

AT THE END OF THE WORKDAY, EVERYONE GOES HOME SAFE.

# Ergonomics in the Workplace

## Toolbox Talk



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In order to get the job done, it is common to find people forcing themselves into awkward positions. Working in an awkward position often or for a long period of time can result in injuries. This is where ergonomics comes into play.

**"Work-related MSDs are among the most frequently reported causes of lost or restricted work time."**

Ergonomics is the science of adjusting the workplace to suit the individual. Instead of forcing the body into an awkward position that puts a lot of strain on muscles, joints, ligaments, and bones, the worksite is manipulated. This not only makes the task easier and more comfortable, it also makes the work more efficient.

Poor ergonomics in the workplace can lead to musculoskeletal disorders (MSDs). MSDs affect muscles, nerves, blood vessels, ligaments, and tendons. Factors that cause MSDs are things like heavy lifting, bending, reaching overhead, pushing and pulling heavy loads, working in awkward positions, and repetitive tasks. The more you do these things, the more likely you are to develop an MSD, and MSDs are not uncommon. In fact, work-related MSDs are among the most frequently reported causes of lost or restricted work time.

To prevent MSDs, one thing employers can do is develop a plan that involves input from employees with

identifying and eliminating MSD hazards. Going through day to day tasks and processes to find the areas where people have to adjust themselves to the work instead of adjusting the work to them will greatly reduce the odds of someone developing an MSD. Another option the plan can include is implementing a stretching program. Allowing the body to "warm-up" and loosen up before performing tasks will help prevent MSDs.

A useful tool for eliminating/preventing MSDs is following the Hierarchy of Controls. The first step in the Hierarchy is to see if the hazard can be eliminated. If not, engineering controls should be utilized. An example of an engineering control would be to use a dolly, or hand truck, to move a heavy object instead of carrying it.

If engineering controls are not possible, or do not completely remove the hazard, the next step would be administrative work practice controls. An example of an administrative control would be creating a job rotation so people do not have to spend too much time doing one task to minimize the amount of time that continual exertion, repetitive motions, and awkward postures are performed.

The last step in the Hierarchy is to utilize PPE. While it is the last step, PPE should be considered a last resort:

the other steps just help to remove exposure to hazards while PPE protects you from the hazards that cannot be removed. An example of PPE to prevent MSDs would be knee pads for floor jobs, or gloves to protect against vibration and rough surfaces.

### Real World Application:

A construction company was not happy with the rate of MSDs among their employees. They brought in a consultant who interviewed the employees, reviewed the tasks of each employee, and observed the tasks being performed.

The consultant took that information and customized an injury-prevention program for the company. The consultant also assisted with implementing a stretching and strengthening program. The result was the company logging over 104,000 labor hours without any MSDs.

### Talking Points:

1. What tasks do you perform that could be adjusted to fit you better?
2. What stretches would be helpful before beginning work?
3. What tools, equipment, and PPE are you utilizing to prevent MSDs?

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