

SPINAL CORD INJURY

Student Reference Sheet

Spinal cord injuries are some of the most severe injuries in the agricultural industry, and can cause paralysis and even death. A single cause of spinal injuries cannot be pinpointed because factors such as carelessness, fatigue, equipment, speed, time, and use of safety measures each play a role. Spinal cord injury on farms usually happen because of tractor overturns, falls, and all-terrain vehicles (ATVs).



Tractors play a major role in death and injury among farmers. Incidents include being pinned beneath an overturned tractor, running into or over something, falling from the tractor, or the tractor rolling over with the operator. Being thrown from the tractor greatly increases the chances of spinal injury. A survey of Kentucky farmers showed that one of every nine farmers had rolled a tractor at least one time. Other situations can lead to injury as well, such as having extra riders on the tractor or starting the tractor from the ground (bypass starting).

Many spinal cord injuries result from other sources on the farm. Simple daily and seasonal work such as painting, repairing roofs, hanging tobacco, and farm maintenance chores can result in spinal injury. Falls frequently result from slipping because of poor traction or not wearing suitable shoes when climbing. Climbing on unstable surfaces, like temporary rails or ladders, often results in falls as well. You don't have to be up high to be injured, though! Falls from as low as three feet can result in spinal injury.

All-terrain vehicles (ATV's) are still another source of injury on the farm. Improper operation of ATV's including high speeds, covering rough terrain, venturing into unknown areas, going into impassable areas, and going up steep slopes leads to injury when the operator and riders are not protected. Head injuries from ATV crashes can cause neck damage that results in paralysis.

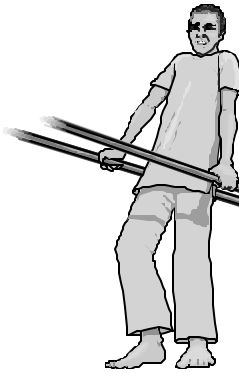
There are many human factors that contribute to injuries, aside from the machinery or equipment involved in the incident. All too often, the person injured is acting in a way that allows the injury to occur. Being too tired, rushing through work in a hurry, not paying attention to the task at hand, impatience, and not using safety measures or safety equipment add to the likelihood of an incident and the resulting injury.



The medical expense of a spinal cord injury alone is more than most people in agricultural occupations can afford, not to mention all the other costs the injured person and their families suffer. Usually a recovery period

is required (longer time for the more severe injuries) in which the injured person is unable to perform farm tasks that need to be done. This results in missed profits, reduced returns, and added expense of hiring labor. Imagine if you fell from a tobacco barn, hurt your back, and had ten more acres of tobacco that needed to be cut and put in the barn. You have to pay your medical bills and pay someone to house the crop.

There are additional costs when a person has a spinal injury. So many things we take for granted can no longer be done as before, and sometimes cannot be done at all. Recreational activities like playing ball, boating, hiking, swimming, and fishing can be hindered by a spinal injury. New activities like therapy, exercise, and medications become a part of the daily routine. Little things like getting dressed in the morning, brushing your teeth, and taking a shower have to be done in a new way and sometimes require assistance. Persons with paralysis may need catheters for emptying their bladders and must re-train their bowels to function. Special exercises must be done to prevent muscle deterioration and deformities. It is hard work to live with a spinal injury.



The good news is that spinal cord injuries in agricultural occupations can be prevented. The key ways to prevent them include:

- 🌀 Use tractors with roll bars, and always fasten your seat belt!
- 🌀 Always start a tractor from the seat, and never give tractor rides. One seat, one rider.
- 🌀 Use good judgment when driving tractors, ATVs, and other machinery. Wear a helmet and protective clothing when riding ATVs. Go at a safe speed, and don't take unnecessary chances on hillsides or close to drop-offs. Know what the terrain is and where you should and shouldn't go.
- 🌀 Remember, you can't react fast enough to keep a tractor from rolling. If a tractor begins to overturn, it's gone. Even if you jump, your chances of being injured are very high. You may be injured from the impact with the surface (hard ground, rocks, stumps, or brush).
- 🌀 If you have not had one, enroll in a tractor safety certification course. Even tractor drivers with a lot of experience can learn new and important lessons that may prevent injury.
- 🌀 Assess your surroundings before you start work. Wear good work shoes and protective clothes. Use caged ladders, and set them on a level surface. Be sure your climbing surface is secure, sturdy, and stable.