



Musculoskeletal Disorders and the Science of Ergonomics

An Often Overlooked Cause of Injuries and the Science of Preventing Them

Musculoskeletal Disorders (MSDs) are caused by hazards such as overexertion, repetitive strain, and vibrations, and they affect the body's muscles, bones, and the connective tissues between those systems. The Bureau of Labor Statistics noted that MSDs accounted for 31% of all reported injury cases in 2015¹, and the Ohio State University (OSU) Spine Research Institute estimated the average cost of a chronic lower back disorder to be \$100,000². OSU also noted the many benefits of implementing program to prevent MSDs, including improved productivity and decreased employee turnover.

The science of "fitting the task or tool to the person" is called Ergonomics, and many resources are available to employers who want to attack these hazards head-on. The Occupational Safety and Health Administration (OSHA) has a [Resource Page](#) available, and can be a great place to start.

1. <https://www.bls.gov/news.release/pdf/osh2.pdf>
2. <https://spine.osu.edu/blog/2015/01/unexpected-benefits-good-ergonomics>

Please do not hesitate to reach out to your designated Safety Specialist, should you have additional questions or require further assistance.

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