

DWYER INSURANCE

Applying the Science of Ergonomics to Farm Work

Learn how to avoid musculoskeletal injuries



Anyone who's worked in agriculture can testify to the hard, often backbreaking work required to do the job. Lugging buckets of grain and water to feed the livestock, hoisting bales of straw, and lifting heavy equipment are just a few of the tasks performed by American farmers every day. Strains, sprains and back pain are so common among farmers that these injuries are sometimes considered just another part of the job.

Yet farmers and farm workers report some of the highest risks of work-related musculoskeletal disorders in the nation. "Only recently has the science of ergonomics been applied to farm work to help reduce the number of injuries that cost commercial agriculture millions of dollars every year in health care expenses, lost wages and lowered productivity," says Industrial Hygienist, Glenn Soyer, manager, Risk Management Services with Nationwide Agribusiness Insurance Company, Des Moines, IA.

Ergonomics is the study of the physical capabilities and limitations of a worker in relation to that person's work tasks, tools and environment. Ergonomics seeks to reduce stress on the body, and increase safety, comfort and productivity. It may sound complicated, but most ergonomic recommendations are fairly easy to integrate into many farming routines. The key is awareness and practice.

Simple changes that make work safer

Consider incorporating these ergonomic modifications into your everyday work activities to reduce potential injuries to you and your workers.



Lifting

Lift only the loads you know you can handle. Get help or use a mechanical lift for larger loads. Keep the load close to your body, lifting with your legs. Be careful when reaching for items, and move them closer to you before lifting. Avoid twisting or bending at the waist while lifting.

Carrying

If you carry an item with one arm, such as a bucket, keep your knees soft to reduce the strain on your lower back. Counterbalance by raising your other arm away from your body. Be sure to switch sides frequently. Carrying with both arms is safer for your back and

prevents overuse of the favored arm. Make sure the weight is balanced. For example, carry two buckets half full rather than one heavy bucket to minimize strain.

Shoveling

Be sure that your shovel is the right size for the job. If you're shoveling snow, grain or manure, use a smaller shovel or take smaller scoops. Keep your feet at shoulder width with your knees slightly bent to give yourself good support. Lift with your legs, not with your back. Avoid twisting while shoveling, and keep the load close to your body.



Stooping

Awkward positions such as stooping, bending from the waist or crouching can take a toll on your back. Use a half-kneeling position for better balance and posture instead of a full squat if you need to change a tire or do other work near the floor. If you need to bend from the waist, make sure you don't reach out too far and wrench your back. Always take frequent breaks from awkward positions to release the tension in your muscles.

Mounting

Always maintain three points of contact with the handrails and steps for stability and balance when climbing on a tractor or other large farm implement. Pull with your hands and step with your feet at the same time while keeping your weight over your feet. This way, each step elevates you straight upward or lowers you straight downward.



Driving

Sit with your back against the seat so that it's supported. Sit close enough to the steering wheel that your knees are comfortably bent. Shift your position frequently to prevent the muscles from tightening. Consider adding suspension seats to your tractor to decrease whole body vibration.

Using tools

Ergonomically designed farm implements – like clippers, shovels, rakes, wheelbarrows and posthole diggers – help lessen the stress on your back and are readily available at local farm supply stores. Additionally, many power tools have been redesigned to be more

body-friendly.