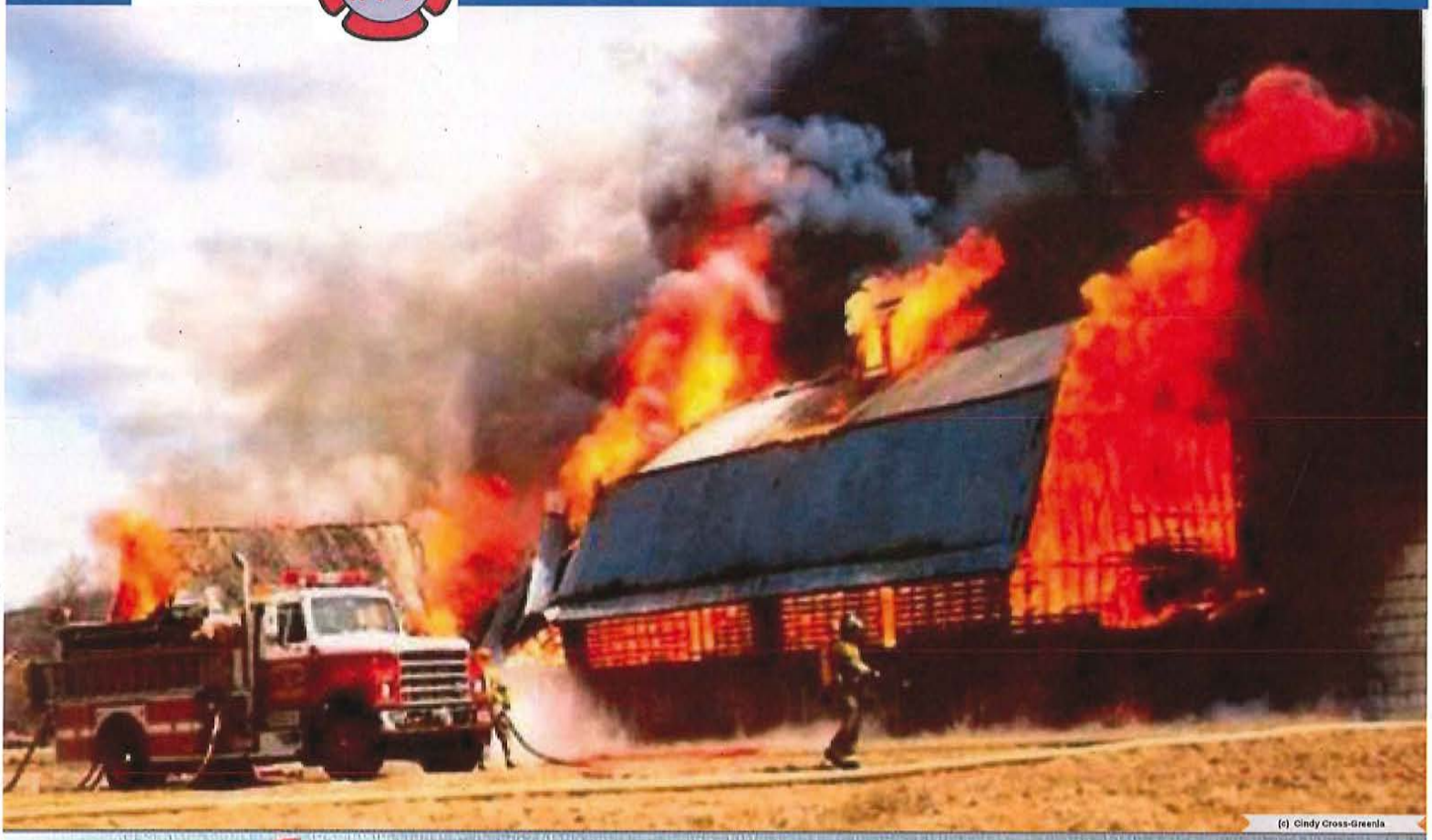
VERMONT DIVISION OF FIRE SAFETY
FIRE SAFETY.VERMONT.GOV

Vermont Rural Fire Protection Task Force
Vacd.org/programs/rural-fire-protection/



FARM & RURAL Community FIRE SAFETY EDUCATION PACKAGE

Including Informational Resources from

- THE VERMONT BARN FIRE PREVENTION TASK FORCE
- VERMONT DIV. OF FIRE SAFETY- PUBLIC EDUCATION SECTION
- VERMONT RURAL FIRE PROTECTION TASK FORCE - RURAL FIRE PROTECTION PROGRAM
- UVM EXTENSION
- NATIONAL FIRE PROTECTION ASSOCIATION (NFPA)
- GEMBLERS TIP SHEETS

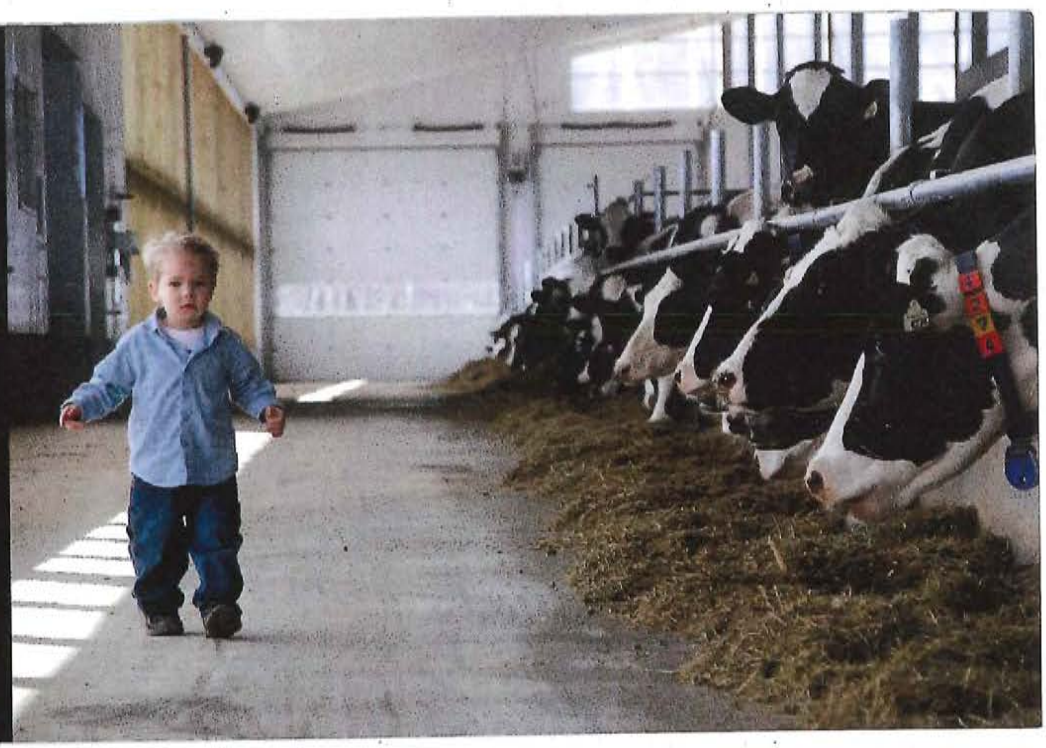
VERMONT DIVISION OF FIRE SAFETY
FIRE SAFE 802
COMMUNITY RISK REDUCTION PROGRAM
FIRE SAFETY TEAM

CRR COMMUNITY RISK REDUCTION

Fire is Everyone's Fight.

Updated January 2020

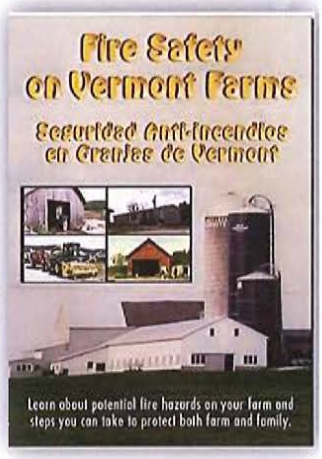
THERE IS MORE AT STAKE THAN THE BARN.



Imagine having to tell one... that the other didn't survive.

FIRE SAFETY ON VERMONT FARMS

A Fire Safety Education Video for the Farm and Family



Vermont's small rural communities and farms continue to face a variety of unique fire safety challenges.

Fires on Vermont farms are devastating. The losses are felt deeply by the farmers and by the community—not simply the loss of property and animals, but the loss of a livelihood and a way of life.

A team of other stakeholders come together to produce and develop this farm fire safety education video. The Division of Fire Safety Pubic Education Section joined the Vermont Agency of Agriculture Food & Markets, and other professionals in this effort.

YouTube
vimeo

The full version of the video may be viewed on

https://www.youtube.com/watch?v=xsjhUQ5i3-A&spfreload=10

https://vimeo.com/197105194

In this video, you will learn about potential fire hazards on your farm and steps you can take to protect both farm and family. After viewing, perform a walk-through on your farm to identify hazards, fill out a fire safety checklist, complete a farm-fire preplan and share it with your local fire department.

Remember, fire safety is up to you, and fire is everyone's fight.

- **Take the time to do an inspection of your farm's potential fire hazards every year.**
- **Follow through and fix these hazards or hire a professional to make the repairs as necessary.**
- **It's also a good idea to establish a regular fire and safety training schedule for your employees and document all training.**

Produced by
The Vermont Barn Fire Prevention Task Force

a sub-committee of the
Vermont Rural Fire Protection Task Force

Sponsored by:

University of Vermont Extension — Cultivating Healthy Communities
State of Vermont Division of Fire Safety
Co-operative Insurance Companies
ASHCA — Agricultural Safety & Health Council of America
FirePROTEC — Protection • Suppression • Training
Vermont — Agency of Agriculture, Food & Markets — www.VermontAgriculture.com

Video producer **VIDEO Syncracies** Burlington Vermont

Barn Fire Safety Checklist

Mrs. O'Leary's Cow may have gotten a bad rap but the folktale reminds us fire safety is an important part of farm life. People, animals, and property are in danger when fire breaks out on the farm. Inspect your barn and outbuildings for fire hazards to reduce the risk of tragic loss.

- ✔ Heat lamps and space heaters are kept a safe distance from anything that can burn.
- ✔ Heaters are on a sturdy surface and cannot fall over.
- ✔ Electrical equipment is labeled for agricultural or commercial use.
- ✔ All wiring is free from damage.
- ✔ Extension cords are not used in the barn.
- ✔ Lightbulbs have covers to protect them from dust, moisture, and breakage.
- ✔ Damage is identified quickly and repairs are completed with safety in mind.
- ✔ Dust and cobwebs around electrical outlets and lights are removed.
- ✔ Oily rags are stored in a closed, metal container away from heat.
- ✔ Feed, hay, straw, and flammable liquids are stored away from the main barn.
- ✔ The barn is a smoke-free zone.
- ✔ Exits are clearly marked and pathways are clear.
- ✔ Fire drills are held frequently with everyone who uses the barn.
- ✔ Workers are trained to use fire extinguishers.
- ✔ Everyone in the barn knows personal safety is the first priority if a fire breaks out.
- ✔ Hazard checks take place on a set schedule.

Required Equipment

The following safety equipment may be required by local building codes and will help protect your barn. Install and maintain:

- ABC-type fire extinguishers near every exit and within 50 feet from any point in the barn.
- Fire alarm system
- Sprinkler system
- Carbon monoxide detection system

Talk with your local fire department to address safety concerns unique to your farm.

