

Environmental Health & Safety

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Proper Lifting to Prevent Back Injuries

Preventing back injuries is a major workplace safety challenge. In 2016, musculoskeletal disorders involving the back accounted for 38.5 percent of all work-related musculoskeletal disorders (134,550 back cases out of 349,050 total cases). No approach has been found for totally eliminating back injuries caused by lifting, though it is felt that a substantial portion can be prevented by an effective control program and ergonomic design of work tasks.





Suggested administrative controls include:

- Train employees to utilize techniques that place minimum stress on the lower back.
- Physical conditioning or stretching programs to reduce the risk of muscle strain.
- Encourage the use of carts, dollies, forklifts and hoists to move materials where possible.

Suggested engineering controls include:

- A reduction in the size or weight of the object lifted.
- Adjusting the height of a pallet or shelf.
- Installation of mechanical aids such as pneumatic lifts, conveyors, and/or automated materials handling equipment.

Practice proper lifting techniques:

- Have your feet spread about shoulders-width apart.
- Your feet should be close to the object.
- Get a firm grip on the object.
- Keep your back straight and elbows close to your body.
- Keeping your back straight and head up, straighten your legs to lift object.
- At the same time tighten your stomach muscles to provide back support (Don't hold your breath while doing this).
- While carrying the object DO NOT twist or bend at the waist, move your feet and legs when turning.
- Keep the load as close to your body as possible
 - To set the object down, use the same technique used to lift the object.