Are You Grounded?

Electrical safety check is peace of mind.

by Barb Baylor Anderson



►Kyle Finley demonstrates the power of electricity to help give people an understanding of the danger it poses.

he National Safety Council estimates some 600 people in the U.S. die every year from electrical accidents. About 60 farm workers are electrocuted annually in incidents involving equipment. The good news is many of these types of accidents are preventable.

"So many people just don't have a good understanding of electricity and what it can do," says Kyle Finley, farmer from Alvin, Ill., and owner of Live Line Demo Inc. "The number one killer is the 120 volts found in your home and office. Electrical voltage is a powerful thing."

Finley has always had a passion for electricity. He began working for an electrical contractor at age 17, and then worked as a lineman for Ameren and Eastern Illini Electric Cooperative until about 13 years ago. He also is a past champion of the National Lineman's Rodeo.

After retiring as a lineman, Finley started farming with his family. He wanted to generate additional income, so he created Live Line Demo to stay connected with the power industry and inform others about the dangers of electricity. His safety presentations provide audiences with a firsthand look at the dangers of live contact with 7,200 volts, and educate participants about protection from injury or death in various situations related to electricity.

As a farmer, Finley is in touch with the dangers grain and livestock producers face every day — worn drop cords, the do-it-yourself-mentality and the contact threats equipment and trailers can pose. While producers are not required to sit through Occupational Safety and Health Administration (OSHA) presentations, he stresses rules and regulations should still be followed.

Contact threats

"Wiring on the farm is a big concern. Many producers try and do their own wiring or call a neighbor to do it. You really need a qualified electrician in any circumstance. It is money well-spent," he says. "You should consider bringing in an electrician to check current wiring, too. Often, it is inadequately grounded motors on grain bins or legs or other equipment that are threats. If a ground wire breaks off in a piece of electrical equipment and shorts out to ground, there is no path for the electricity. In turn, you could become the deadly path to ground."

Livestock trailers can also pose electrical safety hazards. Finley was at a summer fair where a horse was electrocuted when the

Top tips for electrical safety

Kyle Finley offers these top tips for livestock producers and electrical safety:

- 1. Always use a qualified electrician. If you have a livestock trailer that needs wiring, hire a professional that is insured and up to date on all safety codes.
- Never let a friend or neighbor do your electric work, even if they have done it for others or work for a utility company. Safe and right for the situation is the best philosophy.
- Check your home and office for proper grounding on outlets. Grounding prongs must be on the top side, not the bottom, to prevent the risk of electrocution, especially with kids.
- 4. If your outlets were installed prior to 2008, consider replacing them with new, tamper-resistant outlets that require prongs to go into both holes for the outlet to work. The cost is relatively inexpensive.

animal came in contact with an electrified trailer.

"The truck and trailer are on rubber tires. You may be wearing boots that protect you, but animal hooves are like bare feet. As soon as you flip down a ramp, an ungrounded current can quickly run through animals from front to back and kill them," he says. "Trailers that plug into 120 volts with living quarters pose a threat, as do trailers with fans or other equipment. If you do your own wiring, make sure it is up to code, or you could be putting yourself and your animals at risk."

Similarly, Finley says cars or farm equipment that come into contact with

power lines can electrocute if the lines are energized.

"Use a cell phone to call for help, and stay in or on the vehicle until the utility company shuts off power to the line (a bird sitting on a bare high voltage wire is ok, because it is not a path)," he says. "If the vehicle catches fire, jump out away from the vehicle with your feet together and hop until you are a safe distance away."

Finley reiterates, "Overhead power lines and a lot of large farm equipment can be a bad combination. Educate yourself, and you can prevent injury and save lives. Electricity is a silent killer; you can't see it, you can't hear it, and you can't smell it."

More about live line demo

Kyle Finley's Live Line Demos have become so popular over the last decade that he books six months or more in advance around the planting and harvest seasons. He travels to numerous states to present programs in schools, at county fairs, with fire and police departments and for major companies that include Caterpillar, Monsanto, Pioneer and more

Each presentation is tailored to the audience, whether it is to help emergency response teams learn to react quickly and safely to emergencies involving electricity, teach procedures for utility disconnects, or lead assemblies to help students learn to



respect the power of electrical lines.

Finley uses the same poles, transformers and line hardware as local utilities, so audiences can better visualize a real electrical system. Presentations last 30 minutes to three hours. For more information about the programs, visit Finley's website at www.LiveLineDemo.com.