

# Grain Bin Safety Stats and Facts

## FACTS

1. In 2019, nationwide, there were 38 grain entrapment cases with 23 of those leading to fatalities, according to Purdue University's Agricultural Safety and Health Program, which has documented these cases since the 1970s.
2. In 2020, 11 grain entrapment cases have been reported in Illinois with four fatalities, according to the Illinois Fire Service Institute in Champaign.
3. OSHA notified grain farmers in February 2020, saying due to heavy rains, grain bin deaths are on the rise.
4. Suffocation from engulfment is a leading cause of death in grain bin accidents.
5. It takes only seconds to be completely engulfed in flowing grain or overcome by oxygen-deficient atmospheres.

## STATS

- The majority of grain entrapment cases – 83% – occurred in the Midwest.
- Grain entrapments accounted for 49% of the documented cases of entrapments in confined spaces.
- The United States averaged about 35 reported grain-handling incidents per year from 2005 to 2015, about 60% to 70% of which were fatal, according to Purdue University.
- After wet weather in 2009 led to a dangerous year in 2010 (59 grain entrapments; 29 fatalities), the number of reported grain entrapments fell during the mid-2010s, according to data compiled by Purdue University who has tracked confined-space accidents and deaths on farms for the past 40 years.
- In 2017, 23 grain entrapments and 12 deaths were recorded; in 2018, 30 grain entrapments and 15 deaths were recorded;

and in 2019, 38 grain entrapments led to 23 deaths. Total grain entrapments rose by 65% over that 3-year period.

- Grain bin deaths are on the rise this year, continuing a trend. From 2018 to 2019, instances of grain entrapment rose by 27 percent, according to the U.S. Department of Agriculture. Deaths rose by 53 percent over the same period. Just halfway through 2020.