

# Upright Silo Safety

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Silos are very important to many farm operations, but they are also the source of many accidents. These accidents include falls, electrocution, entanglement in augers, and silo gas inhalation.

## **Safety Guidelines For Silos**

Make silos off limits to children and unauthorized personnel. Barricade or lock silos up. Keep portable ladders away from these areas. All feed storage ladders should end at least seven feet off the ground. Make sure these ladders are in sound condition.

When filling or emptying silos, never allow people in or around them. Warning decals recognizable to children should be on silo filling equipment.

Lockout the power supply on all unloading mechanisms. Serious injuries have occurred when someone was inside a silo and the unloader started. It is very important to be able to lock the switch off to electric or PTO powered silo unloaders. This will prevent anyone from starting the unloaders when someone is inside the structure.

## **Entering Silos**

If the silo needs work, try to find a way of getting the job done without entering it. If this cannot be done, take these safety measures:

- Make sure you have installed ladders inside and out of all silos. Do not rely on a rope, chain, or pipe ladder hanging from the roof. They are not reliable and may obstruct flow during filling or increase drag during unloading. If you should become trapped in a silo, stay near the outer wall and keep moving. If necessary, you can carefully walk around the outer edge until the bin is empty and the flow stops.

- Always use a rope and safety harness when entering a dangerous silo situation. Never rely on a second person outside the bin to whom you shout instructions. Outside noise may block out or garble your calls for action or help. The second person may fall or stumble in the panic and haste of climbing and running to shut down equipment.

- Always have three people involved when entering a questionable storage situation. Lifting one person on a rope and safety harness from inside requires two people on the outside. One can then go for help while the other gives preliminary aid.

## **Respiratory Problems**

Farmer's Lung and Toxic Organic Dust Syndrome (TODS) are two respiratory diseases that

affect farmers. Breathing dusts from decayed plant material over a period of time can lead to these very serious diseases.

Farmer's Lung is caused by dust from moldy hay, straw, and grain. Anyone who is allergic to hay mold spores and who breathes air filled with these mold spores can get Farmer's Lung.

Symptoms usually occur four to six hours after being exposed to hay mold spores. These symptoms include increased coughing and bringing up more mucous than usual, fever, and sometimes, chills,

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## **Key Factors**

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installing a water meter on the barn, and keeping a daily record of water intake. A sudden drop in water intake is the earliest indicator of a disease problem.

Over the entire finishing period, water usage will average about two gallons per head per day. Minimizing water wastage also minimizes manure output.

## **Ventilation and Temperature Management**

During cool weather, the challenge is to provide an adequate amount of fresh air without creating drafts or uncomfortable temperatures. During hot weather, we must provide significant air movement to keep the pigs from becoming too hot. The advent of tunnel ventilation (along with foggers and evaporative cooling) has enabled producers to keep pigs comfortable and growing in warm weather.

Cold weather ventilation is more difficult. Providing lots of fresh air often brings drafts and cold temperatures. Using a very low ventilation rate sacrifices air quality. It's sometimes difficult to find a happy medium, but here are some rules of thumb:

Check relative humidity in the barn during cold weather. Ideal humidity levels range from 55-75 percent;

Remember that pig comfort is your first priority. You may have to sacrifice air quality somewhat to keep the pigs comfortable;

Keep fans, inlets, and curtains functional and well maintained. Grower finisher barns generally function well during the first year of operation. That level of performance can be maintained if you keep the fan blades and louvers clean, and the curtains functional.

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