

Safe Tractor Operations: Dangers of Extra Riders¹

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Dangers of Extra Riders

It was going to be a record harvest. The owner of the operation could see light at the end of the tunnel—with money to pay off loans and update equipment, and maybe a little left over for a family vacation. The farm manager sent the workers out to the field. It was a beautiful morning, and the workers were laughing and joking. They hopped up onto the tractors to catch a lift to the field. As the merriment continued, one of the tractors drove into a rough part of the field. Before anyone knew what had happened, one of the workers had lost his grip on the tractor he was riding, and the tractor ran over him. He drowned in about 15 minutes as his punctured lung filled with blood. There was no harvest that day, just anxious workers, and a bereaved family. The following days were taken up with the funeral, the OSHA investigation, the insurance company, and a pending lawsuit by the victim's family.

This story illustrates the danger that extra riders face. It is a compilation of details from many incidents of this type that have occurred all too often in Florida and elsewhere in recent years. In most incidents involving extra riders, victims fall off or are thrown from the tractor during a rough ride or when a tractor overturns. In these situations, extra riders can be run over by either the tractor or by an implement being towed, or both. In an overturn, the tractor often crushes the extra rider. These incidents are doubly tragic because they can be prevented so easily. This publication discusses the serious risks that extra riders face.

Why take the risk?

Tractors are not passenger vehicles. Except for those built with instructional seats, they are designed for one person to operate. Passengers on a tractor can interfere with the safe operation of the tractor by distracting the operator, blocking access to controls, or obstructing the operator's vision. Additionally, tractors (except those with instructional seats) are designed to provide protection to only one person: the operator.

All tractors manufactured since 1976 have a special Roll-over Protective Structure—a ROPS—that provides a zone of safety for the operator if the tractor overturns. The use of seat belts on tractors with ROPS will protect the operator from serious injuries. Extra riders have no such protection. There is no safe environment for extra riders on tractors.

Older model tractors without ROPS offer no overturn protection for either operators or extra riders. Many people mistakenly assume that enclosed cabs protect extra riders. This notion only gives tractor operators a false sense of security. Many tractor runover deaths happen when a person, often a child, falls out of an enclosed cab. An enclosed cab can reduce the chance that a rider will be bumped off a tractor, but history shows that it does not eliminate the risk. The small measure of protection from an enclosed cab is no guarantee of safety for extra riders. Door latches may not be fully latched; latches can be bumped; and children can become restless and tamper with latches and controls. Note:

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Tractor models with instructional seats are limited to cab tractors.

Causes of Runovers

There are many reasons why extra riders are thrown from the tractor, frequently resulting in death. These include:

- Sudden stops
- Driving over holes, stumps, and debris
- Losing balance due to a sharp turn (The tractor does not have to overturn for an extra rider to be thrown from the vehicle.)

Operators may think they can respond quickly and stop the tractor if something occurs, especially if the tractor is moving very slowly, or if simple tasks are being performed; however, this is rarely the case. The most common comment from people involved in tractor runovers is how quickly the incident occurred. Table 1 shows why this is true: by the time a person reacts and brings the tractor to a stop, the tractor has already moved many feet. Runovers can also occur when the tractor is involved in an incident. One common scenario is when a rider is thrown after the tractor hits a building, bridge, or another vehicle. If the tractor overturns, the operator and the rider are both in danger.

The “No Riders” Rule

The only way to prevent extra rider injuries or deaths is to prohibit riders on tractors except for those directly involved in training on a tractor equipped with an instructional seat. Consider making a permanent policy for not allowing riders on tractors. Make sure all tractor operators observe the “No Riders” rule. Discuss the importance of this rule with managers and employees. It is also helpful to post “No Riders” decals on all tractors to remind others about the policy. “No Riders” decals are widely available. Many implement dealerships also carry these decals (Figure 1).

The most effective way to observe the “No Riders” rule is to eliminate the need for extra riders on tractors. Use other vehicles, such as trucks or motor vehicles, when transporting workers to fields or distant work sites. Below are two tips:

- Discuss with managers and employees why a “No Riders” rule is important.
- Make sure all guests and hosts know the owner’s or employer’s policy on extra riders.



Figure 1. Example of a “No Riders” decal.
Credits: Serap Gorucu, UF/IFAS

Problems with Other Equipment

Other farm equipment may be unsafe for extra riders, too. Most all-terrain vehicles, skid steer loaders, and riding lawnmowers are designed for one person.

Some combines and other equipment have extra seats. Seats for extra riders should be added only by the manufacturer because many factors are considered in designing them for safety. A makeshift seat added to farm equipment cannot ensure safety.

Enforcing a “No Riders” rule may be one of the most important actions in protecting people on farms or ranches. The rule may challenge years of tradition, but it provides a safer way to pass on the agricultural heritage.

Additional Safety Resources

Websites

- For more information about these and many other safety topics, contact your county’s UF/IFAS Extension office, or visit the Florida Agricultural Safety and Health Program website at <http://abe.ufl.edu/agsafety/>.
- Consult *Tractor Fundamentals: Best Practices*, North American Guidelines for Children’s Agricultural Tasks. For more information, contact the National Children’s Center for Rural and Agricultural Health and Safety at <http://www.marshfieldresearch.org/nccrahs>.
- Consult the Outdoor Power Equipment Institute at <http://www.opei.org>.
- Consult the National Agricultural Safety Database at <http://www.nasdonline.org>.

Safety Standards

- “Hand Signals for Agriculture,” ASAE Standard S351
- “Operator Controls on Agricultural Equipment,” ASAE Standard S335.4
- “Roll-Over Protective Structures (ROPS) for Wheeled Agricultural Tractors,” ASAE Standard S383.1
- “Symbols for Operator Controls on Agricultural Equipment,” ASAE Standard S304.5
- “Roll-Over Protective Structures (ROPS),” Occupational Safety and Health Administration, OSHA Standard 1928.51

Safety Decals

- “No Riders” decals may be purchased from various tractor supply companies.

Table 1. A tractor cannot stop before running over a thrown rider, no matter how slowly it is going.

Tractor Speed (mph)	Stopping Distance (feet)	How Far Tractor Travels Until the Average Person Reacts (feet)
2	6	1.5
5	12	3.7
10	30	7.3
15	44	11.0
20	64	14.3