

**AG SAFETY S.T.A.T. - SAFE TACTICS FOR AG TODAY**

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**THOUGHTS FROM THE EDITOR — Staying Safe While Staying Warm: Heating Safety Considerations**

**Dee Jepsen – State Agricultural Safety and Health Leader**

Staying warm during the winter months is important for outdoor workers. Popular heating sources in barns and farm shops include furnaces, wood stoves, portable space heaters, and heat lamps. Each source has its own type of hazards, putting Ohio farmers at risk of fire and carbon monoxide poisonings. According to the National Fire Protection Association, January and February are the primary months associated with deaths caused by heating equipment. Here are a few tips to prevent heating-related tragedies.

- Keep combustibles at least 3 feet away from heating sources. This includes trash cans, papers, cloth, liquid fuel containers, and straw bedding.
- Use the right kind of fuel, suggested by the manufacturer, for fuel burning space heaters.
- Wood burning stoves pose significant danger if not installed correctly. It is important to protect the walls, ceiling and floor near the stove with mortared fireproof materials, and keep stove pipes as short as possible.
- Chimneys and stove pipes require regular inspection and cleaning during the months they are used. Creosote buildup can quickly lead to a chimney fire.
- Ashes from wood burning stoves, open station fire pits, and fireplaces should be placed in metal containers. The containers should not be near combustibles, or be used as additional trash collectors.
- Always turn portable heaters off when the area is not occupied. Unattended heating equipment is a serious fire concern.
- Ensure electrical cords on heating units have grounding prongs and are not frayed or taped together. Electrical cords should not be placed under rugs, or strung through walls or door jams.
- All heat sources require ventilation to prevent the buildup of carbon monoxide (CO). Do not use any type of heating equipment without adequate ventilation. It may be necessary to open a window or door to allow fresh air to circulate through the room. This is especially true if the area is tightly insulated and sealed.
- Install smoke and carbon monoxide detectors as a first alert to excessive heat or CO accumulation. Test and replace their batteries annually.
- Heat lamps should be at least 18 inches away from combustible bedding materials like straw or blankets. Heat lamps and their cords should be out of reach from curious livestock.
- Have an ABC fire extinguisher in the area to be prepared for small fires.

Staying warm during winter months is important to protect from hypothermia. Protecting your barn, grain facility shanty, and farm shop from fire and CO accumulations is also important for your health and safety.

For more information about Agricultural Safety and Health, visit <http://www.agsafety.osu.edu>, or contact Dee Jepsen, OSU Agricultural Safety & Health Program Leader, at [Jepsen.4@osu.edu](mailto:Jepsen.4@osu.edu) or 614-292-6008.



### **SAFETY RESOURCE SPOTLIGHT – eXtension.org: Ag Safety and Health**



This website contains research-based information from America's land-grant universities. The Ag Safety and Health section houses a variety training resources, safety videos, and pre-recorded webinars. More information can be found by clicking on, [http://articles.extension.org/farm\\_safety\\_and\\_health](http://articles.extension.org/farm_safety_and_health)

#### **Ohio AgrAbility in Action: Replacing Grain Bin Ladders with Stairs**

##### **Laura Akgerman – Disability Services Coordinator for Ohio AgrAbility**

Many farmers have grain bins, and have climbed the ladders up and down the grain bins for years, in all weather, without injury or trouble. “If it ain’t broke, don’t fix it” could be said about the ladders on grain bins. Ladders serve their purposes and work well, and have worked well for years, so why make changes?

Safety, stability, and reduced risk of injury from falling from a grain bin ladder, are a few reasons to consider upgrading from a ladder to stairs on your grain bin.

One of the missions of Ohio AgrAbility is to work with farmers with disabilities to identify ways to make changes or modifications to equipment, facilities or worksites to allow the farmer to continue farming. Another mission of Ohio AgrAbility is to offer resources and education to all farmers on how to reduce the risks of injury, and introduce modifications and technology that help farmers stay safe, and work more efficiently.