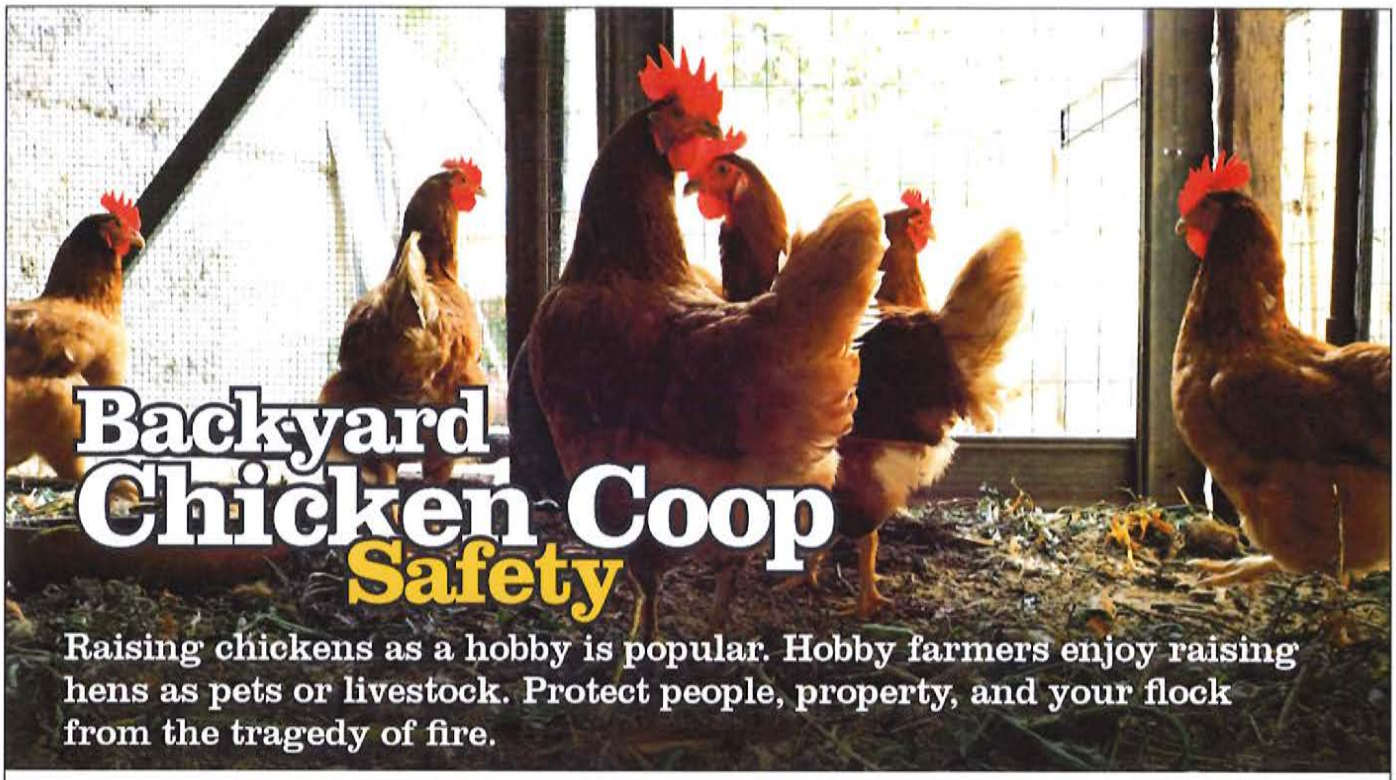
Go to www.nfpa.org/farms to learn more about fire safety on the farm.

NFPA
NATIONAL FIRE PROTECTION ASSOCIATION
The leading information and knowledge resource on fire, electrical and related hazards

Vermont Division of Fire Safety
Public Education Section

FIRE SAFE 802

 ©NFPA 2018



Backyard Chicken Coop Safety

Raising chickens as a hobby is popular. Hobby farmers enjoy raising hens as pets or livestock. Protect people, property, and your flock from the tragedy of fire.

SAFETY TIPS

- Make sure that heat lamps are properly secured. This will keep them from being knocked over.
- Keep heat lamps away from anything that can burn.
- Keep space heaters away from anything that can burn.
- Place space heaters on a sturdy surface so they won't be knocked over.
- Brush cobwebs and dust from light fixtures and outlets. Do this regularly.
- Choose light bulbs that have covers. This will protect them from dirt, moisture, and breaking.
- Do not use extension cords in the coop.
- Choose electrical equipment for agricultural or commercial use.
- Be careful with electrically heated poultry waterers. Make sure the cord and plug are properly grounded.
- Check all wiring for damage.
- Have electrical work done by a qualified electrician.
- Choose outlets and switch boxes designed to keep out dust and water.

SAFE HAY AND BEDDING STORAGE

Store baled hay away from livestock. Hay and bedding storage should not be near anything that can burn. Check with your community for safety rules on animal housing facilities. Talk to your local fire department for any fire concerns.

GO TO WWW.NFPA.ORG/FARMS

to learn more about fire safety on the farm.

NFPA NATIONAL FIRE PROTECTION ASSOCIATION
The leading information and knowledge resource on fire, electrical and related hazards

Vermont Division of Fire Safety
Public Education Section

FIRE SAFE 802

 ©NFPA 2018

Vermont Barn Fire Prevention Task Force

FARM FIRE SAFETY SHEET

FIRE SAFETY REMINDERS

FLAMMABLE LIQUIDS AND GASES

Gasoline, diesel fuel, LP gas, degreasing solvents, paint solvents, and certain paints are among flammable materials found on most farms.

Keep these flammable materials away from open flames and motors that spark.

Clean up spills right away and put oily rags in a tightly covered metal container.

Store flammable liquids in approved containers, in well-ventilated areas away from heat and sparks.

Be sure all containers for flammable liquids are clearly and correctly marked.

Do not keep gasoline inside the home or transport it in the trunks of automobiles or recreation vehicles. If gasoline must be transported, carry only a small amount in a labeled safety can on the floor of the back seat. Roll down the windows so moving air can sweep away vapors.

HOT WORK

Never do cutting or welding work alone. Always have someone on hand to put out a fire before it can get out of hand.

Watch for molten metal. It can ignite flammables or fall into cracks and start a fire that might not erupt until hours after the work is completed.

Use portable cutting and welding equipment in clean areas. Keep flammables at least 35 feet from hot work area.

Be sure tanks and other containers that have held flammable liquids are completely neutralized and purged before you do any work on them.

REFUELING

When refueling, turn off engine and extinguish smoking materials.

Remove fuel cap slowly and allow pressure to dissipate.

If engine is hot, allow it to cool for a few minutes.

Avoid over filling. Allow any spilled fuel to evaporate before starting the engine.

Refuel small equipment outside -- never in an enclosed area. A funnel will make the job easier when using a safety can.

Only fill portable gasoline containers outdoors. Place the container on the ground before filling and never fill containers inside a vehicle or in the bed of a pick-up truck.

FLAMMABLE OR COMBUSTABLE MATERIALS

If at all possible, hay, straw and other types of bedding should not be stored in the same building in which livestock is housed. Care should be taken that these materials are not stored with machinery or near any type of electrical or heat source.

LIGHTNING PROTECTION

Buildings should be equipped with professionally installed lightning rods of copper or aluminum.

The system should be properly grounded.

All pipes, water systems, electrical systems and telephone lines should also be grounded.

Contact a professional company for proper maintenance and installation.

FIRE EXTINGUISHERS

ABC (all class) dry-chemical fire extinguisher should be in all livestock buildings, workshops, garages, or wherever welding is done.

Extinguishers on the farm should be 10 lb in size.

Even if a unit is partially discharged, the extinguisher must be replaced or recharged.

A fire extinguisher should be hanging at all exterior doorways, in the middle of long aisles, and in the milk house.

Signs denoting placement of fire extinguisher should be highly visible.

SMOKE ALARMS

In the event of a fire, a smoke alarm can save your life and those of your loved ones. They are the single most important means of preventing fire fatalities by providing an early warning signal -- so you and your family can escape.

Smoke alarms need to be properly installed, maintained and replaced when needed to be effective. Install smoke alarms on every level of your home, including in side the bedrooms and the basement.

Smoke alarms don't last forever. Smoke alarms need to be Replaced every 10 years.

Many hardware, home supply or general merchandise stores carry smoke alarms. Make sure the alarm you buy is a photoelectric style that is AC powered with a battery back up and is UL-listed. If you need additional assistance call your local fire department (on a non-emergency telephone number) and they will provide you with some suggestions.

A variety of fire detection and warning systems are also available for barns.

ELECTRICAL SYSTEMS AND DEVICES

Electrical systems in barns, especially in older structures, are often the cause of a barn fire. The following safety precautions should be taken when installing a new system or repair of an older electrical system.

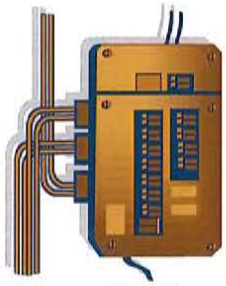
Avoid areas of excessive moisture for the location of the main electrical panel box.

Place panel box in the driest, most dust free area as possible. (Stall areas are not recommended). Panel box should be corrosive resistant and weather-proofed even if installed inside a building.

Outlets and switch boxes should be dust and water tight with spring-loaded covers that close when released.

Wires should be encased in conduit pipe. Even temporary wires should be run through conduit pipe to keep the wires safe from breakage and away from the teeth of horses, livestock, rodents and metal shoes of horses.

Light fixtures for fluorescent lights should have dust and moisture resistant covers. Incandescent bulbs should have globe with seals that are dust and moisture proof, and surrounded by a cage to prevent accidental breakage.



Motors - such as the type used for circulation fans, water pumps or hay elevators should be designed for agricultural use and be moisture/dust proof. Motors should not be within 18 inches of any combustible material (hay, bedding).

Any appliances or electric fence units used in the barn should be UL approved and grounded. An appliance with broken, frayed cords or bent plugs should not be used until properly repaired.

All appliances should be disconnected when not in use.

Older portable heaters should not be used in the barn area. Many of these heaters do not contain safety devices which prevent overheating.

Do not place portable heaters near livestock where they may be knocked over. Make sure heaters have a shut-off device that activates if the unit is knocked over.

Improperly utilized heat lamps are a major source of barn fires. They are often placed too close to hay and bedding which may ignite quite easily from the heat.

Never use extension cords with heat lamps.

Heat tapes and water tank heaters must have a thermostat and be UL listed. Tapes and tank heaters should be installed and used following manufacturer's instructions.

Heat tapes and tank heater cords should be adequately protected so that animals (horses, livestock, cats, dogs, rodents) cannot easily chew through them causing electrocution, electrical shocks or a barn fire.

BARN CONSTRUCTION OR RENOVATION

When constructing or renovating an agricultural building precautions should be taken to reduce the chance of barn fires.

Many insurance companies will lower premiums if extra safety precautions are taken during the construction of a new building, some of which may be above and beyond the standards required by local codes.

Check with your insurance company regarding which features will possibly lower your insurance premiums. Extra measures may include:

- Approved fire doors.
- A fire wall between hay/bedding storage and the actual stabling area.
- Use of materials that are flame retardant or fire resistive.
- Use of fire retardant latex paint - preferably two coats.
- Installation of smoke detectors, fire alarm and sprinkler systems.
- Trickle-charged battery powered emergency lighting to permit evacuation of people and animals in case of power failure.
- A water source on the premises, especially a pond will help the fire department to save buildings. Remember to have the water source properly fenced to keep unwanted visitors out.

HOUSEKEEPING

Shops, garages, machine sheds and barns often are cluttered with unnecessary accumulations of items that can add fuel to a fire.

Often, these items are located near sources of ignition. Large amounts of unneeded items that will burn, such as papers, clothing and straw, should be kept away from heat.

Arrange shops and barns so that flammables are safely away from ignition sources. A little rearranging could reduce fire risk considerably.

SMOKING

Cigarette or cigar smoking causes many fires in the United States each year.

Post and Obey "No Smoking" signs in the barn.

Keep matches, lighters and lighter fluids away from small children.

FARM MACHINERY

Common causes of tractor and machinery fires include defects in the fuel or ignition systems, improper method of refueling, smoking and matches, over-heated engines, sparks from exhaust and friction.

Refuel with care. Watch for and repair leaks in fuel lines, carburetors, pumps and filters.

Keep exhaust systems in good condition to avoid sparks.

Keep engines properly tuned and timed to avoid backfiring.

Keep machinery properly lubricated to minimize friction.

EMERGENCY GENERATORS

Always consult and follow your operator's manual. All generators operate differently and have safety and maintenance requirements.

Use only in areas that are well ventilated, away from children and pets, and away from air intakes to the home. Always keep your generator clean and free from dirt and dust.

Do not install a generator to the main power supply unless you have a special disconnect switch. This switch must be installed by a qualified and licensed electrician.

Carbon monoxide (CO) alarms should be installed in areas were people sleep.

FIRE EMERGENCY PROCEDURES

Design a fire safety plan. Review the plan with all family members and employees and update your plan regularly to accommodate changes to the buildings, livestock or employees.

When a fire breaks out in a house or a farm building, human safety must be your first priority.

If you decide to evacuate animals, don't become trapped. Always have a good escape route and keep in mind that if there is significant fire or smoke within the building, the danger is generally too great to risk your own life.

