Harvest Safety

AMES, Iowa—Harvest is typically one of the most dangerous seasons in a farmer’s year. And this year has been anything but normal, adding to the dangers.

Long hours of fieldwork bring fatigue. Poor yields may cause stress. Those are among the many conditions that can bring lapses that cause agricultural injuries.

And while all indications are that harvest will start early and not be delayed by extensive rainy weather, conditions can change quickly. Charles Schwab, Iowa State University professor of agricultural and biosystems engineering, advises producers and their seasonal help to keep three things in mind this harvest season:

Fight fatigue with breaks

When conditions change, put safety first

Take extra care to prevent fires in this dry year

Give yourself needed breaks

“Fatigue is known as a factor for many agricultural injuries,” said Schwab. “Take breaks to replenish and refresh. Just 15 minutes out of the operator station with a change of scenery and perhaps a non-work related conversation will reduce your fatigue. This also is a good time to have drink and grab a bit to eat.”

Be aware of working conditions

He advised producers to be extra careful when working conditions are out of the ordinary.

“The common statement from those who have been injured starts with the phrase, ‘I don’t normally do it that way … ’ When conditions differ from your normal routine, warning sirens in your head should alert you to pause so that you can think about your safety,” he said.

Sometimes a task might seem similar but the way you approach it must be different because the normal conditions have changed.

For example, you may normally use a certain tool for a repair but it was left in the truck so you decided to use another. Or typically you tow a wagon with the large tractor, but it needed a repair so you used a substitute. These are situations that should cause anyone to pause long enough to realize that these changes could create additional risks of injuries.
“When operating conditions change, pause to consider how your risk of injury might have changed, too,” Schwab said.

Watch for fire hazards

“Every fall the crops are in a dry condition and that creates a field environment prone to fires, but during a drought year the dry field environment magnifies that risk,” he said. “The three parts of any fire — fuel, oxygen and ignition source — are in abundance in those fields. Combines, trucks and other vehicles are a large part of the millions of dollars lost every year in agricultural fires.”

Producers can minimize the risk of combine fires by cleaning stalks and debris from the machine often. How often depends upon the wind and field conditions. Schwab recommends checking for debris build up several times a day, and more if the build up returns quickly.

He said it is also important to have two fire extinguishers on a combine — a 10-lb. size in the cab or operator’s station and a 20-lb. size nearer to ground level. The small extinguisher can be used for immediate response and the large extinguisher would have enough reserve to put out a more involved fire.

Both extinguishers should be Class ABC, rated for oil, gas and electrical fires as well as combustibles such as crop debris.

Low clearance and lots of debris, like leaves, stalks, husks and field stubble, can create an ever-present fire hazard for trucks and cars. The catalytic converter, located on the underside of these vehicles, can easily serve as the ignition source.

Schwab said the best plan is leaving those vehicles out of the field when possible, or minimize their use if they must be in the field. Carrying a fire extinguisher in these vehicles might make the difference in losing an expensive vehicle.

Just having a fire extinguisher available is not enough, he cautioned. You should know how to use it properly before fighting your first fire.

“Some fires might have grown too big for your fire extinguisher to handle, so the best course of action is to retreat to a safe distance and wait for the professional that you should call at the first sign of fire. Your personal safety must be your first priority, so if the fire is too large get away because the value of that equipment is not worth your life,” Schwab said.