



## Safety Tips for Farming with a Back Injury or Back Problem<sup>1</sup>

---

The physical limitations that someone with a back injury might experience varies with the level of the back injury and the severity of the injury. Individuals with back injuries often experience limitations in one or more of the following activities: standing, sitting, reaching, lifting, carrying, pushing, pulling, climbing, bending, stooping, crawling, kneeling, crouching, running, driving, walking, and jumping. Individuals with back injuries should identify the specific functional limitations that are associated with their specific back injury. Based on these limitations, one can then determine the types of tasks around the farm that may be hazardous to perform or that could result in further injury or deterioration of current abilities.

Farming safely with a back injury may be more difficult than farming safely with a spinal cord injury or an amputation as the loss of physical ability is not clearly visible or there may not be a complete loss of a particular body function. An individual may attempt to perform a particular task that may exceed his/her abilities with the conscious or unconscious thought that “maybe I can get away with it without getting hurt”. In addition, because the disability often is not visible, the individual may feel that others perceive him/her as not disabled and capable of performing normal activities. It is very important to understand one’s functional limitations and respect those limitations. The following is a list of safety tips that have been shared by various farmers who have experienced back injuries:

1. Obtain appropriate assistive technologies or labor-saving devices to assist in performing tasks that exceed your physical abilities.

2. Add additional steps made out of non-slip material to farm machinery to assist in mounting and dismounting safely.

3. An independent suspension seat can be installed in some tractors to help absorb shock and vibration. The type of suspension systems may include pneumatic (air), hydraulic (oil), mechanical, or a combination of any of these suspension systems.

There has been no specific research as to the best type of suspension seat. However, many farmers have preferred a pneumatic seat or a hydraulic seat over a mechanical suspension seat. Keep in mind that mechanical suspension systems continue to be improved. If an independent suspension seat cannot be installed in the tractor, the current tractor seat suspension can be overhauled or repaired to achieve its maximum suspension.

Tractor seat cushions themselves can be modified or replaced to accommodate your back injury. Seat cushions that are being installed in newer tractors are considered to be ergonomically designed and better for your back. These seats often have adjustable lumbar support, adjustable arm rests, and adjustable thigh support to help distribute the weight across the seat. They provide support for your back to reduce stress or pressure to the lower back area. These cushions can also be purchased and installed in many older model tractors with some adaptations required.

---

1. The information shared is based on data gathered by the Easter Seal Society of Iowa’s Farm Family Rehabilitation Management (FaRM) Program through financial support from the Injury Prevention Research Center at the University of Iowa Grant #R49\CCR703640-02 funded by the Center for Disease Control. No scientific research has been conducted to determine if the above tips or suggestions are safe or effective. The information shared is simply ideas shared by farmers affected by disabilities of the staff at the FaRM Program. For more information or clarification contact the FaRM Program at (515) 289-1933 or submit comments or questions to P. O. Box 4002, Des Moines, Iowa, 50333.

In some tractors, a swivel seat pan can be added to assist the operator in rotating to see behind the tractor. Unfortunately, not all tractors will accommodate a swivel seat. Therefore, it is important that the seat cushions do not restrict you when you slide your legs and turn yourself to see behind the tractor. To help eliminate the need for frequent upper body turning, additional mirrors can be added inside and outside of the tractor cab to see what is happening behind the tractor. You might also consider using a separate back support cushion. These cushions are available from durable medical equipment dealers, chiropractors, or other health care professionals who assist individuals with low back injuries.

Tractor seating modifications made to accommodate a low back injury may still not be sufficient. It is often recommended that someone with a back injury take a break at least every two hours to get out of the tractor, to stretch, and to increase circulation to the lower back. Consult with your physician regarding how often breaks should be taken.

4. Various outdoor mobility aids can be used to decrease fatigue and further deterioration of your back. These mobility aids include riding lawn mowers, golf carts, and all-terrain vehicles. It is important to note that, while the device may reduce fatigue, it may cause additional problems because of lack of suspension while riding around bumpy or rough terrain. If you use a cane for mobility, a broad-based cane tip or an ice tip should be considered to help prevent falls while walking on icy or uneven terrain. Head gear should be worn while operating ATVs.

5. Automatic hitching devices and automatic gate openers can reduce the frequency of mounting and dismounting from a tractor.

6. Direct access to livestock should be avoided due to their unpredictable behavior and your decreased mobility. Job restructuring or modifications to livestock handling facilities should be explored. These modifications might include: fence line feeding, raised decks for hog facilities, or automated feed systems.

7. If you cannot afford an automated feed system, use a feed cart so that you don't need to carry a feed. An auger wagon is often used in feeding livestock located in outside facilities.

8. A combination sit/stand stool can be used when you perform tasks that require standing for long periods of time. This stool can be placed in the farrowing house to be used when administering to health care needs of pigs, or placed in the farm shop next to the workbench to help relieve stress in the lower back area.

9. There are several back support devices that are available through durable medical equipment dealers as well as through your doctor. Consult with your doctor about whether or not a back support device is recommended. There are also some devices that help remind you not to bend in an incorrect manner.

10. Remember to use proper lifting and body mechanics if you have back problems. In addition, you should maintain your exercise program as recommended by your physician.

11. Any adaptations or modifications intended for use by an individual with a disability should be used by that individual only. Use of a modification or adaptation by another individual could result in an injury.

### **FOR MORE INFORMATION**

For more information on general farm safety, contact: Kansas State University Research and Extension Agricultural Safety and Health Program at 785-532-5813. To contact Kansas AgrAbility call 1-800-526-3648 (1-800-KAN DO IT)