



## Avoid entrapment incidents with proper grain storage

Word count: 498

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As farmers, you understand the importance of proper storage of your crops. High temperatures and humidity level can drastically impact grain quality. But how is this a safety concern?

This past year, we experienced a very wet harvest season and crops were put into storage in wet conditions. Once spring weather arrives, the grain will thaw and can start to go 'out of condition' as humidity and temperature reach certain levels and grain begins to bind together. Out of condition grain is one of the leading causes for producers to enter a bin. Across Canada, there's an average of six fatalities every year from grain entrapment or engulfment.

Entrapment and engulfment often result from out of condition grain that has bridged over and has a void under the surface. When the producer enters the bin to assess the situation, the bridged grain gives way, entrapping or engulfing them. Another situation is from grain that has scaled up in the side walls of the bin, restricting the flow of contents. Producers often enter the bin to remove the buildup. The buildup can slump down and entrap or engulf them.

Here are a few ways to prevent 'out of condition' grain storage issues, ultimately protecting your crops – and yourself:

1. The first, and most obvious way, is to dry the grain before loading it into bins. Many producers have been running grain dryers almost constantly since harvest time this year. However, this can be a costly and time-consuming option and not everyone owns a grain dryer.





2. Another way would be to load the wet grain in the bin and use your aeration systems to maintain temperature and humidity at ideal levels. It's a delicate balance as under or overuse of the aeration system can make the grain less desirable for sale. This method calls for an understanding of the characteristics of the product being stored and a close monitoring of temperature and humidity levels.

Organizations like the Prairie Agricultural Machinery Institute and the Canadian Grain Commission have developed charts and resources that help farmers determine the ideal conditions for different grain varieties.

In terms of industry innovations, there tools worth exploring: imaging technology that reads the moisture content throughout the bin, regardless of size or volume; and air bag systems that uses liners that inflate and deflate, pushing the grain through for removal without ever having to enter the bin. Take the time to research and find the right tech for your farm.

Keeping grain in good condition will help the grain to flow without issues when unloading, reduce risks to workers, maintain grain quality and better ensure that you get the best price for your grain.

This safety advice article is a part of Canadian Agricultural Safety Week. Canadian Agricultural Safety Week (CASW) is an annual campaign held the third week of March of each year. In 2020, Grow an AgSafe Canada, takes place March 15 to 21. CASW is presented by Farm Credit Canada. For more information, visit [agsafetyweek.ca](http://agsafetyweek.ca)



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