

## Safety Tips for Farming with Cerebral Palsy

Cerebral Palsy (CP) is a disability resulting from damage to the brain before, during, or shortly after birth. Visible indicators include muscular incoordination and speech disburbance. Some degree of neuromuscular impairment (impairment of muscle control) is present in all people with CP. Many associated deficits (impairments that can exist in addition to neuromuscular difficulties) may or may not be present depending on the non-motor areas of the brain that have been damaged. The severity of any deficit is determined by the extent of the damage to the area of the brain that controls that function. As a result there is a wide range of ability and disability among people with CP. Therefore, it is not possible to provide a universal "cookbook" of solutions that will work for all persons with CP.

## Safety On The Farm

A number of issues should be dealt with before someone with CP assumes tasks on a farm or ranch. The individual should ask himself/herself: Will I be able to maintain my balance during the task? Will I be able to access required areas without falling? If I fall, is significant bodily injury likely to occur? Will I be able to react in time to safely do the task without causing injury to others or myself or causing property damage? Will I be able to easily view all necessary areas? Will I be able to fulfill the communication requirements of the task? If I have a history of seizures, are they currently under control with medication?

If the answer to any of the above is "no," the task should be adapted to allow for safe perfor-

mance or delegated to someone else.

The best way to compensate for inadequate balance and slower reaction time is to use good judgment and caution. A farmer with CP must use good judgment to decide which tasks can safely be done alone or with others and which ones should be delegated to others.

Keep work areas neat and organized. Cluttered work areas increase the potential for falls.

Delegate animal health and equipment repair tasks that cannot be done easily or safely. It is difficult for farmers with CP to move quickly to avoid injury. If no one else can assist, contract the work out with a local service provider.

Good communications can help make any farm or ranch more efficient and productive. Access to telephones, cellular phones, C.B.s, and 2-way radios can save unnecessary trips and help in an emergency. All major pieces of equipment and each primary building should be connected with telephones or by radio.

Stability during lifting can be improved by keeping feet shoulder width apart, bending at the knees and hips while keeping the back straight, and carrying heavy objects as close to the body as possible.

Farmers with CP are more likely to fall because of inadequate balance especially on surfaces coated with ice or manure. Wood ashes, if available, are great for immediate traction on ice. Ag lime or sand also work, but not as well. Commercially available ice grippers like those used for ice fishing may also be helpful.

Often, a few inches are all that prevent easy

access to trucks, tractors, and self-propelled implements. Extra steps and handholds often come standard on new equipment. For older models, these features can be added. Hand railings are another helpful addition for stairs anywhere around the farm, especially under poor lighting or weather conditions.

The operator station on most farm equipment does not easily accommodate a person with limited range of movement. Spinner knobs, level extensions, enlarged handles and/or a complete set of hand controls may be needed to enable safe equipment operation.

Automating tasks like animal feeding, manure handling and/or milking operations will help conserve energy and prevent joint stress by reducing the manual carrying, walking and lifting.

A forearm support allows the operator to slide his or her arm on a supporting surface between controls and may help some who have difficulty with this. Others may be helped by wearing wraparound wrist weights of one pound or less. Weights help reduce the overshooting and tremors of hands and arms. Wearing seat belts can prevent some involuntary reflexes that could restrict the operator's ability to safely operate equipment.

Purchase feed and fertilizer for bulk delivery, eliminating the need to handle heavy bags. Locate feed storage bins close to mixing areas to reduce the need to push heavy feed carts.

A utility vehicle, small tractor, or ATV can be used to carry one or more items between buildings in one trip. As a result, the problem of having to maintain balance while carrying feed sacks and other bulky items between buildings is eliminated.

Walking on the unstable and uneven surface of piled bales can challenge the balance of a farmer with CP making the task more fatiguing than it

would be otherwise. A baler with a thrower or large balers and large bale handling equipment can be used to reduce or eliminate manually handling bales.

Install shift lever extensions on ATVs or purchase models that do not require manual shifting. It is common for people with CP to have limited movement in their ankles, making it difficult or impossible to raise the standard foot operated shifter on an ATV.

Some farmers with CP experience foot, leg, and/or back pain due to abnormal walking patterns combined with prolonged standing, walking or carrying. These activities create pressure on bones, muscles, and joints and result in pain and fatigue. Sitting occasionally throughout the day can reduce or prevent the pain. This can be done by: 1) alternating tractor work and labor intensive tasks throughout the day; 2) setting up a shop area with work benches low enough to allow work from a stool. (A stool on casters is very handy on a concrete floor.); 3) wearing commercially available jogging shoes with steel toes that offer comfort and foot protection.

Mount additional mirrors on tractors to enable easier monitoring of implements being towed. This is particularly helpful for those with difficulty turning their heads and backs to view trailing equipment.

## For More Information

To contact Kansas AgrAbility call 1-800-526-3648 (1-800-KAN DO IT); www.oznet.ksu.edu/agrability. For more information on general farm safety, contact the K-State University Research and Extension Agricultural Safety and Health Program at 785-532-5813.

Kansas State University Agricultural Experiment Station and Cooperative Extension Service, Manhattan, Kansas It is the policy of Kansas State University Agricultural Experiment Station and Cooperative Extension Service that all persons have equal opportunity and access to its educational programs, services, activities, and materials without regard to race, color, religion, national origin, sex, age, or disability. Kansas State University is an equal opportunity organization. These materials may be available in alternative formats. Issued in furtherance of Cooperative Extension Work, Acts of May 8 and June 30, 1914, as amended. Kansas State University, County Extension Councils, Extension Districts, and the U.S. Department of Agriculture cooperating, Marc A. Johnson, Director.

The information in this publication is based on information generated by the Breaking New Ground Resource Center, Purdue University, West Lafayette, Indiana.

The material is based upon work supported by the USDA Cooperative State Research, Education & Extension Service under special project number 2002-41590-01380. The Kansas AgrAbility Project is administered by K-State Research and Extension. Contact Kansas AgrAbility by calling 1-800-526-3648 or 785-532-5813.