

*Farm Safety Series*

# Combating the Dangers of Electrical Shock on the Farm

There are two primary dangers of electrical shock on the farm:

1. Coming into contact with electrical wires that are routed overhead
2. Using improperly grounded electrical equipment

Overhead wires are easily ignored until an electrical conductor that you are handling contacts those wires. Devices, such as grain augers, metal ladders, backhoe buckets, irrigation pipes, boom sprayers, and any unusually tall farm equipment, may reach these power lines routed between power poles and up to buildings. Such contact often results in electrocution.

Any electrical equipment that is not properly grounded is a potential hazard to the user. All permanently wired equipment installed by a certified electrician should be properly grounded. All equipment that is subject to wet conditions must be wired using ground-fault breakers and all plug loads must have the ground connection in place and not defeated by using plugs that bypass the ground connection.

## Good Electrical Safety Rules

1. Make sure electrical power tools (plug loads) are grounded.
2. Inspect power cords for safety and serviceability before use (for cuts and exposed wiring).
3. Attempt no electrical repairs unless you are qualified to do so.
4. Use the plug, not the cord, to unplug electrical equipment.
5. Know the location and proper use of electrical disconnects or fuse or breaker panel.
6. Keep all equipment well away from overhead power lines.
7. Use nonconducting ladders (dry wood or fiberglass) when working near electrical wires.
8. Tag faulty electrical tools and place them in a repair basket.
9. Make sure of proper clearances when moving machinery under power lines.

10. If equipment, such as a grain auger, has to be raised near power lines, get someone to serve as a spotter.

11. Do not use electrical power tools while standing in mud or water.

12. If unsure about electrical safety, ask your supervisor.

A good exercise for newly hired farm workers is to check out all power lines and note where they are located. This can save time and help avoid electrical mishaps when working in close proximity at a later date. Some farm proprietors have placed red flags under power lines to help remind workers of their location. Structures on the ground are easier to see than those that are above eye level.



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For more information, call your county Extension office. Look in your telephone directory under your county's name to find the number.

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