Ohio AgrAbility has a few farmer clients who are not able to safely climb ladders, whether because their hands cannot grip the ladders as tightly as they once could, or because arthritis has affected their knees, backs, or shoulders and it is hard to climb.

One Ohio AgrAbility client fell 14 feet off his grain bin, breaking bones, and causing internal organ damage. He has lost the use of his dominant hand, suffers chronic pain and balance issues. These injuries do not just impact his ability to climb the grain bins, he also has trouble climbing the steps to get into his tractor, hitching the tractor to implements, and turning to look over his shoulder while operating the tractor.

He is still farming, but now he has stairs on his grain bins (instead of ladders). Other modifications he has added are: extra steps and handrails on his tractors, and cameras installed in the tractors so he doesn’t have to turn his head to see over his shoulder.

This farmer benefits from the stairs, as does his 80-year-old father, who also climbs the stairs on the grain bin. This farm has fewer concerns about climbing stairs in bad weather. The safety and security the stairs have given these two farmers is invaluable, and has helped them to continue farming safely, without risk of more injuries from falling off grain bin ladders.

Adding stairs to a grain bin is not cheap or easy, but if you consider increased safety and reduced risk of injury or accident, versus lifelong injuries (or death) the stairs are worth the investment.



Grain bin with a ladder



Grain bin with steps and guardrails

For more information about Ohio AgrAbility visit <https://agrability.osu.edu/> or contact Laura Akgerman, Ohio AgrAbility and OSU Extension Disability Services Coordinator, at [Akgerman.4@osu.edu](mailto:Akgerman.4@osu.edu), or 614-292-0622.

### **INJURY PREVENTION - Minimize Risk of Injuries in Winter Working Conditions**

#### **Kent McGuire – OSU Ag Safety and Health Coordinator**

As we progress further into winter with bitter cold temperatures, and the potential for freezing rain, or significant snowfall amounts, there is still work to be done around the farm or agri-business. Layered clothing is a necessity, but can be restrictive to range of motion in your body movements. Individuals who continue to perform work activities in winter conditions are at a higher risk of a variety of injuries including: frostbite, overexertion, muscle strain, slips trips and falls, or heart attack. Some simple guidelines for reducing the risk of injury in winter working conditions include:

- Keep track of weather forecasts. Watch the local weather and check the National Weather Service. Know when temperatures and conditions could make outside work dangerous.
- Plan ahead and wear appropriate clothing for the weather conditions, even a simple task may take longer to complete than planned. Dress warm enough to withstand the lowest forecasted temperature or wind chill temperature. Remove or replace wet or damp clothing as soon as possible, including gloves.
- If possible, perform work during the warmest part of the day and take frequent short breaks in a warm dry area to allow the body to rest and warm up.
- Keep travel paths free from ice and snow. Be observant to areas such as water troughs or leaking roofs / gutters, where liquids may have splashed and have frozen.
- When walking on an icy or snow covered areas, take short steps and walk at a slower pace so you can react quickly to a change in traction.

- Keep your hands out of your pockets when walking. This can reduce the risk of you falling or completely losing your balance in case you slip while walking on ice or snow.
- Be observant to hazards at the perimeter of buildings such as falling ice cycles and sliding snow on metal roofs during thawing conditions.
- When shoveling snow or removing ice: Stretch your muscles before you begin. Don't overload the shovel, and take frequent breaks to stretch your back. Bend your knees and let your legs do the lifting. Avoid twisting motions which can lead to muscle sprain / strain injuries.
- Use 3 points of contact when mounting or dismounting equipment (1 hand / 2 feet) or (2 hands / 1 foot). Be observant to potentially hazardous ground conditions when dismounting equipment.
- During the daytime, wear sunglasses to reduce glare and protect your eyes from UV rays being reflected by snowy ground cover.
- When transitioning from the bright outdoor environment to indoor areas, stop briefly to allow your vision to catch up with the change in lighting.
- Snow removal operations such as plowing, sweeping, and snowblowing can reduce visibility to near zero in the immediate area. Utilize a visual reference point to stay on course and avoid any potential hazards.
- Use caution with gas powered equipment. Dangerous carbon monoxide can be generated by gas-powered equipment as well as alternative heating sources. Use these items only in well - ventilated areas.