Normal exits may be blocked; therefore, it is essential that emergency exits exist. Doors and windows should be closed when escaping a fire, failure to do so may cause air drafts which can fan the fire.

Call the fire department immediately. Give your name, address, and the exact building or location of the fire.

Make sure everyone follows the rules: Ensure anyone visiting or working on the property learns and obeys the fire safety rules.

MORE SAFETY REMINDERS

Keep all equipment used for petroleum storage and handling in good condition. Watch for leaks, deterioration or damage. Make needed repairs or replace faulty components immediately. Keep cap vents clean and free, and tank and safety can pressure-relief valves functional.

When servicing machinery, check the fuel system for leaks. Double check connections to be sure they are secure and leak-free after changing fuel filters or performing other work requiring disconnecting or removing a fuel line or fuel system component.

Turn off portable heaters before refueling. Make sure the filler cap is replaced and tightened. Set portable heaters away from combustibles where they cannot be tipped over.

Motor oil and grease are considerably less flammable than engine fuels, but they will burn. Keep them away from ignition sources.

Do not store vehicles and machinery in the barn. Aisles should be raked or swept clean of hay and bedding. Vacuum up cobwebs and dust regularly. Wipe dust/dirt off light fixtures, outlet covers, switches and panel boxes.

Hay/bedding storage should not be near lights, fans, electrical boxes, heaters or outlets.

Weeds, twigs, and other trash should be kept mowed or picked up from around the outside of the barn.

Aboveground LP storage tanks having the capacity of 2,001-30,000 gallons should be at least 50 feet from the nearest building and 20 or more feet from other aboveground fuel tanks. Provide and maintain solid foundations to support LP-gas tanks so they won't settle or tip and break or damage connections.

Be alert for leaks in the LP-gas system. Protect gauges and regulators from weather and dirt. If you smell gas, turn off valve(s) at the tank(s). Open windows and doors to ventilate the building, and don't switch on/off anything electrical. Get everyone out and call the fire department.

The USDA is an equal opportunity employer.

This information was developed with the assistance of
The Illinois Fire Safety Alliance
The National Fire Protection Association (NFPA)

Produced by
The Vermont Barn Fire Prevention Task Force
a sub-committee of the
Vermont Rural Fire Protection Task Force

Disclaimer: This fact sheet is intended for information purposes only. The authors and distributors of this facts sheet accept no liability for the information or suggestions provided. Each recipient waives and releases the authors and distributes from any and all claims relating to the usage of information, in whole or in part, contained on the fact sheet. The authors and distributors will not be held responsible for any injury, loss or damage incurred by reliance on the information provided.

Vermont Barn Fire Prevention Task Force

FARM FIRE SAFETY SHEET

Hay Fire Prevention

What Causes Hay Fires?

Freshly cut forage is not dead; respiration (the burning of plant sugars to produce energy) continues in plant cells and a small amount of heat is released in the bale. Many producers refer to this elevation in bale temperature as "sweating" or "going through a heat." In hay that is baled at the proper moisture concentration, plant cell respiration has slowed dramatically and will eventually cease.

The heat generated by plant cell respiration in hay bales is normal and generally of little consequence. However, if bale moisture levels are too high (greater than 20 percent), the heat and moisture will provide a suitable environment for the growth and multiplication of mesophilic (warm temperature) bacteria that are present on forage crops.

The respiration of mesophilic bacteria releases additional heat in the bale and interior bale temperatures can reach 130° to 140°F. At this temperature range, most mesophilic bacteria die and interior bale temperatures start to decline.

This cycle of heating and cooling may occur several times during the weeks after baling as the microbial population increases and decreases.

However, the maximum temperature decreases during each subsequent cycle. The interior bale temperature will eventually stabilize near the ambient temperature. Hay that has sustained these heat cycles has lost much of its quality as a feeding source, but is unlikely to catch fire.

Reducing the Risk of Hay Fires

Hay moisture concentration has a major effect on the microbial activity that can lead to hay fires. Therefore, hay should be cured to the proper moisture concentration prior to baling.

Monitoring Hay Temperatures during Storage

The temperature of hay that has been baled at a high moisture concentration should be checked twice a day for six weeks after baling. Use a probe and thermometer to accurately determine the temperature inside a stack of hay.

A simple temperature probe can be made in the farm shop from a 10-foot piece of 3/4-inch diameter iron pipe. Drill eight 3/16-inch diameter holes about three inches from one end then hammer that end of the pipe together to form a sharp edge (Figure 1). Compost manure gauges may also work well.

Commercial temperature probes are available, but are often too short to monitor the maximum interior temperature zone within a hay stack.

Check hay temperature in the center of the stacked hay. The easiest way to do this is from the top of the stack. Do not walk directly on the stacked hay; pockets may have already burned out under the hay surface. Place boards, plywood, or a ladder on the hay and walk on those instead.

This will spread the weight of the person monitoring the temperature over a larger area and help keep him from falling into burned-out cavities. Be sure to use a lifeline in case the hay surface collapses into a fire pocket. A second person, standing safely away from the hay, should hold the other end of the rope to pull the person monitoring the temperature out in case the hay surface collapses into a fire pocket.

Drive the probe from the top of the hay stack into the inner most bales. Lower a thermometer to the end of the probe with a piece of light wire. After 10 to 15 minutes, retrieve the thermometer and read the temperature. If the temperature has reached 150°F, the temperature is likely to increase and hay bales should be moved to allow increased air circulation and cooling Continue monitoring the temperature every two or three hours.

Temperature interpretations for hay stacks.

Temperature (°F)	Interpretation
<130	Continue monitoring temperature twice a day.
130 – 140	Temperature may go up or down. Recheck in a few hours.
150	Temperature will most likely continue to climb. Move the hay to provide air circulation and cooling. If hay is stored inside evacuate any livestock to a safe area and remove hay from building. Monitor temperature every two hours.
≥175	Fire is imminent or present. **Call the fire department immediately.** Continue probing and monitoring the temperature.

Fire is imminent if interior bale temperatures exceed 175°F and fire is present at temperatures greater than 200°F.

Other symptoms of hot hay or an internal hay fire include a slight caramel or strong burning odor, visible vapor or smoke, a strong musty smell, and/or hay that feels hot to the touch. If any of these symptoms occur, **call the fire department immediately**.

Let firefighters take control of the situation once they arrive. Do not move hay if signs of fire are present. Moving hay exposes the overheated or smoldering hay to oxygen and may cause the fire to burn uncontrollably.

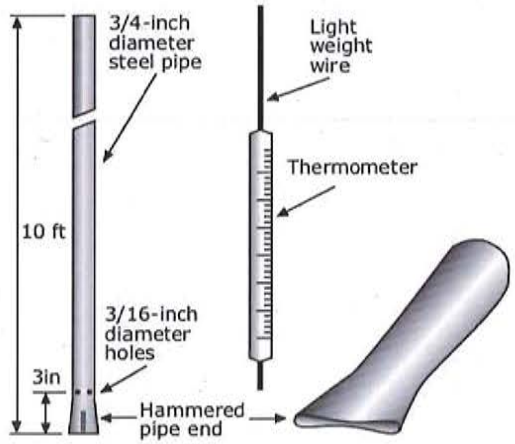


Figure 1. Homemade hay temperature probe with thermometer.

Controlling Hay Fires

In the event of a hay fire, surveying the fire scene is the most important step to ensure everyone's safety.

Review the area surrounding the hay fire. If flammable products (e.g. gasoline, fertilizers, and pesticides) are located nearby, **leave the area immediately**.

If there are no flammable products in the area and time permits, there are several steps you can take before the fire department arrives.

Hay Stored Outside

Use a disk to create a firebreak around the stacked hay. The firebreak should be approximately 15 feet wide. If water and a high-pressure hose are available, water the hay and the surrounding vegetation to keep the fire from spreading.

Hay Stored Inside a Building

If the area is safe and time permits, evacuate any livestock from the building. Put the animals in a pasture that is a safe distance from the structure. Turn off the building's electricity to prevent an electrical fire.

Monitor wind direction carefully. If water and a high pressure hose are available, water the roof of adjacent structures that are downwind of the fire.

This information was developed with the assistance of
Virginia Tech Extension
Virginia Polytechnic Institute and State University
Department of Biological Systems Engineering
The National Fire Protection Association (NFPA)

Produced by
The Barn Fire Prevention Task Force
a sub-committee of the
Vermont Rural Fire Protection Task Force

Disclaimer: This fact sheet is intended for information purposes only. The authors and distributors of this facts sheet accept no liability for the information or suggestions provided. Each recipient waives and releases the authors and distributes from any and all claims relating to the usage of information, in whole or in part, contained on the fact sheet. The authors and distributors will not be held responsible for any injury, loss or damage incurred by reliance on the information provided.

Vermont Barn Fire Prevention Taskforce

FARM FIRE SAFETY SHEET

Fire Extinguisher Selection, Location and Use

While not all of these items may be practical for every farm, the listed recommendations are universally endorsed by fire experts worldwide, and farms conforming to as many of these points as possible will be at much lower risk for fires.

Armed with the right type of fire extinguisher, a property owner can often extinguish or contain a fire before it becomes a major blaze.

To effectively fight a fire, an individual must be prepared with the right type of extinguisher, have it readily available, and know how to use it properly. Failure to be properly prepared to extinguish a fire not only reduces the chances of containing the blaze, but may also place the individual in an extremely hazardous situation.

If you lack the tools or the skills to fight a fire, no matter how small, get out of the building, call your local fire department and wait for them to arrive.

FIRE EXTINGUISHERS

There are several types of fire extinguishers available, but the best type for home and farm use is a multipurpose "ABC" type extinguisher. ABC type extinguishers generally use ammonium phosphate as the active chemical to extinguish a fire and are capable of putting out most common fires.

Extinguishers are rated for the type of fire they are made to extinguish.

A - Ordinary combustible materials such as wood, paper, hay, etc.

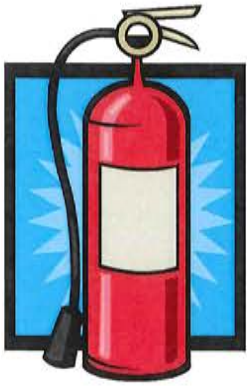
B - Flammable liquids such as gas, oil, grease and other petroleum products.

C - Electrical fires.

As this listing shows, an ABC type extinguisher is capable of extinguishing most fires. Multipurpose extinguishers are available in 2½, 5 and 10 pound sizes.

The larger the extinguisher the longer it takes to completely discharge. Because the discharge time for these sizes ranges from 8 to 25 seconds, a five-pound extinguisher is the minimum size that should be purchased.

When purchasing an extinguisher, make sure it is U.L. (Underwriters Laboratories) or F.M. (Factory Mutual Laboratories) approved. Extinguishers with these labels are manufactured to meet recognized safety and performance standards. Contact your local fire department for additional information about purchasing an extinguisher to meet your specific needs.



PURPOSES AND LOCATIONS FOR FIRE EXTINGUISHERS

The main reasons for having fire extinguishers readily available are to:

1. Suppress a fire along an escape route so trapped persons can exit a burning structure.

2. To extinguish or contain a fire from the time it is discovered until the arrival of fire department personnel.

FARM BUILDINGS

Farm buildings and farm equipment should be equipped with fire extinguishers.

The farm shop is a particularly fire prone area due to the types of equipment used. Welders and cutting torches can quickly ignite any combustible material.

At least one 10-pound ABC extinguisher should be wall - mounted in the shop for easy accessibility.

It is a good practice to have at least one ABC type extinguisher in all farm buildings and in other areas where there is a risk of a fire, such as around grain drying and processing equipment.

TRACTORS, COMBINES AND OTHER MACHINES

Fire extinguishers should also be mounted on tractors, combines, trucks and other equipment. Because most fires associated with these types of equipment are from petroleum products or electrical fires, a ten-pound ABC will be adequate.

To cut down the cost of purchasing several extinguishers, mounting brackets can be attached to equipment and the extinguisher can be transferred from seasonal equipment when it is to be stored for several months.

