

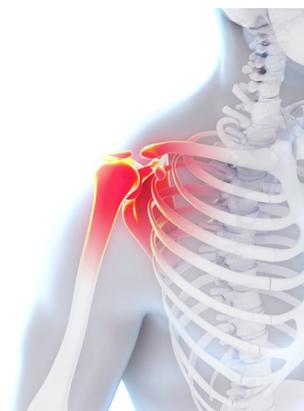


Strain & Sprain Injury Prevention

Sprains and strains, including the back, shoulder and other musculoskeletal injuries, are the most common workplace injuries resulting from **manual material handling**.

IMPORTANT FACTS:

Musculoskeletal disorders are injuries or illnesses that result from overexertion or repetitive motion. They include soft-tissue injuries such as sprains, strains, tears, hernias and carpal tunnel syndrome. Work-related musculoskeletal disorders that result in days away from work most commonly involve the back alone. 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).



Average Number of Days Away from Work for Musculoskeletal Injuries

Occupation Type	Back	Shoulder	Leg	Arm	Abdomen	Multiple Parts	All Other
Maintenance and repair workers	42.5	11.4	12.9	6.5	5.9	5.1	15.7
Janitors and cleaners	37.5	16.2	13.0	4.9	4.0	8.5	15.8

Courtesy of U.S. Bureau of Labor Statistics



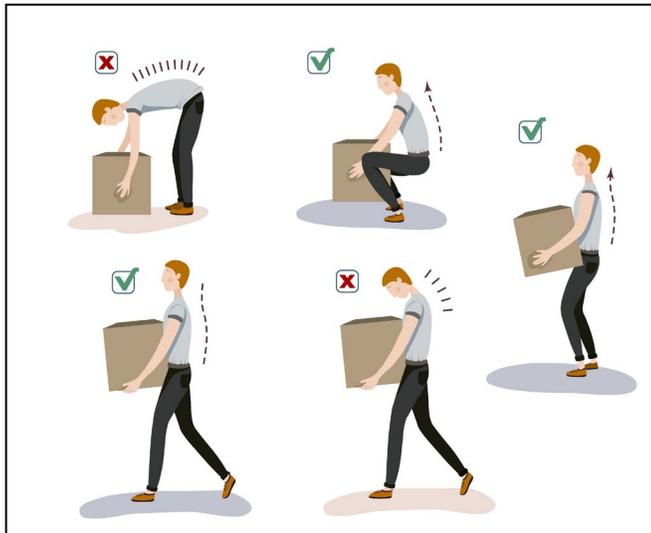
Strain & Sprain Injury Prevention *continued*

CAUSES:

The following motions are significant risk factors to sustaining Sprain and Strain injuries:

- **Bending over at the waist (front) while lifting object** – Pinches the front of the discs together, allowing the discs to push out the back;
- **Reaching/lifting with extended arms** – Significantly multiplies the force on the lumbar spine;
- **Twisting the back** – Stresses the cartilage of the disc, eliminating the “cushion” effect of the discs;
- **Sitting in a slouched position for prolonged periods** – Causes excessive strain and fatigue to lumbar muscles; and
- **Lifting, pushing, or pulling incorrectly** – Decreases mechanical efficiency and increases required force exertion.

Manual Handling Do's and Don'ts



Prevention Best Practices

- Be aware of the weight of the load being handled.
- Get assistance with heavy loads.
- Use mechanical devices whenever possible (i.e. forklifts, carts, dollies, etc.).
- Bend your knees to lift the load.
- Lift with your legs; never lean over at the waist.
- Keep the load close to the body.
- Do not twist while lifting or placing the load.
- Avoid lifting the load above the shoulders.
- Be aware of any objects or obstacles in the path of travel.
- Wear proper gloves to improve your grip.

Failure to observe any one or more of the above “best practices” could result in a sprain or strain injury.

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