For more information about the OSU Ag Safety visit <http://www.agsafety.osu.edu> or contact Kent McGuire, OSU Agricultural Safety & Health, at [mcguire.225@osu.edu](mailto:mcguire.225@osu.edu) or 614-292-0588.

### **INJURY PREVENTION – *Baby, It's Cold Outside***

**Lisa Pfeifer – OSU Ag Safety and Health Education Coordinator**

Those Dean Martin lyrics have become an earworm by the close of the winter holiday season every year, but they sure rang true this year in Ohio for the final weeks of 2017. Ohio farmers who had to be out in those frigid temps endured that cold firsthand. Daily work on the farm goes on regardless of what weather blows in. Farmers do not get the luxury of hibernating in a warm office or calling in sick when the weather outside takes a drastic turn for the worse. There are still numerous responsibilities to tend to out in the elements: animals to feed, water supplies to check, hatches to button down, fences to maintain, shelters to clean, lanes to clear, medications to administer. It really is an endless list.

Along with the cold outside comes the dangers of frostbite and hypothermia. If you can't avoid the cold because work still has to be done, knowing who is at high risk for frostbite and hypothermia, the most vulnerable body parts, and how to dress to protect yourself can help to keep you safe. Keep in mind that preventive measures are the first line of defense. Prepare your home and vehicle with winter weather emergencies in mind.

Wearing a scarf or mask that covers the face and mouth, a hat, a water-resistant coat, mittens or gloves, multiple layers of clothing, and water-resistant boots will offer you protection. The ears, nose, cheeks,

chin, fingers, and toes are the areas of the body most often affected, so make sure you cover those areas. The Centers for Disease Control and Prevention (CDC) warns those most at risk fall into the following categories:

- Older adults with inadequate food, clothing, or heating
- Babies sleeping in cold bedrooms
- The homeless, hikers, hunters, or those that remain outdoors for long periods
- Those who drink alcohol or use illicit drugs

Both frostbite or hypothermia can occur when a person is exposed to extremely cold temperatures. In the cold the body loses heat faster than it can be produced, which in turn can lead to health problems.

The CDC has a list of signs and symptoms that may indicate frostbite:

- Redness or pain in any skin area
- A white or grayish-yellow skin area
- Skin that feels unusually firm or waxy
- Numbness

Signs & symptoms of hypothermia the CDC points to are:

- Shivering
- Exhaustion
- Confusion
- Fumbling hands
- Memory Loss
- Slurred speech
- Drowsiness
- Infants may present with bright red, cold skin and/or very low energy

If you notice any of the above signs, move the person to warm shelter and take their temperature. If a person's temperature is below 95° get medical attention immediately. Remove any wet clothing and wrap the person in warm blankets.

Please reference the factsheet, "Injury Prevention: Working In Cold Weather" at <https://ohioline.osu.edu/factsheet/AEX-981.14-11> for more precautions and recommendations on the subject.

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*Ag Safety S.T.A.T. – Safe Tactics for Ag Today* is an e-mail newsletter prepared by Dee Jepsen, Extension Agricultural Safety Specialist and team members from the State Safety Office, in the Department of Food, Agricultural and Biological Engineering at OSU. The primary goal of this monthly newsletter is to help you stay connected to everyday safety news and activities that maybe used in your own newsletters or programs. If you have safety-related questions or program ideas that you would like to share, please contact Dr. Jepsen at [jepsen.4@osu.edu](mailto:jepsen.4@osu.edu)  
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