FIRE EXTINGUISHER OPERATING PROCEDURES

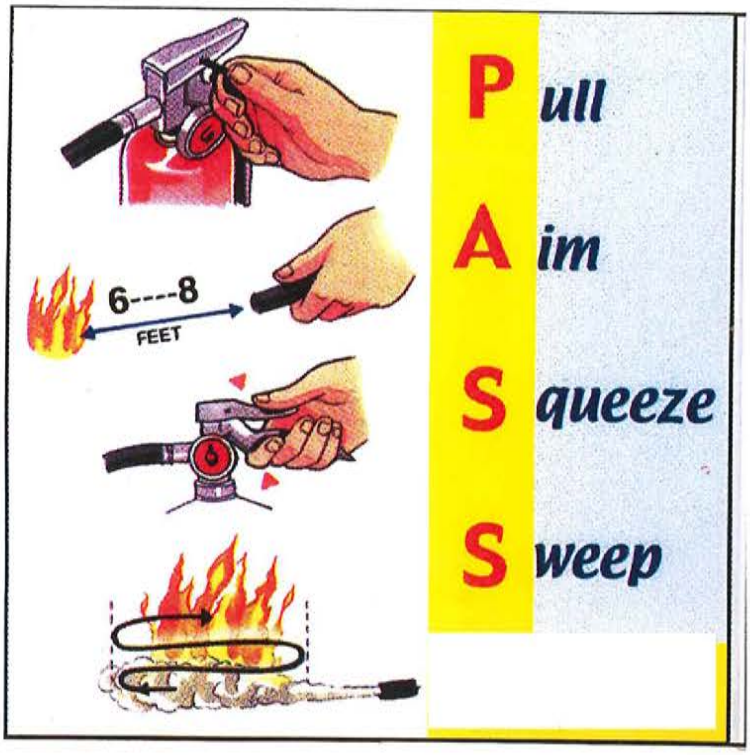
When a fire occurs, follow these general rules:

1. Make sure everyone gets out of the building.

2. Call the fire department immediately. Fires can spread quickly -- if you are unsuccessful in putting out a fire, the time you spend trying to extinguish a blaze may allow it to spread to other buildings. If your farm is difficult to find or off a main road, keep a complete set of directions posted by the telephone to instruct fire department personnel to your location. Precious seconds can be lost if you are required to stop and think about the quickest route to the farm. Most individuals can be easily confused during a stressful situation.

3. After calling the fire department, if the fire is still small, decide if you or someone else should risk trying to control the fire. Smoke and gases released from a fire can be toxic, so never attempt to put out a fire if you have any doubts about your ability to extinguish it. Wait for fire department personnel who have the proper equipment and are trained in fire fighting procedures.

If you elect to put out a fire and it grows too large to control, back out of the building. Never turn your back on a fire. Close the door behind you to limit oxygen in the building and wait until help arrives.



To Operate a Fire Extinguisher:

USE THE P.A.S.S. METHOD

1. Take extinguisher from mounting bracket.

2. Remove locking pin, ring, clip, level, etc. Get into a crouching position on the upwind side of the fire.

3. Point extinguisher nozzle at base of fire and squeeze the lever or handle.

4. Discharge using a sweeping motion from side to side at the base of the fire.

Having fire extinguishers in your home and on your farm does not relieve you and family members from the responsibility of taking precautions to prevent fires, nor do fire extinguishers take the place of trained fire department personnel.

A fire extinguisher is designed to reduce the chances of injury and death to you and family members during the time it takes to leave the structure and for trained help to arrive in the event of a fire.

Smoke detectors are essential to early detection of a fire. Install and maintain them according to manufacturer's instructions.

This information was developed with the assistance of
Michigan State University Extension
The National Fire Protection Association (NFPA)

Produced by
The Barn Fire Prevention Task Force
a sub-committee of the
Vermont Rural Fire Protection Task Force

Vermont Farm Safety Project
University of Vermont Extension
Vermont Agency of Agriculture

Farm Name: _____ Telephone: _____ - _____
Date: _____/_____/_____ Email: _____
Auditor: _____

Farmstead, Livestock & Crop Checklist

	General Farmstead	Yes	No	N/A	Comments or Improvements Needed	Date Improved	Who
1	Are there fenced play areas for children?	☐	☐	☐			
2	Designated areas to park tractors & equipment that does not reduce visibility or restrict safe traffic flow?	☐	☐	☐			
3	Can you see clearly in both directions as you enter the main road from the farm driveway?	☐	☐	☐			
4	Is the driveway wide enough to enter or exit without swinging machinery into the opposite lane of traffic?	☐	☐	☐			
5	Are buildings and outdoor work areas well lighted?	☐	☐	☐			
6	Are fuel tanks maintained in good condition?	☐	☐	☐			
7	Are "No Smoking" signs posted near fuel storage and refueling areas?	☐	☐	☐			
8	If there are underground utilities (gas, power lines) present, are they marked or location recorded?	☐	☐	☐			
9	Are ponds, lagoons, or manure pits fenced off?	☐	☐	☐			
10	Are warning signs posted near ponds, manure pits, or lagoons ?	☐	☐	☐			
11	Do ponds, lagoons, or manure pits have rescue equipment, readily accessible?	☐	☐	☐			
12	Are overhead power lines at a safe height?	☐	☐	☐			
13	Are junk piles cleaned up so they do not pose a hazard to children, visitors or the environment?	☐	☐	☐			
14	Are old wells filled in or securely covered?	☐	☐	☐			
15	Are there fall or trip hazards around the farmstead?	☐	☐	☐			
16	Do all porches & decks have railings?	☐	☐	☐			

Vermont Farm Safety Project
University of Vermont Extension
Vermont Agency of Agriculture

	Farm Buildings	Yes	No	N/A	Comments or Improvements Needed	Date	Who
1	Are there telephones located in each major farm building?	☐	☐	☐			
2	Are there emergency contact numbers and directions posted near phones?	☐	☐	☐			
2a	Do you use cellular phones or two-way radios when working away from the farmstead?	☐	☐	☐			
3	Are there fully charged ABC fire extinguishers located in each farm building?	☐	☐	☐			
4	Are well maintained first aid kits located in each major farm building?	☐	☐	☐			
5	Is electrical wiring in good condition and supported in conduit?	☐	☐	☐			
6	Are pesticides stored in a separate room or building which can be locked?	☐	☐	☐			
7	Do buildings have lightning protection?	☐	☐	☐			
8	Are stairs and fixed ladders in good condition?	☐	☐	☐			
9	Do stairs have handrails and are clear of objects?	☐	☐	☐			
10	Are floors free of broken concrete, slick spots or rough spots that could cause falls?	☐	☐	☐			
11	Is lighting adequate, with dust & break-proof lights?	☐	☐	☐			
12	Are smoke & carbon monoxide (CO) detectors installed and working?	☐	☐	☐			
13	Are NO SMOKING signs posted?	☐	☐	☐			
14	Do all buildings have 2 ways to exit?	☐	☐	☐			
	Shop						
1	Are the floors clean, free of grease, oil, clutter, and tripping hazards?	☐	☐	☐			
2	Is adequate ventilation provided?	☐	☐	☐			

	Shop	Yes	No	N/A	Comments or Improvements Needed	Date	Who
3	Are lubricants, oil, grease, paint and/or solvents labeled and stored in metal cabinets or on metal shelves?	☐	☐	☐			
4	Is flammable waste NOT present?	☐	☐	☐			
5	Are fuses & circuit breakers clearly marked?	☐	☐	☐			
6	Are stacked materials secured against falling?	☐	☐	☐			
7	Are jack stands available?	☐	☐	☐			
8	Are power tools and shop machines properly shielded and guarded?	☐	☐	☐			
9	Are all outlets, switches, junction boxes covered?	☐	☐	☐			
10	Are extension cords and portable power tool cords in good condition?	☐	☐	☐			
11	Is there an overuse of extension cords?	☐	☐	☐			
12	Are 3 prong plugs properly grounded?	☐	☐	☐			
13	Are there GFCI's present in bathrooms and for outdoor power use?	☐	☐	☐			
14	Is the welding area kept dry?	☐	☐	☐			
15	Are flammables & combustibles stored away from the welding area?	☐	☐	☐			
16	Is ventilation adequate to dissipate welding fumes?	☐	☐	☐			
17	Are compressed gas cylinders secured in an upright position?	☐	☐	☐			
18	Are gas cylinders turned off when not in use?	☐	☐	☐			
19	Is there a metal container, with lid, for oily rags?	☐	☐	☐			
20	Are heaters adequately vented & maintained?	☐	☐	☐			
21	Are portable heaters (salamanders) used?	☐	☐	☐			
22	Are flammables & combustibles stored away from heaters?	☐	☐	☐			
23	Can the shop be locked to prevent children or any other unauthorized people from entering?	☐	☐	☐			

		Yes	No	N/A	Comments or Improvements Needed	Date	Who
	Crop and Feed Storage Areas						
1	Can entrances to feed, grain, or silage storage areas be locked?	☐	☐	☐			
2	Are warning signs posted on grain bins, gravity wagons, and trucks to warn of flowing grain hazards?	☐	☐	☐			
3	Are silo gas warnings posted?	☐	☐	☐			
4	Are permanent ladders attached securely and in good condition?	☐	☐	☐			
5	Are ladder extensions removed from the bottom 8-10 feet to prevent children or visitors from climbing up bins or silos?	☐	☐	☐			
6	Are there safety cages around ladders on silos, tall bins, or elevator legs?	☐	☐	☐			
7	Do you have two outside assistants, harness & safety line when working inside grain bins?	☐	☐	☐			
8	Are children prohibited from playing in grain bins or wagons?	☐	☐	☐			
9	Are respirators worn if handling dusty grain, feed, or bedding?	☐	☐	☐			
10	Are all shields and guards on unloading equipment?	☐	☐	☐			
11	Do you lockout and tag motors and controls before entering bins and silos?	☐	☐	☐			
12	Are silos and bins free of cracks, corrsion, and structural problems?	☐	☐	☐			
13	Are storage and drying areas free of trash or other fire hazards?	☐	☐	☐			
14	Are overhead power lines located away from bins or silos where augers may be used?	☐	☐	☐			
	Livestock Facilities						
1	Are doorways, alleyways, fences, and gates free of obstructions and sharp projections?	☐	☐	☐			
2	Are windows inaccessible to livestock?	☐	☐	☐			

	Livestock Facilities	Yes	No	N/A	Comments or Improvements Needed	Date	Who
3	Are outside ramps, steps, and entries protected from rain that could freeze?	☐	☐	☐			
4	Do steps and walkways have rough textured surfaces to prevent slips and falls?	☐	☐	☐			
5	Are fences sturdy and well maintained?	☐	☐	☐			
6	Is hay stored away from heat and electrical sources?	☐	☐	☐			
7	Are children prohibited from playing in barns, pens or feedlots?	☐	☐	☐			
8	Are vents and fans in good repair?	☐	☐	☐			
9	Are ventilation fans cleaned and checked periodically to maintain proper air exchange?	☐	☐	☐			
10	Are portable heaters in good condition, vented, and placed so they won't cause a fire if tipped?	☐	☐	☐			
11	Are animal drugs/medicines kept in a secure area?	☐	☐	☐			
12	Are barn chemicals kept in original containers, properly labeled & stored out of reach of children or visitors?	☐	☐	☐			
13	Are manure pit hoppers covered with sturdy, well-fitted grates in good condition?	☐	☐	☐			
14	Are "No Smoking" signs posted near manure pits in in and around barns?	☐	☐	☐			
15	Are fall hazards such as floor openings or platforms guarded with handrails?	☐	☐	☐			

16 Other Farmstead Safety issues?_____

From this Farmstead Safety Checklist, list improvements to be made.

