

# ERGONOMICS ON THE FARM



AgHealth  
Central States  
Center for Agricultural  
Safety and Health



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## WHAT IS ERGONOMICS?

Ergonomics is the science of designing work to minimize the risk of injury. This includes arranging work areas to promote healthy body positions, using well designed tools, and sitting on supportive seats.

## WHAT CAUSES INJURIES ON THE FARM?

Driving a tractor, hauling buckets, hoisting bales, pulling calves, and stooping may be daily occurrences. These actions can result in back pain, tendonitis, and other muscle and joint problems. **Back pain among farmers is the most common cause of job related disability.**

### Poor ergonomics can lead to:


- Backaches
- Shoulder pain
- Hand, wrist, and/or elbow pain
- Muscle ache
- Injuries

### Caused by prolonged exposure to physical workload such as:

- Stooped positions
- Carrying heavy loads
- Kneeling often
- Working with raised or outstretched arms
- Repetitive hand and/or wrist motions
- Vibrations from operating machinery

### Resolve this by reducing the physical workload:

- Rest periodically when doing physical work
- Alternate between heavy and light work, if possible
- Redesign the job
- Modify tools

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# ERGONOMIC-ASSOCIATED INJURY PREVENTION CHECKLIST

## LIFTING AND CARRYING LOADS

- ☐ Avoid lifting from floor or over shoulder height and keep objects close to your body.
- ☐ Hold handles on containers using both arms to balance weight.
- ☐ Avoid lifting objects weighing fifty pounds or more.
- ☐ Use mechanical equipment whenever possible.
- ☐ Use dollies, pallet trucks, or carts to transport heavy items.



## HAND WORK

- ☐ Work at or below shoulder height.
- ☐ Work within 17 inches of body.
- ☐ Rotate job to reduce repetition.
- ☐ Standing on floor mats will increase comfort, but may not prevent an injury.

## POWER HAND TOOLS

- ☐ Use tool handles that allow forefinger and thumb to overlap.
- ☐ Choose hand tools with handles covered with smooth, non-slip material and at least 4" long.
- ☐ Use hand tools that allow the wrist to stay straight.
- ☐ When selecting power tools consider purchasing those with vibration reduction characteristics or use anti-vibration gloves.

## SHOVELING AND STOOPED WORK

- ☐ Use long handles for stooped work and keep feet at shoulder width.
- ☐ Sit on a stool when doing stationary work.
- ☐ Do stooped work intermittently with other tasks and avoid twisting.
- ☐ Use leg and arm muscles instead of back muscles when shoveling. Use more small loads instead of fewer large ones.

## VEHICLE USE

- ☐ Choose vehicle seats with lumbar support and replace worn out seats.
- ☐ Sit using a slightly inclined posture with full back support.
- ☐ Maintain three-point contact facing the farm equipment when mounting and dismounting.
- ☐ Shift driving position frequently.

## RESOURCES



UMASH:  
Ergonomic Strategies for  
Preventing Pain While Farming



NIOSH:  
Simple Solutions:  
Ergonomics for Farm Workers