



## Farm Bureau Safety Program

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### Grain Bins Pose Potential Safety Hazard

Large volumes of feed and grain are commonplace on many farms. Storing and moving the grain are routine activities that have the potential to become dangerous.

Flowing grain is hazardous because it acts like quicksand. It takes four to five seconds to be trapped up to your knees and less than 20 seconds to become submerged. Once you are trapped knee-deep in the grain, you are helpless to escape due to the immense forces the flowing grain exerts on your body.

For example, to rescue a 53 pound child caught in knee-deep grain, an adult would have to be able to lift 71 pounds. If the same child was shoulder-deep in grain, it would require 240 pounds of strength.

Probably one of the most common causes of death in and around grain bins is suffocation as a result of drowning in grain. Often a victim enters a bin of flowing grain and is unaware of the dangers because you only sink about a foot when walking on dry grain.

Sometimes looks can be deceiving. Grain will crust over and look solid, but a cavity develops. Someone walking on top of the

crust will break through and become submerged in the grain. If you are ever covered by flowing grain, cup your hands over your mouth and take short breaths.

Carbon dioxide (CO<sub>2</sub>) is another hazard found in grain bins. When grain is stored wet, it ferments and produces this colorless, odorless gas. Oxygen is pushed out of the bin by CO<sub>2</sub>. If you are in this environment, CO<sub>2</sub> will get into your bloodstream and slow your breathing. If you suspect that this gas is present, don't go inside the bin. Try to force air through the bin by opening any doors or manholes. Spoiled grain can also produce mold spores that become airborne when disturbed.

To prevent injuries and illness, you should follow certain safety precautions.

- Keep children away from areas where grain is being handled.
- Check inside the bin or wagon before turning on the power to the auger.
- Install ladders inside all bins.
- If it is necessary to enter a bin, shut off and lock out power before entering the bin.
- Place safety decals by the ladders on wagons and bins, so others will be aware of the dangers.