1._____
2._____
3._____

Vermont Farm Safety Project
University of Vermont Extension
Vermont Agency of Agriculture

Farm Name:_____
Date: _____

Tractor and Machinery Safety Checklist

Total number of tractors_____
Number of tractors with ROPS_____
Number of ROPS equipped tractors with working seatbelts_____

		Yes	No	N/A	Comments or Improvements Needed	Date Improved	Who
1a	Do tractor operators receive training on the equipment?	☐	☐	☐			
2	Do tractor operators review operator's manuals?	☐	☐	☐			
3	Are seatbelts always worn with ROPS?	☐	☐	☐			
4	Is there a "No Extra Rider" policy on the farm?	☐	☐	☐			
5	Are fire extinguishers mounted on each tractor?	☐	☐	☐			
6	Are first aid kits mounted on tractors?	☐	☐	☐			
7	Do tractor operators perform walk around inspections of tractors & machinery prior to operation ?	☐	☐	☐			
8	Are operator platforms & steps kept clear of grease, mud, tools, and other items?	☐	☐	☐			
9	Are all handholds & steps in good repair?	☐	☐	☐			
10	Are reflectors and Slow Moving Vehicle (SMV) emblems clean and unfaded?	☐	☐	☐			
11	Are lights and flashers in working order?	☐	☐	☐			
12	Are all PTO components properly shielded?	☐	☐	☐			
13	Is the PTO always disengaged and the tractor turned off before repairing or adjusting equipment?	☐	☐	☐			
14	Are warning labels readable and in place?	☐	☐	☐			

Vermont Farm Safety Project
University of Vermont Extension
Vermont Agency of Agriculture

	Tractor and Machinery Safety	Yes	No	N/A	Comments or Improvements Needed	Date	Who
15	Are shields for belts, chains and shafts in place and properly maintained?	☐	☐	☐			
16	Are children and non-working personnel kept away from tractors and machinery during operation?	☐	☐	☐			
17	Do you travel with front-end loader buckets low to the ground during transport?	☐	☐	☐			
18	Are the proper size hitch pins and safety clips used for towed implements?	☐	☐	☐			
19	Do you use safety hitch chains when towing implements on roadways?	☐	☐	☐			
20	Are towed loads hitched to the drawbar and never higher?	☐	☐	☐			
21	Are all tires are in good condition and kept at the recommended pressure?	☐	☐	☐			
22	For cab tractors, is the operator's manual kept in the cab for quick reference?	☐	☐	☐			
23	Are the cab windows and mirrors clean for good visibility?	☐	☐	☐			
24	Are jackstands for equipment in good condition?	☐	☐	☐			
25	Are all attachments (loader buckets, implements) lowered to the ground when parked?	☐	☐	☐			
26	Is the parking brake set and/or the transmission lever placed in park before dismounting tractors?	☐	☐	☐			
27	Are keys removed from tractors when not in use?	☐	☐	☐			

28 Other Tractor & Machinery Safety issues?_____

From this Tractor & Machinery Safety Checklist, list improvements to be made.

1._____

2._____

3._____

Vermont Farm Safety Project
University of Vermont Extension
Vermont Agency of Agriculture

Farm Name:_____
Date: _____

	Personal Protective Equipment (PPE) Checklist	Yes	No	N/A	Comments or Improvements Needed	Date Improved	Who
1	Do workers receive training on how to use PPE?	☐	☐	☐			
2	Is hearing protection available for workers?	☐	☐	☐			
3	Is eye protection available at all shop machines and other sources of eye hazards?	☐	☐	☐			
4	Are welding helmets, welding goggles in good condition and fitted with the appropriate lenses?	☐	☐	☐			
5	Is there an emergency eyewash station or a reliable source of freshwater available to flush eyes in emergencies?	☐	☐	☐			
6	Do workers wear safety shoes when there are hazards for falling, rolling objects or around livestock?	☐	☐	☐			
7	Are the appropriate respirators and dust masks available for workers?	☐	☐	☐			
8	Are leather work gloves available to workers?	☐	☐	☐			
9	Is clothing close fitting, hair put up, jewelry not worn, and no laces, hood strings/dangling items exposed?	☐	☐	☐			
10	Do workers take measures to protect against sun exposure such as wearing sunscreen, broad brimmed hats, and long sleeved shirts?	☐	☐	☐			
11	Are hard hats available?	☐	☐	☐			
12	Are chainsaw helmets and chaps available for tree/wood cutting activities?	☐	☐	☐			
13	Are MSDS posted in a convenient location?	☐	☐	☐			
14	Other PPE safety issues?_____						

From this PPE Safety Checklist, list improvements to be made.

1._____

2._____

GEMPLER'S® TAILGATE TRAINING TIP SHEET – NO. 62
Copyright 2009

Fire Safety at Work and Home

Editor's note: Our Tailgate Training Tip Sheets are available in Spanish at **www.gemplers.com.**

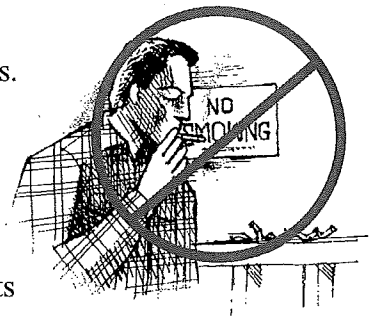
KEY POINTS:

- **Regularly inspect your work area and home for potential fire hazards.**
- **Know how to contact your local fire department in an emergency.**
- **Always put the safety of people first if a fire breaks out.**

Note to trainer: *Follow this script or use it to help guide you through a 10- to 15-minute training session for your ag/hort workers. You may photocopy this sheet for your employees' personal use. However, it may not be published or sold. Bring to your training session a copy of the fire escape plan for your operation.*

Fires can be prevented

- Each year, thousands of people in the United States are injured or killed in workplace fires.
- A residential fire occurs every 78 seconds. Most of these fires occur during the winter months.
- Being on the lookout for potential fire hazards here and at home can save your life, as well as the lives of your co-workers and family members.
- Here are some potential hazards to watch out for at work:
  - poor housekeeping (such as trash, oily rags, packing materials or other combustible items on the floor or ground)
  - electrical hazards, such as frayed cords, overloaded circuits, powered equipment or tools that smoke or spark
  - smoking in non-smoking areas, or improperly discarded cigarette butts
  - improperly stored chemicals
  - the use of paint or other flammable products in poorly ventilated areas
- At home, be on the constant lookout for:
  - stoves, space heaters, fireplaces or candles that are left unattended
  - space heaters that are less than three feet away from draperies, bedding or anything else that could burn
  - the whereabouts of matches and lighters (Store them up high out of the reach of children.)
  - smoking in bed (**Never** do it.)
  - smoldering cigarettes



Have a fire escape plan

- It's important to have a fire escape plan and to practice fire drills at least twice a year.
- Your home fire escape plan should include two ways out of each room and a designated meeting place outside. Draw a picture of the location of doors and windows for young children. And be sure all family members know all routes out.

Note to trainer: *Go over your company's fire escape plan with trainees.*

(Continued on back)

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

GEMPLER'S® • P.O. Box 45800 • Madison, WI 53744-5800 • Phone: 1-800-382-8473 • www.gemplers.com

 Copyright 2009

Fire Safety at Work and Home

If there is a fire

- Be sure you and all of your family members know how to notify the local fire department in case of a fire. Post emergency telephone numbers by each phone. ***Note to trainer:*** *Tell trainees whether you have the emergency 911 phone number in your area or how else to notify the fire department in case of a fire at work.*
- When calling to report a fire here or at home, be sure to include your name, the telephone number you are calling from, the address of the fire, the type of fire, whether anyone has been injured, and whether the fire is in a chemical storage area.
- Always put your safety and the safety of other people first if a fire does break out. Immediately get out of your home or other building if you spot smoke or flames. Yell to others as you go. Never re-enter a burning building.
- If you are not in a burning building but your clothes catch on fire, stop where you are, drop to the ground, and cover your face and mouth with your hands. Then roll over and over to smother the flames. Have someone call for emergency help. Cool burns with large amounts of cool water for 10 to 15 minutes. Do not use ice or ice water. Do not remove clothing that is sticking to the skin.

More fire safety tips

- Never leave food cooking on a stove or in an oven unattended.
- Teach your children to stay away from stoves, space heaters, matches, fireplaces and anything else that could cause a fire or burn.
- Take special care during the winter months to discard dried out Christmas trees. Never use lighted candles on Christmas trees. Also, check to make sure furnaces and space heaters are working properly.
- Know the location of our smoke alarms and fire extinguishers. Install smoke alarms at home, including outside each sleeping area. If you have more than one level, install smoke alarms on each level of your home.
- Test smoke alarms once a month. Replace batteries once a year or sooner if the alarm starts "beeping."
- Have an "A B C" type fire extinguisher at home. Store it in a place that's readily accessible and not too far away from potential ignition sources.

Never leave food cooking on a stove unattended.

Are there any questions?

Note to trainer: *Take time to answer trainees' questions. Then review the* **Fire Safety Do's and Don'ts.**

FIRE SAFETY DO'S AND DON'TS	
DO: • Act quickly but stay calm in case of a fire. • Consider purchasing a fire escape ladder if you have a two-story home. • Know where all fire extinguishers are and how to operate them. And remember: Big fires start small.	**DON'T:** • Smoke in bed, in barns, near powered equipment or machinery, near chemicals, or when working with other flammable or combustible materials. • Forget to be on the constant lookout for frayed electrical cords and other potential electrical hazards at home. • Neglect to report any fire hazards to your supervisor.

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

GEMPLER'S® • P.O. Box 45800 • Madison, WI 53744-5800 • Phone: 1-800-382-8473 • www.gemplers.com

GEMPLER'S® TAILGATE TRAINING TIP SHEET® – NO. 47
Copyright 2009

How To Handle Emergency Situations

Editor's note: Our Tailgate Training Tip Sheets are available in Spanish at **www.gemplers.com.**

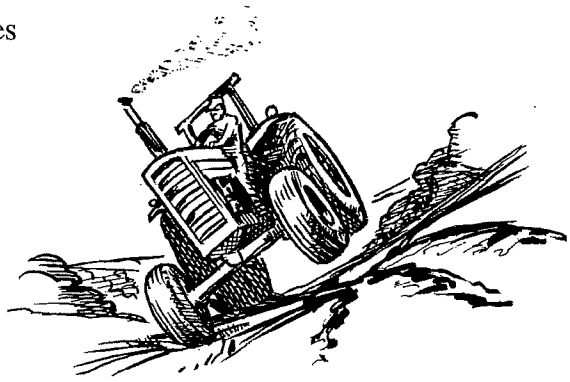
KEY POINTS:

- **Act quickly but calmly in an emergency.**
- **Know where our emergency phone numbers and first aid kits are located.**
- **Get professional emergency medical help as soon as possible when someone is seriously injured.**
- **Know what information to give a 911 dispatcher or other emergency telephone dispatcher.**

Note to trainer: *Follow this script or use it to help guide you through a 10- to 15-minute tailgate training session for your ag/hort workers. You may photocopy this sheet for your employees' personal use. However, it may not be published or sold.*

Why your response is important

- Agricultural operations are often located some distance away from emergency medical services and other sources of professional medical help.
- In addition, many agricultural accidents occur in fields or other remote areas where they may go unnoticed for long periods of time.
- That's why it's important that you know what to do if you come across an emergency situation. Your quick actions can make the difference between life and death.



Agricultural accidents often occur some distance away from help.

How to recognize an emergency

- If you see, hear or smell something unusual, that may be your first indication that an emergency situation exists.
- Some examples of unusual noises include a person screaming or calling for help; sudden, loud voices; breaking glass; unusual machinery or equipment noise; screeching tires; or a loud crash.
- An emergency may also exist if you smell something unusual. Be especially alert to this if you work with pesticides or other chemicals.
- Some examples of unusual sights are spilled chemical containers, downed electrical wires, smoke or fire.
- An emergency may also exist if you see someone having trouble breathing or speaking, holding his throat or chest, sweating for no apparent reason, or suddenly appearing dizzy or confused.
- If you spot an emergency situation, get emergency help as soon as possible.

(Continued on back)

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

 Copyright 2009

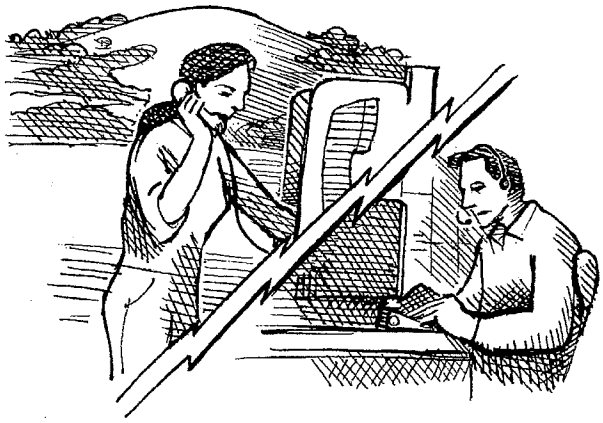
How To Handle Emergency Situations

A few important tips

1. Know where our emergency telephone numbers are located.
   Note to trainer: *Tell trainees whether you have 911 in your area, and where that and other emergency numbers are posted.*
2. Know where our first aid kits are located and what is in them.
   Note to trainer: *Show trainees a first aid kit and go through the contents with them.*
3. Stay calm when you come across an emergency.
4. Quickly assess the situation. If someone is hurt, make sure both you and the injured person are out of immediate danger. For example, if someone is caught in a PTO, turn the power off if you can safely do so.

