

BeGrainSafe Training Prepares PEI Firefighters for Life-Saving Grain Rescues

Byline: Canadian Agricultural Safety Association

When thinking about grain bins and grain entrapment incidents, most people likely conjure up images of Prairie farms.

And while that's understandable, grain hazards exist across the country anywhere that grain is stored – including far away from the Prairies on Prince Edward Island.

According to Canadian Agricultural Injury Reporting data, there were 27 fatalities on Canadian farms due to asphyxiation from grain or soil between 2011 and 2020.

So, when the PEI Federation of Agriculture (PEIFA) inquired about hosting the Canadian Agricultural Safety Association's BeGrainSafe firefighter grain rescue training on the Island, the training program made its way to the Maritime province.

"Grain entrapments can happen anywhere, even here on PEI. This is the type of training that everyone hopes they will never have to use, but if a potentially life-threatening grain entrapment does occur, then there is knowledge of what to do," explains Hannah Fraser, PEIFA's sustainable agriculture specialist, noting that approximately 20 firefighters from across PEI took part in the training during early October 2024.

Shannon Dumville is the chief instructor at the PEI Firefighters Association's Fire School and has been a firefighter for about 25 years. He says that while grain rescues – fortunately – are not common on PEI, the training is still beneficial.

"On PEI, the grain storage facilities usually have smaller tanks because they're not huge facilities, but the potential for an engulfment is always there, especially during harvest season," says Dumville. "This isn't something that we would need to use every day, thankfully, but that doesn't make the training any less beneficial."

Given that grain entrapments are low-probability, high-risk incidents, Dumville says the specialized training is essential for a successful rescue.

"The grain bin rescue is quite different than a lot of the other training we do and the actual technique is quite specific and unique, which is crucial in these situations," Dumville explains.

At the core of the BeGrainSafe firefighter grain rescue training, which was introduced in 2017 due to an increase in grain entrapment fatalities, is a trailer outfitted with a built-in silo that can hold 7,000 pounds of grain, serving as a grain bin simulator. Positioned above the silo is a platform with a davit arm that can safely lower a person into the grain. Once entrapped, grain rescue trainers then demonstrate how to use tubes in combination with an auger to remove grain from around the individual until they can be freed from the grain.

"If a person becomes engulfed in grain and they are buried up to their waist, it's not as easy as just grabbing the person and pulling them out. You have to remove the product from around them first before they can be extracted," Dumville explains. "So, it's quite a technical rescue and differs significantly from any other type of extrication that what we are used to."

While the training experience can be intimidating at first, particularly for those who have never been around grain, it also leaves participants with a new perspective and appreciation for the severity of grain entrapments, particularly as participants take turns being safely entrapped in grain to understand how it feels.

"It was quite an eye-opening experience for those who took part in the training," says Fraser. "The simulator experience certainly made people stop and think about how important the specialized training is for grain entrapment rescues."

Fraser adds that the feedback received from participants afterwards was overwhelmingly positive, with many indicating they planned to tell their respective fire departments that more firefighters need to take the training.

"Since we are essentially a rural province, many people at the training emphasized how invaluable the knowledge is," Fraser says. "This is really a community safety initiative because you never know when or where [a grain entrapment] will happen or who it will affect."

And as the majority of firefighters on PEI are volunteers with day jobs, the training will hopefully help spread knowledge about grain hazards throughout other areas of the Island's communities.

"Most of the firefighters on PEI are volunteers and a lot of them are also farmers, which hopefully helps heighten awareness about grain safety for those who work around grain," explains Fraser.

Dumville says there is no question that there is a desire to have the BeGrainSafe training return to PEI, and he stresses he would encourage any fire department to take part in the training.

"It's always good to stay on top of training like this because as they say, if you don't use it, you'll lose it," he explains. "At the end of the day, training is always valuable, and this is a specific course that's specific to grain rescues. Unless you go through this training, you don't realize what's involved."

Adds Fraser, "Even if only one department here needs to use that [grain bin rescue] knowledge once, it's worth it, especially if it saves a life."

For more information about the BeGrainSafe program, please visit casa-acsa.ca/BeGrainSafe.

About the BeGrainSafe Program

The BeGrainSafe program is a grain safety initiative of the Canadian Agricultural Safety Association. In 2025, BeGrainSafe Week takes place August 11-17 and is presented by Corteva Agriscience. The program is also supported by G3, CN, Farm Credit Canada, Agriculture Financial Services Corporation, Alberta Canola Producers Commission, Alberta Grains, Canadian Canola Growers Association, Nutrien Ag Solutions, SaskOilseeds, Sask Wheat, Bunge, Grain Farmers of Ontario, Manitoba Canola Growers Association, and Prairie Oat Growers Association. For more information about BeGrainSafe, visit www.casa-acsa.ca/BeGrainSafe.

About the Canadian Agricultural Safety Association

The Canadian Agricultural Safety Association (CASA) is a national, non-profit organization dedicated to improving the health and safety of farmers, their families and agricultural workers. CASA is funded in part by the Sustainable Canadian Agricultural Partnership. For more information, visit www.casa-acsa.ca.