



Farm Fire Prevention and Safety



“Avoid ‘building in’
fire hazards.”

Sound Management Practices for Producers

Fire prevention is critical on any farm, but sometimes overlooked until it is too late. The heat and smoke of fire, along with the toxic gases and rapid loss of oxygen, can kill quickly. Without prevention and safe management practices, you put your own life at risk as well as that of family members, employees and animals. Your farm buildings, equipment and livelihood can be wiped out in minutes. Safe management practices can make the difference.

- Avoid “building in” fire hazards in the initial construction of your farm buildings and management practices. For example, use all noncombustible or flame-retardant materials possible. Also, keep motors and machine tools free of dust and grease.
- Fight fire before it starts by keeping all ignition sources away from combustible material in and around your farm buildings.
- Get proper fire insurance coverage for your livestock, buildings and equipment.
- Make time for inspections and fire drills.
 - Invite your local fire department to your farm. Let them get acquainted with your facilities and help identify any fire hazards. Ask for their input in making your operation more fire-safe and fire-proof.
 - Develop and carry out a fire safety inspection for animal buildings and other buildings. Follow a routine preventive maintenance schedule and checklist for fire hazards.
 - Conduct regular fire drills, so all family members and employees know what to do. After a drill, hold a meeting to discuss improvements in procedures and equipment. Educate yourself and others about fire safety practices.
- Update and upgrade your farm buildings to the latest National Electrical Code. Use all noncombustible materials. Install a lightning protection system and inspect it periodically.
- Keep things clean and in good repair.

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*Disaster Handbook for
Extension Agents*
(Wisconsin Cooperative
Extension Service)

“Test your fire or smoke alarm system at least once a year.”

- Make good housekeeping part of your daily routine. Cut down and remove weeds and brush from around buildings. Keep work areas clean, dry and unobstructed. Never block exits or aisles, even for a few minutes. If you have a poultry building, check for excessive accumulations of dust, down feathers or cobwebs on sides, roof or rafters. Find a place for everything and keep it there.
- Test your fire or smoke alarm system at least yearly. Also, flush outside private fire hydrants at least once a year. Check fire doors and shutters regularly to make sure they are free of any obstructions and in good operating condition. Check all water control valves and air and water pressures of automatic sprinkler systems every week.
- Make sure that power needs for ventilation, feed distribution and other functions are met without overloading your electrical system. Follow the National Electrical Code. Use good material and proper fuse size or circuit breaker rating. Use junction boxes at all splice points. Use waterproof wiring and receptacles, enclosed electric motors and similar equipment in any buildings which are cleaned periodically with high-pressure equipment.



Fire Extinguisher Tip

Remember the phrase P-A-S-S if you attempt to put out a small fire with an extinguisher.

- P** is for pull the pin of the extinguisher (or with some units, Press the puncture lever or release the lock hatch);
- A** is for aim low or point the unit's nozzle at the base of the fire;
- S** is for squeeze the handle to release the extinguishing agent; and
- S** is for sweep from side to side. Aim the extinguisher at the base of the fire and sweep back and forth until it appears to be out.

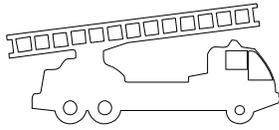
Never turn your back on a small fire, even if it looks as if it is out. Be prepared in case it flashes again.

General Safety

- Inspect all wiring and electric motors and appliances for exposed wires, broken insulation, improper grounding and improper installation. Equip motors with thermal overload relays or cutouts.

“Know your limits and always think safety first.”

- Check the heating system to make certain that every furnace or stove is in good repair. See that ducts and air shafts are clean of dust and debris, motors are cleaned and oiled (if necessary) each season, and pulley belts are in good working order. Check gas and fuel oil systems for leaks and unsafe installations. Keep all types of heating devices and other equipment clean and in good condition.
- Minimize hazards on site.
 - Strictly enforce a “no smoking” rule inside any buildings or areas where flammable and combustible materials are stored. Never smoke near storage, shipping or receiving areas where boxes or containers can easily start a fire.
 - Be extremely careful when handling gasoline. It is flammable and explosive. If your clothing becomes contaminated with a flammable material, change immediately. Never refuel gasoline engines while they are running or hot.
 - Keep flammable liquids in labeled safety containers and store them in approved flammable-liquid safety cabinets.
 - Keep above-ground fuel storage tanks at least 40 feet from buildings. This setback minimizes the potential for fire spread and generally is required by state laws.
- Know your fire extinguishers.
 - Select and provide proper fire extinguishers. Always make sure a wall unit matches the type of fires that could develop in that area. Different types of extinguishers work on different kinds of fires. Using the wrong unit on a fast-moving fire can cause the fire to spread even faster.
 - Read the extinguisher’s instructions to learn how to use the extinguisher before a fire ever starts. Make sure all extinguishers are serviced, maintained and tagged at intervals not to exceed one year.
- Know your limits and always think safety first. Fire extinguishers cannot do the job of a local fire department. When a fire burns for more than a couple of minutes, the heat starts to build up and intensify. Once that happens, you are past the point of first aid. Get out of the building and let fire fighters handle the situation.



Additional Resources

- Your local fire department
- the National Fire Protection Association
- Your county agricultural agent

Related Publications

- Fire Control in Livestock Buildings, (NRAES-39), a publication of the Northeast Regional Agricultural Engineering Service.
- The National Fire Protection Association Catalog, available by calling (800) 344-3555.