Prevent. Protect. Perform: Musculoskeletal Disorders and Ergonomics FAQ

Practical Answers to Common Ergonomics Challenges

Musculoskeletal disorders (MSDs) are among the most common and costly workplace injuries impacting workers across industries. Despite their prevalence, many organizations still struggle to understand how ergonomics can be used effectively to prevent these injuries.

The following questions were gathered from a webinar hosted by Fit For Work and VelocityEHS, and reflect common concerns around MSDs and ergonomics in the workplace. This resource offers expert-backed answers and practical guidance to help organizations reduce risk, improve safety, and support worker well-being.

Frequently Asked Questions

Early Symptoms of MSDs

Question: What are some early signs that someone might be developing a musculoskeletal disorder?

Answer: Reduced range of motion, pain/discomfort (especially if it extends outside working hours), and soreness. Early awareness and proactive treatment are crucial; be sure to address soreness before it becomes an injury.

Job Coaching as a Gap Filler

Q: Job coaching seems helpful while waiting on engineering fixes, but what if leadership thinks coaching is enough once performance metrics improve? How do we keep momentum toward long-term solutions?

A: Use assessment tools to show before-and-after risk reduction. Present quantitative data to leadership, demonstrating that engineering controls yield greater, more sustainable risk reduction than coaching alone. For example, using an ergonomics assessment tool to perform an assessment before a change and after can demonstrate the projected risk reduction. This data-driven approach helps communicate the importance of implementing engineering controls rather than relying solely on job coaching, which may only provide a temporary solution.

Job Rotation and Cumulative Trauma

Q: If we rotate employees between tasks to reduce strain, could that actually increase the risk for more people? How can we make sure job rotation helps instead of hurts?

A: Job rotation can help distribute the risk of cumulative trauma, but if not managed carefully, may simply spread the problem rather than solve it. To avoid this, it should be applied selectively while more permanent engineering controls, such as automation or job redesign, are implemented. Job rotation is best used as a temporary control, not a long-term solution.

Life Ergonomics

Q: How can we help employees see how everyday activities, like hobbies or chores, might affect their risk of injury at work?

A: Incorporate training that connects daily activities (hobbies, housework, yard work) to workplace risks. Use visuals and relatable examples to build awareness of how non-work habits can contribute to MSDs.

Office Ergonomics Assessment Tools

Q: Are there particular assessment tools for office ergonomics?

A: Yes, there are standard questionnaires and software tools that allow employees to self-assess and generate data for tailored recommendations. Use publicly available tools or industry software for baseline assessments.

Vibration Injuries

Q: If a person feels vibration in their body after finishing a job, does this indicate damage to their nervous system?

A: Yes, it can be harmful. If someone is exposed to whole-body vibration from activities like jackhammering and reports feeling like they are still shaking, it indicates that their central and peripheral nervous systems are affected. This sensation occurs because their central nervous system cannot calm down immediately. While medication can help calm the nervous system and prevent prolonged issues, experiencing this sensation for an extended period can lead to lifelong problems with the central nervous system.

Stretching Risks: When to Use Dynamic vs. Static Techniques

Q: Can stretching ever increase the risk of injury, especially in manufacturing jobs? And when is dynamic stretching the better choice?

A: Stretching, particularly pre-shift stretching, is often emphasized in industrial work environments. Dynamic stretching, which involves moving parts of your body and gradually increasing reach or speed, is highly recommended as it warms up the muscles and prepares the body for activity, whether it's for a sport or an eight to ten-hour shift.

Static stretching, on the other hand, involves holding a stretch for a prolonged period to elongate the muscles but doesn't offer the same benefits as dynamic stretching in terms of muscle warm-up.

Dynamic stretching is particularly recommended in cold work environments, such as refrigeration units or freezers. For example, delivery drivers who move between warm vehicles and cold environments should perform a warm-up activity before unloading their vehicles. This movement helps prevent injuries and prepares the body for the task ahead.

Source: Faraci, J., Collins, K., and Berean, J. "Prevent. Protect. Perform: What You Should Know About MSDs and Ergonomics." Fit For Work + VelocityEHS Webinar, June 18, 2025.