

# Low Back Pain: Facts You Should Know



The prevalence of low back disorders exceeds that of diabetes, COPD, and asthma and low back pain is the most easily injured part of the body<sup>1</sup>.

- The rate of low back injuries has increased by 17% in the past 30 years, and it is the most disabling condition.
- A precise diagnosis is unknown in 80 to 90% of the time and only 10 to 15% of cases are diagnosed through imaging. Most evaluations are subjective.
- Up to ½ of low back disorders are attributable to MMH (manual material handling) tasks such as bending, reaching, twisting, pushing, pulling and carrying.
- Low back injuries alone account for nearly \$32,000,000,000 costs per year (\$15.1 billion direct & \$16.6 indirect).
- A typical golf swing generates 1100 pounds of compressive force in the low back. YIKES!

These alarming statistics have spurred the onset of many methodologies to improve MMH tasks, including exoskeletons, job rotation, and engineering controls. Engineering controls, which includes MH equipment is, by far, the most effective

**Exoskeletons:** (wearable devices) They reduce torso flexion, but forces at the low back yielded no change. The long-term effectiveness is unknown<sup>1</sup>.

**Job Rotation:** A technique that regularly moves workers between two or more tasks. Results of an analysis led to an overall greater risk for the three workers involved in the study<sup>2</sup>.

**Engineering Controls:** are implemented to ensure that reaches, forces, and distances of work elements are within acceptable limits of the workforce, which means the workplace is designed to fit the people (ergonomics). By designing for fit and providing the right equipment, you will design out MSD risk factors altogether. This approach has been proven effective and efficient by many academic studies.

## The Bottom Line

Approximately 8 out of 10 Americans will suffer from back pain during their lives. So, since we don't see charity runs or auctions to support more research on this disorder, we'd better start preventing it using the methods that are backed by science<sup>1</sup>.

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