



The Texas A&M University System

SAFE TRACTOR OPERATION: RUNOVER PREVENTION

David W. Smith, Extension Safety Program

March 11, 1995. A 62-year-old male farmer was killed inside his barn on a Saturday afternoon after starting his tractor from a standing position. The victim was demonstrating recent repairs to the tractor for his brother-in-law; a new battery and starter had been installed. Standing beside the tractor, the victim reached for the ignition switch to turn the tractor on. The tractor was in gear; when he turned the key, the tractor lurched forward, running over the victim, who died moments later. *Source: Kentucky FACE #KY9501101*

RUNOVER FATALITIES

According to the National Institute for Occupational Safety and Health (NIOSH), more than 60 fatalities per year occur from tractor runovers. Tractor manufacturers have attempted to reduce the risk of runover fatalities by designing safety interlock systems that require operators to be sitting in the seat with the tractor gear in the neutral or park position before the tractor will start. However, because these devices may present a minor inconvenience in some situations, operators have learned to disable or wire around them, sometimes leading to tragic consequence.

Runover accidents are often the result of operators getting in a hurry, becoming careless, taking shortcuts, or forgetting details that will ensure their safety and the safety of bystanders. Major causes of runover incidents include:

- Bypass starting the tractor
- Attempting to turn the ignition key while standing on the ground
- Falling from or being thrown from the tractor
- Forgetting to set the parking brake before getting off the tractor on sloping terrain
- Neglecting to observe bystanders who may be in the way, or slip and fall underneath the tractor or towed equipment

BYPASS STARTING

Bypass starting is the act of starting the tractor by shorting across the starter terminals while standing on the ground between the front and rear wheels. If the tractor is mistakenly left in gear, the tractor will start, build up hydraulic pressure, and lurch forward, running over the operator. The tractor lurches so quickly and unexpectedly that the operator has no time to react or get out of harm's way.

EXTRA RIDERS

Except for tractors equipped with an instructor seat, most tractors are only designed for one operator and absolutely no riders. Because there is no safety device, such as a seatbelt, to protect an extra rider, they are particularly vulnerable to fall off and become injured by tractor wheels or towed equipment. Data shows that children are substantially more likely to die as a result of falling from a tractor and being run over. According to NIOSH, children under 15 years old account for almost 90 percent of all such fatalities. The accidents can be easily avoided by restricting extra riders, especially children; yet, up to 80 percent of farm children routinely ride along on tractors with family members.

TIPS TO PREVENT TRACTOR RUNOVERS

Runover accidents are preventable if operators recognize the hazards, watch out for bystanders, and learn to be more safety conscious.

- Never attempt to start a tractor while standing on the ground
- Never disable or wire around safety interlocks
- Install a starter cover to prevent bypass starting
- Check for bystanders before starting the tractor
- Always drive under control and wear a seatbelt when operating a ROPS equipped tractor
- Never allow extra riders

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