> ***Warning:*** *Never touch a downed power line. Don't touch a person who has come into contact with a power line until the power has been turned off. If you need to move the person, use a wooden pole or other non-conducting object.*

5. Call for professional emergency medical help as soon as possible. Don't move a person with injuries to the head, neck or back unless he is in immediate danger. Administer CPR if the person isn't breathing and you have been trained in CPR.
6. If another person is with you, send that person to call the emergency medical services while you stay with the injured party. Reassure the injured person.



Information to give an emergency dispatcher

- the location of the emergency and how to get there
- what happened and how many people are injured
- what type of first aid is being given
- what additional hazards exist
- your name and the number you are calling from
- whether someone will meet the emergency medical services by the road or at a remote location

Are there any questions?

Note to trainer: *Take time to answer trainees' questions. Then review the* **Emergency Response Do's and Don'ts.**

EMERGENCY RESPONSE DO'S AND DON'TS	
DO: • Make sure someone knows where you are at all times, and have someone periodically check on you. • Know who to call for professional emergency medical help and what information will be needed.	**DON'T:** • Move a person with head, neck or back injuries unless he is in immediate danger. • Forget to tell a supervisor if a first aid kit needs to be restocked.

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

GEMPLER'S® TAILGATE TRAINING TIP SHEET® – NO. 104 Copyright 2009

Important Tips to Avoid Accidents

Editor's note: Our Tailgate Training Tip Sheets are available in Spanish at **www.gemplers.com**.

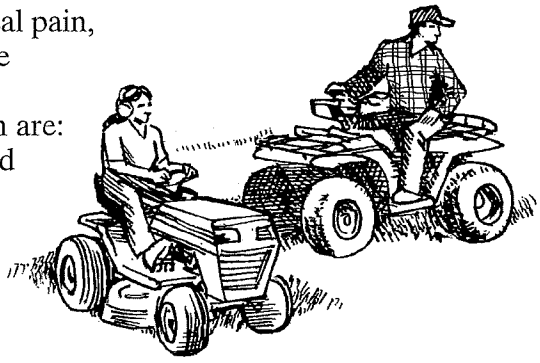
KEY POINTS:

- **Serious accidents can happen in a split second.**
- **It's risky to think that an accident can only happen to someone else.**
- **Rushing to get the job done is one common reason why accidents occur.**

Note to trainer: *Follow this script or use it to help guide you through a 10- to 15-minute tailgate training session for your ag/hort workers. You may photocopy this sheet for your employees' personal use. However, it may not be published or sold.*

Why do accidents occur?

- Accidents can happen in a split second, and can result in serious injury or death.
- Getting into an accident can also result in long term physical pain, emotional pain, reduced income, high medical bills, and the inability to perform your job.
- There are many reasons why accidents occur. Among them are:
  - carelessness, and not paying attention to the task at hand
  - recklessness
  - taking shortcuts because you're rushing to get the job done
  - being distracted – having your mind on other things
  - not getting enough sleep or taking adequate breaks
  - having an attitude that you've "always done it this way" or that accidents can "only happen to someone else"
  - not being adequately trained
  - stubbornness, including an unwillingness to ask for help
  - letting stress or other emotions interfere with your job
  - not using common sense
  - not thinking about safety **all** the time



Not paying attention can result in an accident.

Rushing to get the job done

- Being in too much of a hurry is a common reason why accidents occur.
- It's important that you take a few minutes before you begin a task to think about the potential hazards and how you can protect yourself.
- Then, tackle the task slowly and deliberately – the quality of your work will be better, and you'll get more done than if you suddenly wind up injured.

Being in too much of a hurry to get the job done can lead to an accident.

(Continued on back)

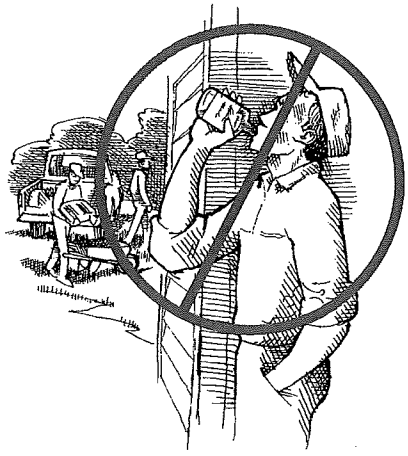
See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

 Copyright 2009

Important Tips to Avoid Accidents

Stress can lead to accidents

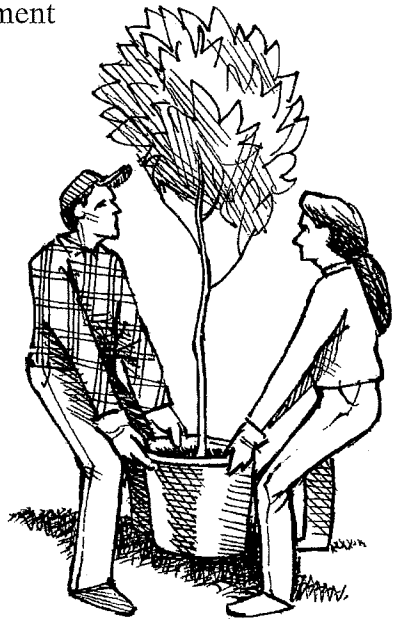
- Accidents are also more likely to occur when you're under stress, whether it's due to problems at home, a death in the family, financial troubles, or other reasons.
- Stress is how your body reacts when increased demands are placed on it.
- Here are a few tips to help you avoid stress:
  - Make sure you have "balance" in your life. Don't work all the time – take some time away from work to have fun.
  - Learn to say "no." Don't take on more than you can handle.
  - Be willing to ask for help when you need it, and to tell your supervisor when there is something you don't understand.
  - Don't deal with stress by medicating yourself. Drinking alcohol or using drugs can make the situation even worse.



Don't deal with stress by drinking alcohol or using drugs.

More accident prevention tips

1. **Practice safe work habits.** Don't operate hazardous machinery or equipment unless you have been properly trained. Pay close attention to our safety warning signs. And don't drive or operate equipment such as tractors or forklifts if you are overtired, ill, are feeling anxious, or if you have been using alcohol or other drugs.
2. **Don't engage in horseplay.** "Fooling around" on the job puts both you and your co-workers at risk of getting hurt.
3. **Be especially careful on the road.** Using a cell phone when driving, letting a passenger distract you, or keeping loose items under the seat or on the dashboard that can fall or roll around can lead to an accident.
4. **Get enough sleep.** This is important because fatigue is a common reason for accidents. Being overtired can result in not hearing important safety instructions and in slowed reaction time.
5. **Ask for help when you need it.** Don't take the attitude "I can do this all by myself." Times you may need help include when you are lifting heavy pots or other items, or when you come to work feeling a little "under the weather" or overtired.



Always ask for help when you need it.

Are there any questions?

Note to trainer: Take time to answer trainees' questions.
Then review the **Avoiding Accidents Do's and Don'ts.**

AVOIDING ACCIDENTS DO'S AND DON'TS	
DO:	**DON'T:**
• Take time to think about safety before you start each task.	• Engage in horseplay or other risky behavior at work.
• Pay close attention to safety warning signs and follow all safety instructions.	• Operate hazardous machinery or equipment if you are overtired or ill.
• Watch out for your co-workers, and work together as a team.	• Forget to take breaks, and to slow down if you begin to feel fatigued.

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

GEMPLER'S® TAILGATE TRAINING TIP SHEET® – NO. 15

Copyright 2009

Work Safely Around Electricity

Editor's note: Our Tailgate Training Tip Sheets are available in Spanish at **www.gemplers.com**.

KEY POINTS:

- **Always be on the lookout for electrical hazards.**
- **Don't let tall machinery get too close to overhead power lines.**
- **Be prepared to call for medical help if someone receives an electrical shock.**
- **Don't touch a person being shocked until the power is off.**

Note to trainer: *Follow this script or use it to help guide you through a 10- to 15-minute tailgate training session for your ag/hort workers. You may photocopy this sheet for your employees' personal use. However, it may not be published or sold.*

Bring to your training session a three-pronged plug and samples of extension cords used in your operation.

Electricity can be dangerous

- Most of us have received minor electrical shocks at one time or another. Shocks occur when an electrical current travels through your body until it is grounded.
- You are likely to get a shock when you:
  - accidentally touch a live wire, or
  - come into contact with electrical current passing through a poorly insulated power tool, electrical device or faulty electric cord.
- You are also likely to receive a shock if you plug a cord into an outlet while standing in water or when your hands are wet.
- Other electrical hazards include:
  - sparks from electric motors or faulty cords
  - fires created by heat from overloaded circuits
  - explosions resulting from overheated equipment stored in an area with flammable liquids, vapors or dusts
  - burns, which may occur when you accidentally touch overheated wires or electrically operated equipment

How to protect yourself

- Be on the constant lookout for these hazards:
  - frayed electric cords
  - loose electrical connections
  - wires or cords in areas where people walk
  - low overhead power line clearances when operating such equipment as portable augers or loaders
  - equipment or tools that smell, smoke or spark
  - household-grade extension cords used to operate heavy machinery
  - overloaded circuits
  - ungrounded equipment or wires
  - missing covers on equipment or boxes

(Continued on back)

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

 Copyright 2009

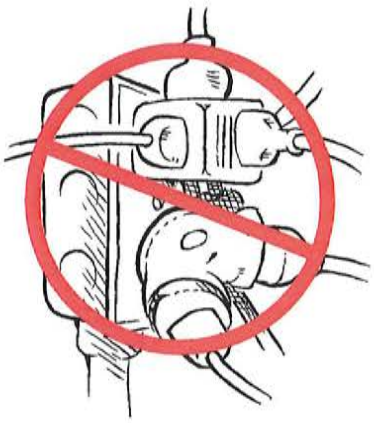
Work Safely Around Electricity

Here are some more safety tips

1. Always check the clearance of overhead power lines when working outdoors on a ladder or with certain equipment such as a front-end loader, fold-up cultivator or auger.

> ***Warning:*** *Don't use a metal ladder around electric power lines.*

2. Never overload outlets or circuits.
3. Be sure the equipment you operate is grounded or double insulated. Three-pronged plugs such as this are used to ground electrical equipment. ***Note to trainer:*** *Show trainees a three-pronged plug. Tell them not to remove the third plug and to be sure to plug it into a three-pronged outlet.*
4. Never use a damaged extension cord.
5. If an extension cord is needed to operate power tools or heavy equipment, use a heavy duty cord. Use weatherproof extension cords outside. Cords with built-in ground fault circuit interrupters are recommended for any potentially wet locations.
   Note to trainer: *Show trainees examples of the extension cords used in your operation.*
6. Keep your work area clean. Especially be on the lookout for oily rags, papers, sawdust or other materials that can easily burn.
7. Don't perform electrical repairs yourself. Leave that to properly trained technicians.
8. Don't lay cords in the aisles or road where they can be walked on or run over.



Don't overload electrical outlets

What to do in an emergency

- In cases of electrical shock:
  - If you can do it safely, shut the power off.
  - If you can't shut the power off and you need to move the person away from a wire, use a long wooden object – not your hands.
  - Immediately call for medical help.
- If your tractor comes into contact with an overhead power line, jump off. Get as far away from it as possible. Don't touch the tractor and the ground at the same time and don't get back on the tractor.

Are there any questions?

Note to trainer: *Take time to answer trainees' questions. Then review the* **Electrical Safety Do's and Don'ts.**

ELECTRICAL SAFETY DO'S AND DON'TS	
DO:	**DON'T:**
• Make sure the electrical equipment you operate is grounded. • Inspect electrical cords before each use. • Check the clearance of overhead power lines when operating tall machinery or working on a ladder outdoors.	• Ever touch a downed power line. • Overload circuits or put anything but an electric plug into an outlet. • Use a household-grade extension cord to operate power tools or heavy equipment.

