dangerous time on the farm. When the temperature is low and winds are high, body heat loss can occur rapidly, resulting in hypothermia, frostbite and trench foot. Farmers and

others who work outside for hours at a time are the most susceptible.

### Hypothermia

Hypothermia is the progressive loss of body heat with prolonged exposure to cold. Simply, the **body loses heat faster than it retains heat**. When a person is wet because of rain, sweat or working in a damp environment, body heat loss is accelerated (water cools the body temperature 25 to 30 times faster than air). Although hypothermia occurs mostly when air temperatures are between 30° and 50°F, it can also develop when air is as high as 65° (particularly when clothing is wet) or in 72° water. When the core body temperature falls below 86°F, the body can no longer reduce heat loss on its own and death can occur.

#### Signs of Hypothermia

- uncontrollable shivering
- cool skin
- rigid muscles
- weak pulse

- slow reaction time
- slurred speech
- confusion, carelessness, disorientation (accidental injury can occur at this time)

### Treatment for Hypothermia

- move individual to warm, dry shelter
- remove wet clothing
- apply warm blankets
- don't use direct heat or hot water to warm the victim
- don't massage the skin
- offer warm, nonalcoholic, caffeine-free drink
- for more severe case, get medical help

### Frostbite

Frostbite occurs when skin freezes and cells are damaged. The freezing point of skin is approximately 30°F, and windchill can accelerate the process. Fingers, toes, cheeks, nose and ears are primarily affected. Tissue damage can be mild and reversible, or severe resulting in scarring, tissue death, loss of function and amputation.

#### Symptoms of Frostbite

- uncomfortable sensation of coldness
- tingling, stinging or aching feeling, followed by numbness

- initially, area appears white and is cold to the touch
- area then becomes hot, red and swollen

#### Treatment for Frostbite

- treat affected area with warm water (102° to 110°F)
- avoid rubbing area (this can lead to greater tissue injury)
- get medical assistance

#### Trench Foot

Trench foot occurs when the foot is exposed continuously to a wet and cold environment, or immersion in water. Vascular damage is a possible outcome.

#### Symptoms of Trench Foot

- tingling and/or itching sensation
- pain
- swelling
- blisters, followed by death of skin tissue and ulceration

#### Treatment for Trench Foot

- move victim to warm area
- treat affected part with warm water or warm packs
- get medical help as soon as possible

Major risk factors contributing to cold-related problems include:

- **inadequate or wet clothing** – affects how well the skin is insulated from the environment
- **drug or medication use** – certain medications inhibit the body's response to cold (examples: beta blockers, neuroleptics, alcohol, cigarettes)
- certain **diseases** such as diabetes, atherosclerosis and hypothyroidism can increase risk
- **gender** – death rates due to cold exposure are higher for males, possibly because of inherent risk-taking or body fat composition
- **age** – increases in age increase risk
- **exhaustion or immobilization**

The following **recommendations** can help reduce the number of cold-related dangers that agricultural workers face during the winter months:

- **Wear at least 3 layers of clothing:**
  - 1) outer layer to break the wind and allow ventilation (gortex, nylon),
  - 2) middle layer of wool, down or synthetic pile to absorb sweat and retain insulation when wet, and

3) inner layer of cotton or synthetic to allow ventilation and escape of perspiration.

- keep a **change of clothes** available in case of wetness
- **protect feet and hands** (they lose their dexterity below 59°F), **head** (40% of body heat can be lost when head is exposed) and **face**
- wear **insulated footwear**, and **layer socks**
- avoid wearing dirty or greasy clothing – they don't insulate as well
- apply **protective lotion** to the skin frequently to prevent chapping
- **avoid alcohol and drugs**, which can impair judgment and increase body heat loss

Winter is a very important time for farmers, but it can be a dangerous time. The best thing a farmer can do during the winter is realize that there is no such thing as being too careful or too protected.

#### References:

Georgia Farm Bureau Safety  
(www.gfb.org)  
National Ag Safety Database  
(www.cdc.gov/nasd)  
North Dakota State University Extension  
Service (www.ag.ndsu.nodak.edu)  
Virginia Cooperative Extension  
(www.ext.vt.edu)

## MAILING LIST UPDATE REMINDER!!!

PLEASE RETURN YOUR MAILING LIST UPDATE FORM AS SOON AS POSSIBLE.

UNFORTUNATELY, IF WE DON'T RECEIVE YOUR COMPLETED FORM, WE WILL HAVE TO REMOVE YOUR NAME FROM OUR MAILING LIST. THIS WOULD MEAN THAT WE COULD NO LONGER SEND YOU ANY FARM SAFETY NEWSLETTERS, OR ANY INFORMATION ON UPCOMING MEETINGS AND PROGRAMS BEING PRESENTED BY OUR OFFICE. SO PLEASE DON'T LET THAT HAPPEN!! RETURN YOUR UPDATE FORM TODAY!!

# BEST WISHES FOR A SAFE AND HAPPY HOLIDAY SEASON

THE EXTENSION OFFICE STAFF