



Ergonomics: Reduce Musculoskeletal Disorders — An Overview

Overview

Ergonomics is the science of fitting the job to the worker. Designing workstations and tools to reduce work-related musculoskeletal disorders (MSDs) can help workers stay healthy and companies to reduce or eliminate the high costs associated with MSDs.

Who is covered?

Even though there is no specific ergonomics regulation, OSHA will continue to cite ergonomic injuries under the General Duty Clause of the Occupational Safety And Health Act, Section 5. All employees covered by OSHA fall under this section.

Causes of MSDs

Prolonged exposure to ergonomics risk factors can cause MSDs. Conditions likely to cause MSD problems include the following:

- Exerting excessive force;
- Excessive repetition of movements that can irritate tendons and increase pressure on nerves;
- Awkward postures, or unsupported positions that stretch physical limits, can compress nerves and irritate tendons;
- Static postures, or positions that a worker must hold for long periods of time, can restrict blood flow and damage muscles;
- Motion, such as increased speed or acceleration when bending and twisting, can increase the amount of force exerted on the body;
- Compression, from grasping sharp edges like tool handles, can concentrate force on small areas of the body, reduce blood flow and nerve transmission, and damage tendons and tendon sheaths;
- Inadequate recovery time due to overtime, lack of breaks, and failure to vary tasks leave inadequate time for tissue healing;

MSDs can affect nearly all tissues in the body: the nerves, tendons, tendon sheaths, and muscles. The most frequently affected areas of the body are the arms and the back.

Employee Training

There is no specific training requirements for ergonomics. However, employees who have been trained to identify and avoid ergonomic hazards are better able to avoid



those hazards, leading to a safer workplace. To get the most out of their ergonomics program, an employer could train workers on:

- ✓ common MSDs and their signs and symptoms.
- ✓ the importance of reporting MSDs, and signs and symptoms, as soon as possible.
- ✓ how to report MSDs in the workplace.
- ✓ risk factors and work activities associated with MSD hazards.

Training Tips

Provide employees with information on MSDs and their signs and symptoms such as pain, weakness, stiffness, joint noises, and decreased range of motion.

Stress the need for early reporting of an injury and explain the process to report MSDs, signs and symptoms of MSDs, and MSD hazards.



Sample Safety Meeting Agenda

1. ACCIDENTS, INJURIES, NEAR-MISSES, DISCUSS:

- Incidents that have occurred in your company since the last meeting.
- Any follow-up that has been done as a result of investigations into incidents.
- Incidents that have happened in other companies.
- Updates to the company's Accident Prevention Plan from "lessons learned."

2. RESULTS OF SAFETY INSPECTIONS.

- Discuss the results of recent safety inspections.
- Follow up on assignments for eliminating or controlling identified hazards.
- Encourage employees to identify any unsafe conditions or tasks.
- Discuss ways to eliminate or control the hazards.
- When appropriate, assign responsibilities for eliminating or controlling identified hazards.

3. TRAINING.

- Discuss any new safe work procedures or other policies and procedures that need to be implemented.
- Safety Topic of the Month: a presentation and discussion on the chosen topic.

4. OPEN FORUM.

- Any one who has a concern about safety and health should bring it up for discussion.

5. NEXT MEETING.

- Set the time, date, and place for the next meeting.
- Select a Safety Topic and designate the presenter/discussion leader.



Employee Sign-in Sheet

Persons attending this meeting:

_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____
_____	_____

Signed: _____

Dated: _____