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

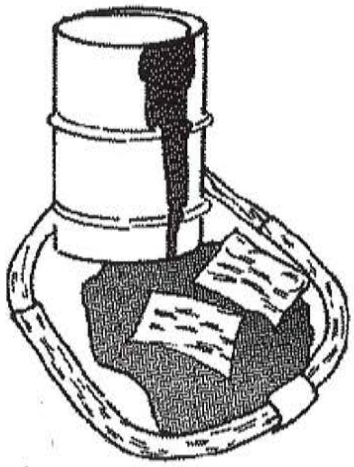
GEMPLER'S® TAILGATE TRAINING TIP SHEET® – NO. 12 Copyright 2009

How to Clean Up a Pesticide Spill

Editor's note: Our Tailgate Training Tip Sheets are available in Spanish at **www.gemplers.com**.

KEY POINTS:

- **Pesticide spills should be cleaned up right away.**
- **Be sure to wear the proper PPE when cleaning up a spill.**
- **Do not use water to clean up a pesticide spill.**



Note to trainer: *Follow this script or use it to help guide you through a 10- to 15-minute tailgate training session for your ag/hort workers. You may photocopy this sheet for your employees' personal use. However, it may not be published or sold.*

Bring samples of the spill cleanup materials used in your operation to the training session.

Pesticide spills can be dangerous

- Pesticides are hazardous materials. A spill could result in a fire, an explosion, or the release of a toxic chemical into the water, soil or air.
- If you see a chemical spill – no matter how small – report it to a supervisor right away.
- Don't leave the spill unattended unless you believe you're in imme

Here's what you should do

- Call for help if you think you will need it.
- See if any workers in the area need medical attention. Get them help if needed.
- Warn all other nearby workers, and have them leave the area. If the spill is outside, don't evacuate people to an area downwind from the spill.
- Put on PPE. Check the pesticide label for personal protective equipment requirements for handlers. You **must** wear at least that much PPE.
- Check for any immediate hazards such as electrical cords, flames, or running equipment.

Warning: *If a fire or explosion seems imminent, leave the area immediately. Warn others as you go. Then call the local fire department.*

Control the spill

- Be sure you're wearing PPE. Then stop the spill.
  - Turn off mixing or application equipment if it is leaking.
  - Turn a tipped container upright.
  - Place a broken or leaking container into a larger chemical resistant container.
- In some situations, you may be able to patch holes in a leaking tank to reduce the amount of flow.

Warning: *If a spray tank or other heavy container has burst or tipped over, you will not be able to stop the source of the spill.*

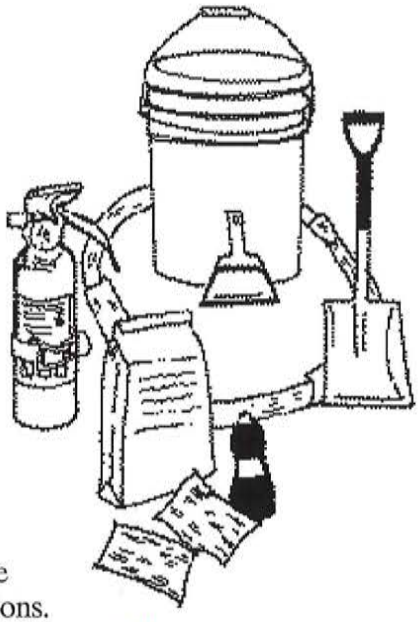
(Continued on back)

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

GEMPLER'S® • P.O. Box 45800 • Madison, WI 53744-5800 • Phone: 1-800-382-8473 • www.gemplers.com

 Copyright 2009

How to Clean Up a Pesticide Spill



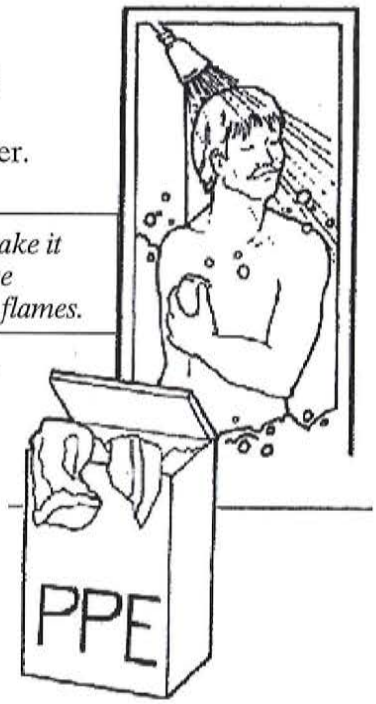
Contain the spill

- Work quickly but carefully to keep the spill from spreading.
- Surround the spill with absorbent pads, or build a dike around the edge of the spill, using soil, sod, clay or other materials. Here is where you can find the materials you need.
  Note to trainer: *Tell trainees what materials you have and where they are located.*
- Dry pesticides that may blow around should be moistened slightly with water or covered with a tarp.
- Rope off area and put signs up when you need to keep people out.

Clean up the spill

- We use certain materials for cleaning up pesticide spills.
  Note to trainer: *Show trainees examples of your spill cleanup materials and tell them where they are kept.*
- We also keep material safety data sheets or MSDSs for each pesticide we use. Be sure to check the MSDS for specific spill cleanup instructions.
- In addition to the MSDS instructions, follow these steps for a liquid pesticide spill:
  1. Soak up the spill with absorbent materials such as fine sand, sawdust, clay, cat litter, shredded newspaper or absorbent pads.
  2. Sweep the absorbent materials with the spilled pesticide into a heavy duty plastic container.
  3. Use a plastic dustpan to sweep up spills. Metal dustpans can spark and ignite flammable pesticides.
- Dry pesticide spills should also be swept into a heavy duty plastic container.
- See your supervisor for the proper disposal of contaminated materials.

> ***Warning:*** *Do not use water to clean up a pesticide spill. It will spread it and make it worse. If the MSDS or pesticide label says the pesticide is an oxidizer, don't use sawdust, shredded newspaper or sweeping compounds. They could burst into flames.*



Thoroughly clean yourself

- Take off your PPE.
- Discard leather shoes, jeans or other porous materials that may have been saturated with the pesticide. Check with your supervisor for the proper disposal procedures.
- Use soap and water to wash your hands, face, neck and forearms. Then take a shower.

Are there any questions?

Note to trainer: *Take time to answer trainees' questions. Then review the* **Pesticide Spill Cleanup Do's and Don'ts.**

PESTICIDE SPILL CLEANUP DO'S AND DON'TS	
DO:	**DON'T:**
• Always wear personal protective equipment. • Let your supervisor know if you cleaned up a spill by yourself.	• Leave a spill unattended unless you're in immediate danger. • Use water to clean up a pesticide spill.

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

GEMPLER'S® • P.O. Box 45800 • Madison, WI 53744-5800 • Phone: 1-800-382-8473 • www.gemplers.com

GEMPLER'S® TAILGATE TRAINING TIP SHEET® – NO. 82 Copyright 2009

The Dangers of Cold, Wintry Weather

Editor's note: Our Tailgate Training Tip Sheets are available in Spanish at **www.gemplers.com.**

KEY POINTS:

- **Winter storms can be extremely dangerous.**
- **Shoveling snow is more strenuous than you may think.**
- **Always dress appropriately for the cold weather.**

Note to trainer: *Follow this script or use it to help guide you through a 10- to 15-minute tailgate training session for your ag/hort workers. You may photocopy this sheet for your employees' personal use. However, it may not be published or sold.*

The hazards of cold weather

- Living or working in a part of the country where it gets extremely cold exposes you to certain dangers.
- Even if you're just visiting another part of the country during the cold winter months, it's important to know how to protect yourself.
- Some dangers associated with cold weather include: winter storms, wind chills, icy conditions, and cold-related injuries such as frostbite and hypothermia.
- Shoveling snow in cold weather carries certain risks, especially if you have a heart or other chronic condition, or aren't in good physical shape.

Be sure you're in good physical shape before shoveling snow.

Storms and wind chills

- Winter storms, often accompanied by strong winds, extreme cold and heavy snow, can be very dangerous. Strong winds combined with heavy snow can knock down trees, telephone poles and power lines.
- Sometimes, winter storms are referred to as "ice storms." Ice storms are especially dangerous. The buildup of ice on utility poles and power lines can disrupt communications and knock out power for days.
- Icy conditions can result in personal injuries when vehicle drivers lose control on icy roads or people slip and fall. Black ice, a thin film of ice on pavement that's very difficult to see, is especially dangerous.
- During the winter months, weather forecasters in cold climates will refer to the "wind chill." The wind chill combines the wind speed with the outside temperature to tell you how cold it feels outdoors.
- Low wind chill numbers mean that any parts of your body that are exposed to the cold will lose heat at a faster rate than at the same temperature if the wind was absent. When the wind chill numbers are low, it's important to take special precautions to dress very warm before going outside.
- Animals can also be affected by low wind chills. Farm animals, just like people, need to be protected from extreme temperatures during the winter months.

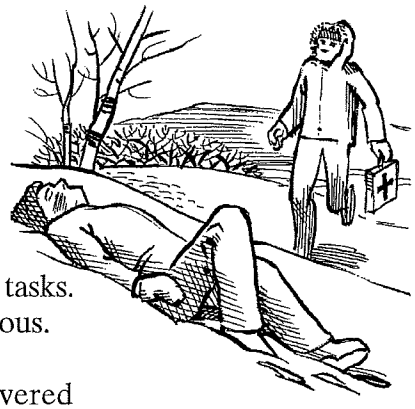
Driving in snow can be dangerous.

(Continued on back)

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

 Copyright 2009

The Dangers of Cold, Wintry Weather



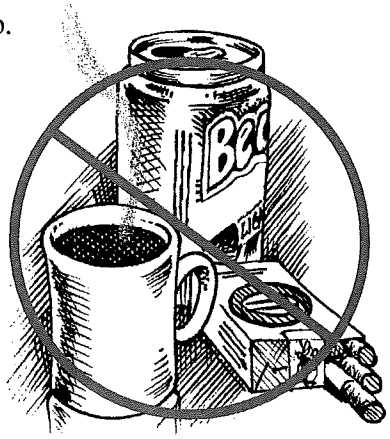
Serious cold-related injuries such as hypothermia need immediate medical attention.

Winter-related injuries

- There are a number of ways you can wind up seriously injured or ill during the cold winter months if you aren't careful. Here are a few:
  - **Injuries from shoveling snow.** People often don't dress properly for working in cold weather; injure their backs while shoveling; or overexert themselves and end up in the hospital. Heart attacks can also result from shoveling snow or from performing other strenuous tasks.
  - **Slips and falls.** Even a small amount of ice on the ground is hazardous. Failing to slow down can lead to slips, falls and broken bones.
  - **Vehicle accidents.** Driving a vehicle when the roads are snow-covered and icy is dangerous. It's important to slow down.
  - **Frostbite.** Frostbite, or the freezing of body tissue exposed to the cold, is a common cold-related injury. Because it has a numbing effect, you may not even realize you are frostbitten. Frostbite can result in the loss of such body parts as fingers, toes, hands, arms, feet or legs.
  - **Hypothermia.** Hypothermia occurs when your body loses heat faster than you can produce it. It can result in death. Warning signs include increased shivering, slurred speech, impaired judgment, and poor muscle coordination. Immediately call for professional emergency medical help.

Important cold weather tips

1. Always dress appropriately for the cold weather. It's best to wear several layers of loose-fitting, lightweight, warm clothing. Be sure your outer jacket repels water and cuts the wind. Also, wear a warm hat that covers your ears, a scarf or ski mask to protect your face, gloves or mittens, dry socks, and dry shoes or boots.
2. Eat adequately before working outdoors in the cold. Also, drink plenty of fluids so you don't become dehydrated. But avoid drinks with caffeine such as colas, coffee and caffeinated tea. Also avoid alcohol, which increases the rate at which your body loses heat.
3. Make sure you are in good physical shape. Don't overexert yourself.
4. Keep your skin dry. Wet skin freezes faster than dry skin.
5. Be extra careful driving in winter. It's a good idea to have a portable radio, first aid supplies and extra warm clothing or blankets in your vehicle.



Avoid alcohol, cigarettes and coffee in cold outdoor weather.

Are there any questions?

Note to trainer: *Take time to answer trainees' questions. Then review the* **Winter Weather Do's and Don'ts.**

WINTER WEATHER DO'S AND DON'TS	
DO:	**DON'T:**
• Take breaks from working outdoors in the cold. • Drink enough water to avoid dehydration. • Know how to call for professional emergency medical help if needed.	• Shovel snow or perform other strenuous outdoor tasks if you are in poor physical shape. • Drive in snowy conditions if you're not used to it. • Wear wet clothing in the cold.

