

Safety Note #209

Ergonomics – General Fields and Grounds



Field workers, including farm workers, frequently get backaches and pains in the shoulders, arms, and hands than any other health issues. A third of the injuries that cause them to miss work are sprains and strains, and a quarter are back injuries, according to NIOSH. These work-related musculoskeletal disorders (WMSDs) have led to the annual workers' compensation costs of \$22 million for 3,000 back injuries in California agriculture alone. While most of the field tasks that result in sprains and strains are unavoidable parts of work, there are safe ways to conduct the tasks to minimize the chances of worker injuries.

Loading and Unloading Equipment

- Be sure that motorized equipment has its fuel drained or sufficiently contained before use.
- Never attempt to move equipment that is heavier than you can handle.
- Tie off or remove any loose parts of components that may become loose.
- Large equipment should be rolled off trucks using ramps or trailer gates.
- Small equipment should be moved in crates, boxes, or strong bags such as canvas.
- Be careful of sharp or rough working parts of all equipment.
- Lift and place equipment off of platforms or trucks above the heights of your knee and below your chest.

Materials Handling

- Minimize repetitive actions by rotating tasks as much as possible.
- Reduce the size and weight of the load to make handling easier.
- Be mindful and protect against sharp edges. Use appropriate gloves, coveralls, and safety shoes.
- Lighting, temperature, and humidity can all contribute to the likelihood of an accident occurring. Evaluate the environmental conditions and postpone work until the conditions improve.

Handling Bagged Materials

- Straddle the end of the bag and grasp the bag with both hands under the end closest to you.
- Bend your hips and knees and keep your back straight.
- Thrust the bag up with your knee while straightening your body.
- Put the bag on shoulder and avoid unloading a bag from shoulder directly to floor level.
- Avoid twisting and side bending while lifting.

Extreme Weather Conditions

- Dress in layers, preferably wool, cold weather synthetics or blends. Avoid cotton which does not wick perspiration readily.
- Stay dry as water and perspiration decreases thermal retention of most fabrics.
- Keep extremities covered, especially your head and hands, as those are areas where body heat is lost the most.
- Take periodic breaks in warm, dry areas, and drink plenty of fluids, avoiding caffeinated beverages and tobacco products.
- Beware of the progressive signs of heat exhaustion and heat stroke.
- Pay attention to sun exposure by wearing a wide brim hat and using high SPF-rated sunscreen.