News Column

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Preventing silage avalanche accidents

I had the privilege Wednesday night to attend a “Managing and Feeding Silage Safely – Your Life May Depend on It!” program that Fort Hays State University department of Agriculture hosted. Dr. Keith Bolsen was the speaker, he is a retired emeritus professor at KSU and Internationally recognized silage expert and founder of the Keith Bolsen Silage Safety Foundation.

Dr. Bolsen and his wife are very passionate about managing and feeding silage **safely.** That was very evident as you listened to him speak and share real life stories of people, some he knew, that have been injured or killed in silage avalanches. The following information in this article is taken directly from Dr. Bolsen’s 49 plus years of experience.

Silage avalanches are real and there is no way to predict when and where they will occur. It only takes a fraction of a second for part of a silage face to silently break off and fall, and the result can be deadly for anyone located beneath it. There are silage avalanche fatalities in the USA every year, and although rarely reported, we have heard numerous accounts of someone having a near miss with a silage avalanche or a feedout face collapsing.

We believe that every farm, dairy, feedlot or livestock operation should have written safety policies and procedures for their silage program, and they should schedule regular meetings with all their employees to discuss safety. Here are guidelines that can decrease the chance of having a fatality or serious injury caused by a silage avalanche.

- Never allow people to approach the feedout face. **No exceptions!**

- A rule-of-thumb is never stand closer to the silage face than three times its height. (i.e. 12’ high silage pile, stand or park back 36’ from silage face).

- Suffocation is a primary concern and a likely cause of death in any silage avalanche. Follow the “buddy rule” and never work in or near a bunker or pile alone.

- Bunker silos and drive-over piles should not be filled higher than the unloading equipment can reach safely, and typically, a large unloader can reach a height of 12 to 14 feet.

- Use caution when removing plastic or oxygen-barrier film, tires, tire sidewalls or gravel bags near the edge of the feedout face.
- Do not remove or “pitch” surface spoiled silage from the top of bunkers and piles. It is too dangerous from the top of many bunkers and piles.
- Use proper unloading technique, which includes **shaving silage down** the feedout face.
- Never dig the bucket into the bottom of the silage. Undercutting creates an overhang of silage that can loosen and tumble to the floor. This is a situation that is quite common when the unloader bucket cannot reach the top of an over-filled bunker or pile.
- Never drive the unloader parallel to and in close proximity of the feedout face.
- When sampling silage, take samples from a front-end loader bucket after it is moved to a safe distance from the feedout face.
- Never ride in a front-end loader bucket.
- Never park vehicles or equipment near the feedout face.
- Avoid being complacent! Always pay attention to your surroundings and never think that an avalanche cannot happen!
- A warning sign, ‘Danger! Silage Face Might Collapse’, should be posted around the perimeter of bunker silos and drive-over piles. Consider a perimeter fence/rope around the silage bunker or pile as an added safety precaution.

Bottom line: We cannot stop avalanches from happening, and they are impossible to predict, but we can prevent people from being under them. If a silage program is not safe, then nothing else about it really matters. It’s about sending everyone in your silage program home to his or her family safe EVERYDAY.

Dr. Bolsen’s web site with educational resources and more is www.silagesafety.org/home