

Iowa Farmer Today

Safety details reduce crashes on rural

By Brandi Janssen

Oct 7, 2022



Flashing amber lights and reflective tape help define the size and shape of farm equipment, which helps other drivers safely navigate around you.

Photo courtesy Iowa's Center for Agricultural Safety and Health

Just last night I was traveling home on my gravel road after dark. I could see headlights of an approaching vehicle, which I thought was a pickup. As we passed each other, I startled a bit as I realized it was actually a tractor and was much wider than I anticipated.

I was glad that I had moved well over to the right side of the road and wasn't traveling too fast.

Although there were headlights, and some reflectors across the top of the cab, the tractor did not have any flashing amber lights or reflective tape to let me know that it wasn't just another motor vehicle I was about to meet.

As harvest gets into full swing, it's a good time to remind vehicle drivers about being alert for farm equipment on the roads. It's also a good time for those equipment operators to double check that their farm vehicles have appropriate lighting and marking to be as visible as possible to other drivers, especially when traveling after dark.

This may seem unnecessary.

After all, you're driving a very large, usually brightly colored vehicle, how could another driver not notice you?

In some cases, of course, drivers are distracted. But it's also hard for drivers to judge the difference in speed between a motor vehicle and a tractor or combine. Drivers also may not be expecting a piece of farm equipment to turn into a field lane.

The effects of good lighting and marking have been made clear through research from the Great Plains Center for Agricultural Health, based at the University of Iowa College of Public Health. In 2016, researchers analyzed the number of roadway crashes in nine Midwestern states over a five-year period and compared those with

each state's policies on lighting and marking of farm equipment. The researchers scored the lighting and marking policies based on how they complied with "gold standard" guidelines developed by the American Society of Agricultural and Biological Engineers (ASABE).

For every five points that the lighting and marking policy score increased, crash rates were reduced by 17%. Illinois had the most compliant policies in the nine-state region, Missouri's were the least compliant; Iowa ranked seventh.

The researchers also estimated how much crashes would decrease if a state improved its compliance with the ASABE guidance by 25%. In Iowa, they found that the state's average of 164 crashes per year would be reduced to 65. That's a reduction of about 60%, which was consistent across all nine states.

The most standard marking is the triangular Slow Moving Vehicle (SMV) emblem that should be included on the back of any vehicle that moves slower than 35 mph, ideally about 6 feet from the ground. This includes tractors, combines, hay equipment, wagons and horse-drawn buggies. It's rare that I see a farm vehicle that doesn't have an SMV, but often they are dirty or worn, which reduces the reflective benefits. Check annually to make sure yours are in good shape and replace them as needed.

Iowa law only requires a steady white headlamp and red tail lamp, as well as a flashing amber light that is visible from the rear of the vehicle. However, the ASABE guidelines recommend two amber flashing hazard lights that are spaced as widely apart as possible and visible from both the front and the rear. Mounting these on top of side mirrors will usually do the job. If the tractor I met last night had these, I would have recognized the width of the vehicle long before I was right next to it.

The ASABE also recommends reflective material that helps define the size and outline of the farm vehicle. This can be accomplished with strips of red, yellow and orange reflective tape. The rear of the vehicle or implement should have red and orange strips on the corners. In addition, place yellow strips along the sides and front of wagons, trailers or long truck beds. This is particularly important to provide visibility as you make a left turn on or off the roadway. The reflective material will show drivers that a long vehicle is crossing their path.

Not surprisingly, the farm equipment operator is less likely to be injured than the motor vehicle driver in the case of a crash. Even though you may feel pretty safe in the cab of your tractor or combine, I hope you'll take the time to go beyond the bare minimum standards for lighting and marking and help keep our rural roadways as safe as possible.

You can find lighting and marking resources in all ISU Extension and Outreach and Farm Service Agency offices this fall. For more guidance on ASABE standards and rural roadway research, go to www.gpcch.org.

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