

Rural Ergonomics

Hard work is required to accomplish many tasks being performed on the farm. Farm work often takes its toll on the body, skeleton, and muscles. The results of lifting, stretching, and straining could lead to backaches, pains in the shoulders, arms, back, and legs, or even disabling conditions. Sprains and strains can happen if the body is not used correctly. Disability could result when work-related musculoskeletal disorders take place. 31% of all workers' compensation cases are related to back injuries. In California alone, it is estimated that the cost of back injuries amounts to \$22 million per year.

What exactly is ergonomics? It is the study of the demands made on the body as a result of work. These studies help determine what to do to prevent damage to the body from doing work in a dangerous way. Musculoskeletal physical stresses include forceful gripping, lifting, bending, twisting, kneeling, squatting, and vibrating equipment.

What puts people at risk?

Lifting objects heavier than 25 pounds. In the case of a child or youth, this translates to lifting items over 10 to 15% of their body weight.

- Repeated lifting
- Awkward body posture
- Prolonged activity such as driving, especially where vibration is prevalent
- Slips and falls

Prevent damage to the body by:

- Designing the job so it reduces the chance of injury. Keep reach to a minimum, lifting as close to the body as possible.
- Lifting only up to 10-15% of body weight
- Lift heavy objects with leg muscles instead of back muscles
- Keep the body in good physical condition through fitness conditioning techniques
- Ask for help if the load is too heavy
- Alternate lifting tasks with other jobs
- Use mechanical assistance when possible



It is important to keep farmers safe and free from muscle related injuries. By starting at an early age, when youth are first experiencing work responsibilities where lifting is required, they can be healthier adult workers.

Manual lifting of heavy objects causes the most low back pain, which is a common complaint among workers. Farm workers must do this type of activity often when they are moving sacks of feed, throwing hay bales, or moving equipment from one location to another. Youth are often involved with this type of activity and find themselves in situations where they could be hurt by lifting excessive weight.