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

GEMPLER'S® TAILGATE TRAINING TIP SHEET® – NO. 38
Copyright 2009

Emergency Care For Burns

Editor's note: Our Tailgate Training Tip Sheets are available in Spanish at **www.gemplers.com.**

KEY POINTS:

- **Burns can result in serious injury or even death.**
- **Call for emergency medical help if a co-worker is burned.**
- **Wear the appropriate personal protective equipment to protect yourself from burns.**

Note to trainer: *Follow this script or use it to help guide you through a 10- to 15-minute training session for your ag/hort workers. You may photocopy this sheet for your employees' personal use. However, it may not be published or sold.*

Burns can be deadly

- Each year in the United States more than two million people are injured and nearly 12,000 people die as a result of burns.
- The largest percentage of burns to adults occur in the workplace. These may result from:
  - contact with flames or hot objects such as machinery or pipes
  - contact with hot liquids or steam
  - splashes from chemicals to the skin or eyes
  - electricity
- You can protect yourself from burns by being careful, and by wearing the appropriate personal protective equipment (PPE) if you work with chemicals or other potential hazards.

Not all burns look the same

- Some burns, called first-degree burns, are less serious than others. They usually result in red, dry skin and mild swelling.
- Second-degree burns do more damage to the skin. They are usually quite painful, and result in blisters and swelling.
- Third-degree burns often result in white or charred skin. The burned skin may also be hard and dry. Third-degree burns of any size are extremely serious and require immediate medical attention. These burns destroy nerve endings, so they may not feel painful.
- If you or one of your co-workers is burned at work immediately notify your supervisor and get emergency medical help.
  Note to trainer: *Tell trainees how to contact the emergency medical services in your area.*

Call for emergency medical help when a co-worker is seriously burned.

Warning: *Immediately call the emergency medical services for chemical burns, electrical burns or burns to the head, neck, genitals, hands or feet. Also get immediate medical help for large burns, burns to more than one part of the body, or burns that result in trouble breathing.*

(Continued on back)

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

 Copyright 2009

Emergency Care For Burns

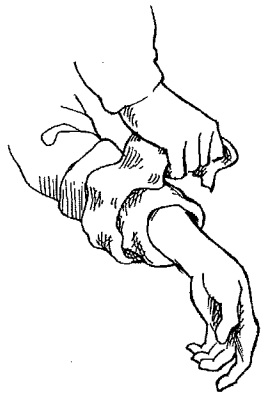
What to do for burns

- Here are some steps to take if a co-worker is seriously burned:
  1. Call for emergency medical help as soon as possible. Report minor burns to management, too.
  2. Remove the person from the heat or other source of the burn.

> ***Warning:*** *Don't touch a person burned by electricity until the power has been turned off.*

  3. Use large amounts of cool water to cool the burn, unless it is an electrical burn or a burn due to freezing such as anhydrous ammonia. Don't use ice or ice water to cool a burn.
  4. Apply a soaked towel, sheet or other wet cloth to burned areas that can't be immersed in water.
  5. Cover the burn with a loose bandage or a clean, dry cloth.

Use large amounts of cool water to cool a burn.



Cover the burn with a loose bandage or clean, dry cloth.

Electrical burns or chemical burns

- Both of these types of burns are very serious. Immediately call the emergency medical services for help.
- Don't touch a person shocked by electricity until you are certain the power is off. Only turn the power off yourself if you can do so safely. If the person isn't breathing and you have been trained in CPR, administer CPR until professional help arrives. Then cover the electrical burn with a dry bandage.
- For a chemical splash to the eye, follow these steps:
  - Immediately flush the eye with eyewash solution or a gentle stream of cool, running water.
  - Continue to do this for at least 15 minutes.
- For chemical burns to the skin:
  - Check the chemical label and material safety data sheet (MSDS) for specific instructions.
  - Don't touch the area exposed to the chemical without wearing the appropriate PPE.
  - Remove any excess powdered or dry chemicals from the person's skin. Also remove any contaminated clothing if possible.
  - Flush the burned area with a gentle stream of cool, running water for at least 15 minutes.

Flush an eye that has been splashed with chemicals for at least 15 minutes.

Are there any questions?

Note to trainer: *Take time to answer trainees' questions. Then review the* **Emergency Burn Care Do's and Don'ts.**

EMERGENCY BURN CARE DO'S AND DON'TS	
DO: • Act quickly when a co-worker is burned. • Use cool – not ice cold – water to cool burns. • Know the location of our emergency showers and eyewash stations.	**DON'T:** • Break blisters that result from a burn. • Apply antiseptic sprays, ointments, grease or butter to a burn. Get professional medical advice. • Try to remove clothing that is stuck to burned skin.

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

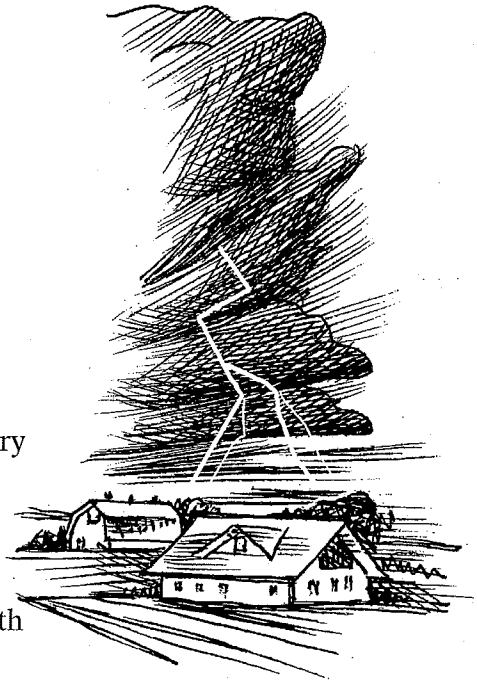
GEMPLER'S® TAILGATE TRAINING TIP SHEET® – NO. 31 Copyright 2009

Protection from Severe Weather

Editor's note: Our Tailgate Training Tip Sheets are available in Spanish at **www.gemplers.com**.

KEY POINTS:

- **Seek shelter in a large building during storms.**
- **Stay away from tractors, wire fences and metal pipes.**
- **Get immediate medical help if a co-worker is struck by lightning.**



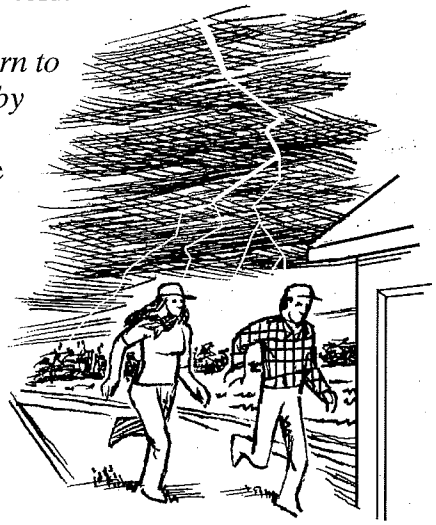
Note to trainer: *Follow this script or use it to help guide you through a 10- to 15-minute training session for your ag/hort workers. You may photocopy this sheet for your employees' personal use. However, it may not be published or sold.*

Stormy weather can be hazardous

- High winds, heavy rains, lightning and hail can cause serious injury to people, as well as to plants and crops.
- Tornadoes and hurricanes are just two examples of severe weather conditions that can cause serious harm. Others include:
  - heavy rains, resulting in flooding
  - lightning, which can result in fires, severe burns, and even death
  - strong winds, which can result in flying debris and downed electrical power lines

Protect yourself during severe weather

1. Immediately alert your supervisor if the sky turns dark or the weather appears threatening. Your supervisor will give you instructions on where to seek shelter. Don't return to your job site until you are told. ***Note to trainer:*** *Tell employees where to seek shelter during severe weather. A large building is the best option. Don't let employees return to their jobs until you have confirmed that weather conditions are safe by listening to a weather alert radio or a commercial radio station.*
2. If you are in an open field when the weather turns severe and there is no shelter nearby, lie flat in the nearest ditch or ravine. Shield your head with your hands. Be on the lookout for flash floods.
3. If you are surrounded by woods during severe weather, seek shelter under a thick growth of small trees.
4. Stay away from metal objects such as tractors, other farm machinery, metal pipes and wire fences.
5. Don't seek shelter under an isolated tree in an open field, and don't seek shelter in a small shed.
6. Stay off the telephone, unless you need it for an emergency. Telephone wires can conduct electrical current.



(Continued on back)

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.

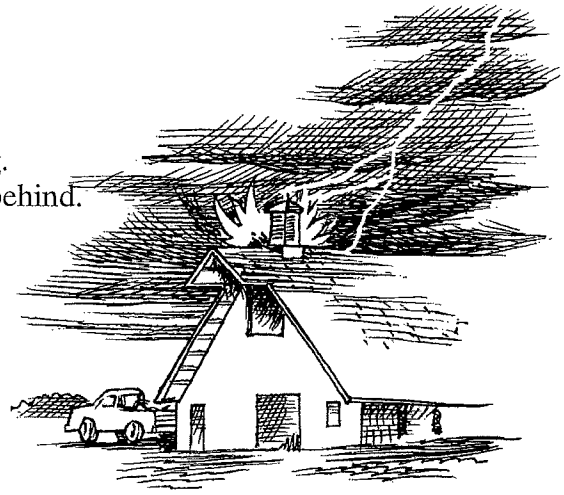
GEMPLER'S® • P.O. Box 45800 • Madison, WI 53744-5800 • Phone: 1-800-382-8473 • www.gemplers.com

 Copyright 2009

Protection from Severe Weather

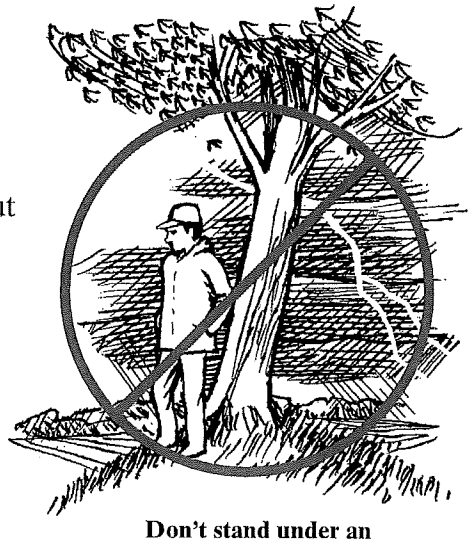
Lightning can be deadly

- Lightning injures or kills more people in the United States than hurricanes or tornadoes.
- Lightning is also a major cause of fires in barns, livestock buildings and other agricultural structures. The plastic used in many greenhouse structures is highly toxic when it burns. If you are in a greenhouse and it is struck by lightning or starts to burn, immediately get out and seek other shelter.
- Lightning is unpredictable. It can strike even if it's not raining.
- If you hear thunder, you can assume that lightning is not far behind. Alert your supervisor, and follow your supervisor's instructions for taking shelter.
- Some of the ways lightning can hurt you are:
  - by directly striking you
  - by striking the ground near you
  - by striking an object you are touching



Lightning safety tips

- Avoid standing on a hilltop or under an isolated tall tree.
- Stay away from metal objects. If you are wearing metal jewelry or any other metal objects, take them off.
- Don't use power tools or other electrical equipment.
- If you are indoors, stay away from water and from open windows and doors. Also try to avoid standing water outdoors.
- If you are caught in an open field and think lightning is about to strike, crouch down as close to the ground as possible. Put your hands on your knees, and your head between your knees. Don't put your hands on the ground.
- Immediately notify your supervisor and have someone call for medical help if a co-worker is struck by lightning.
  Note to trainer: *Let employees know which of your supervisors or other employees are trained in first aid and CPR.*



Don't stand under an isolated tall tree.

Are there any questions?

Note to trainer: *Take time to answer trainees' questions. Then review the* **Severe Weather Do's and Don'ts.**

SEVERE WEATHER DO'S AND DON'TS	
DO: • Listen for thunder and look for other signs indicating a storm is approaching. • Stay away from running water and bodies of water during storms. • Follow your supervisor's instructions for taking shelter.	**DON'T:** • Seek shelter under a tall tree or in a small shed during a storm. • Ever touch downed power lines. • Return to the job until your supervisor tells you the severe weather has ended.

See our full line of safety supplies, including respirators, eye and ear protection, coveralls, first aid and more.