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DON'T GO WITH THE FLOW

Working in and around grain bins poses a variety of different hazards. We enter grain bins to monitor grain condition, or maybe break a crusted layer or even to make bin sweep adjustments. For every reason we work in the grain bins, we need to know what hazards to watch for and ways to eliminate, correct, or reduce those hazards to prevent injury or even death.



One of the major hazards of working in and around bins is grain engulfment. During bin unloading, a vertical column of grain flow forms a funnel shaped path directly over the sump hole when the auger is running. When a person gets in this flowing path, they are rapidly pulled down with the grain. It takes only a few seconds to be knee deep, only about five seconds to be unable to break free and only a few more seconds to be completely engulfed. Once the grain is waist level or higher, a person cannot be pulled from flowing grain without risk of injury to their spinal column.

Always look for safer alternatives to entering the bin. If you absolutely must enter a grain bin have a clear plan and never allow people that are not trained into the bin with you. Remember these points when developing your bin entry plan:

- Plan for escape before entering. Have at least two people nearby prepared and capable of helping in an emergency. Make sure the person outside has clear instructions of calling 911 if necessary and remaining outside the bin.
- Use extreme caution if entering a bin with wet, moldy, or rotten grain in it. Carbon dioxide can build up and displace oxygen leading to not enough oxygen to breathe. Turn on the blower and use a respirator in such situations.
- Lock-out the power source to the bin sweep and conveyors, ensuring no one can start filling or emptying the bin while you are inside.
- If there is a permanent ladder on the inside of the bin, stay on the ladder above the level of compacted or bridged grain while dislodging the grain. Wear a full body harness with the lanyard attached to the ladder above your head. If you are in a bin that doesn't have a permanent ladder, then use a safety harness with rope and secure it to a point outside the bin.
- Never "walk down" grain to get it to flow. You could easily get caught if the grain moves suddenly.

The best alternative to grain bin entry is simple prevention of poor grain condition. Maintaining grain quality through proper drying, storage practices, and aeration can reduce the need to enter the bins and give you a safer tomorrow.

INSPECT WHAT YOU EXPECT

Well maintained bins and equipment is safe equipment. Good maintenance depends on thorough and regular inspections of the equipment. Simply taking the time to look at equipment not only gives you an opportunity to prevent an accident, but it also gives you time to fix a problem before it becomes a more expensive problem later. Always inspect what you expect.

This special edition Stand Up 4 Grain Safety bulletin is a publication by Maplehurst Farms and Fehr-Graham. Suggestions for content are welcome. Please send all questions or suggestions to safety@maplehurstfarms.com