

# “Grain Bin Business”

Last fall’s problematic harvest now has farmers struggling to figure out how to handle their grain removal from on-farm storage bins. In the last two months, there has been a definite rise in the number of falls from grain bins, one entrapment fatality and an ever-present danger of more to come this spring as we empty those bins. In Illinois, 5 people lost their lives in grain storage in 2008 alone, and over the past 22 years, more than 2.5 people have died each year.

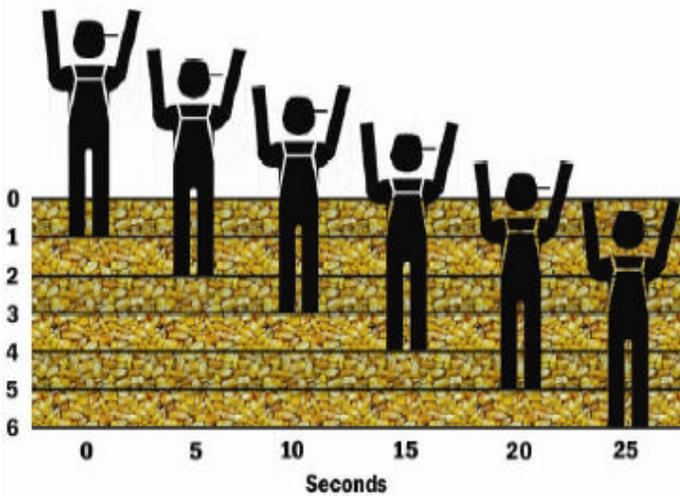
## How does it happen?



## You can’t save yourself

How fast does it happen?

What does it take to pull out a 165 lb. person?



Most farmers know that grain bins can be extremely dangerous, but sometimes it’s easy to forget basics of grain bin safety. Also, there is an increased risk if someone who is inexperienced is using them or playing in them, especially children.

People can become caught or trapped in grain in three different ways: the collapse of bridged grain, the collapse of a vertical wall of grain, and entrapment in flowing grain. Moving or flowing grain is involved in all three. People who work with grain – loading it, unloading it, and moving it from bin to bin – need to know about the hazards of flowing grain and how to prevent a grain entrapment situation. Remember, just because it has been done many years the same way, doesn't mean that this time it will be safe.

Here are a few tips to help keep you safe.

Tips:

- Label grain bins to warn of the entrapment hazards.
  - Lock entrances to grain handling areas to keep bystanders and children out.
  - Install ladders inside bins.
  - Do not enter grain bins that are being loaded or unloaded. Flowing grain can trap and suffocate you in seconds.
  - If it is necessary to enter a bin, shut off and lock out power before entering. Use a safety harness and safety line. Have a "buddy" outside of the bin constantly monitoring the situation.
  - Wear respirators when working in and around grain handling areas. High amounts of dust and molds could be present and are extremely dangerous. *Note: A one strap dust mask is not sufficient and if the mask black, it needs to be replaced.*
- Only use respirators that:
- have two straps
  - fit your face tightly, without gaps around the nose, cheeks, and chin
  - are appropriate for the task
  - are approved by the National Institute of Occupational Safety and Health (NIOSH)
- Wear approved hearing protection when working around noisy equipment, aeration fans, dryers, etc.
  - Be very cautious of grain that may have gone out of condition. Crusted grain may have cavities beneath the surface that can collapse, leading to entrapment and suffocation.
  - Keep bystanders and children away from grain bins and grain handling equipment.

Here are some questions you can ask yourself before you start handling grain:

- Are ladders in good condition?
- Are the rungs on the ladder or steps clear of ice, and am I wearing the appropriate shoes for best traction?
- Is lockout available for power?
- Is electrical equipment safe?
- Are overhead power lines nearby?
- Are guards and shields in place?

These are just a few suggestions to keep you and your family safe from grain bin incidents. Think Safe, Be Safe.

This message is brought to you by the Center for Rural Health and Farm Safety at Carle Foundation Hospital. For more information, please call (217) 383-4606, email us at [farmsafety@carle.com](mailto:farmsafety@carle.com) or visit us on the web at [www.carle.org/farmsafety](http://www.carle.org/farmsafety).

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