

# Ergonomics

Ergonomics is defined as the study of people's efficiency in their working environment. The workforce experiences ergonomics every day on the jobsite. A common ergonomics challenge is as simple as a worker twisting their torso while carrying a heavy load. This could lead to pain, discomfort or even a workplace injury.

<https://www.osha.gov/SLTC/ergonomics/training.html>

Training is an important element in the ergonomic process. Training should be conducted in a language and vocabulary that all workers understand and is best provided by individuals who have experience with ergonomic issues in your particular industry. When training is effective workers will:

- Learn the principles of ergonomics and their applications.
- Learn about the proper use of equipment, tools, and machine controls.
- Use good work practices, including proper lifting techniques.
- Become more aware of work tasks that may lead to pain or injury.
- Recognize early symptoms of MSDs.
- Understand the importance of reporting and addressing early indications of MSDs before serious injuries develop.
- Understand procedures for reporting work-related injuries and illnesses, as required by OSHA's injury and illness recording and reporting regulation: <https://www.osha.gov/laws-regs/regulations/standardnumber/1904>

## Observe Workplace Conditions

By looking critically at your workplace operations, learn how to identify risk factors and eliminate and/or control them as early as possible.

### RISK FACTORS:

The injury depends on work positions and postures, frequency of the task is performed, level of required effort and amount of time the task lasts. EXAMPLES:

- Exerting excessive force. Examples include lifting heavy objects or people, pushing or pulling heavy loads, manually pouring materials, or maintaining control of equipment or tools.
- Performing the same or similar tasks repetitively. Performing the same motion or series of motions continually or frequently for an extended period of time.
- Working in awkward postures or being in the same posture for long periods of time. Using positions that place stress on the body, such as prolonged or repetitive reaching above shoulder height, kneeling, squatting, leaning over a counter, using a knife with wrists bent, or twisting the torso while lifting.
- Localized pressure into the body part. Pressing the body or part of the body (such as the hand) against hard or sharp edges, or using the hand as a hammer.
- Cold temperatures. In combination with any one of the above risk factors may also increase the potential for MSDs to develop. For example, many of the operations in meatpacking and poultry processing occur with a chilled product or in a cold environment.
- Vibration, both whole body and hand-arm, can cause a number of health effects. Hand-arm vibration can damage small capillaries that supply nutrients and can make hand tools more difficult to control. Hand-arm vibration may cause a worker to lose feeling in the hands and arms resulting in increased force exertion to control hand-powered tools (e.g. hammer drills, portable grinders, chainsaws) in much the same way gloves limit feeling in the hands. The effects of vibration can damage the body and greatly increase the force which must be exerted for a task. <https://www.osha.gov/SLTC/ergonomics/identifyprobs.html>

