



FEBRUARY SAFETY TOOLBOX

MONTHLY SAFETY AWARENESS DISCUSSION GUIDE

ERGONOMICS

Introductory Comments

Instructions:

Use this Safety Toolbox Talk to spark discussion within the employee group. Test knowledge retention with the associated quiz.

Ergonomics is the science and practice of designing jobs or workplaces to match the capabilities and limitations of the human body.

Ergonomics touches every division. It focuses on designing workstations, tools and work tasks for safety, efficiency and comfort. The goals are to decrease fatigue and injuries, along with increasing comfort, productivity, job satisfaction and safety.

Each year over a million workers suffer back injuries. To avoid back strain, you must not be casual about any lifting you do. Automatically run through 5 questions in your mind:

- Have I checked the object before trying to lift it?
- Is the load packed correctly?
- Is it easy to grip this load?
- Is it easy to reach this load?
- What is the best way to pick up this object?

Employees may begin to have symptoms such as fatigue, discomfort, and pain, which can be the first signs of a musculoskeletal disorder (MSD). Lifting, pushing, pulling and even repeated motions involving little or no weight can cause MSDs. Four frequent MSD causes are:

1. **Moving heavy objects.** The weight can damage the discs in your spine or strain the muscles in your back and shoulders. At-risk activities include lifting, carrying and positioning heavy objects. You should try to find alternatives to moving them (example using hand trucks, carts or other mechanical assistance, or getting a lifting partner). If you must lift a heavy object, it is best to carry it as close to your belt buckle as possible. Plan the lift and route prior to starting to avoid twisting.
2. **Gripping heavy objects or applying pressure to a tool with your hands.** Over time, these can strain the muscles in your hands and arms as well as the tendons attaching the muscles to bones. You can prevent these injuries by increasing your grip strength. Some ways to do this are by keeping your wrists straight, using two hands and making sure your gloves fit properly. Your thumb and fingers should overlap slightly for best

grip. Keep your hands warm because cold temperatures tend to make you grip too hard.

3. **Repetitive lifting of light objects can be just as damaging to your body as lifting heavy objects.** Frequent lifting can tire out your muscles, making them more prone to injury. If your muscles become tired, the stress will shift to your joints and the discs in your spine, putting them at risk for injury as well.
4. **Repeating the same motion too often.** MSDs can develop unless you rest and allow your body to heal. Control the motions you make and how often you make them. Reduce repetitive motion hazards by taking stretch breaks and spreading these tasks throughout the day.

Prevention Tips

- Stretch
- Walk
- Stand up
- Sit up straight but relaxed
- Take a break

Reference: OSHA Standard 29 CFR Part 1010.900

Meeting Starter Questions

- What is ergonomics?
- What precautions do you take to avoid back injuries?
- Can lifting, pushing, pulling and even repeated motions involving little or no weight cause MSDs?

Critical Safety Points

- To avoid back strain, you must not be casual about any lifting.
- Prevention tips include stretching, walking, standing up, sitting up straight but relaxed and taking a break.
- One of the four frequent MSD causes is repeating the same motion too often.



Safety is not an option, Safety is the way we Live!

Employee Name:	Signature:
Division:	Date:
Instructor:	Score:

ERGONOMICS

Question 1: What is ergonomics?

Question 2: Careless lifting causes so many injuries that there should be no such thing as a casual lift.

TRUE FALSE

Question 3: Walking or taking a break are prevention tips?

TRUE FALSE

Question 4: Lifting even light objects can cause MSDs?

TRUE FALSE

Question 5: Resting your muscles or controlling the motions you make and how often you make them won't help you avoid repetitive motion MSDs?

TRUE FALSE

Question 6: Stress shifts to your joints and spinal discs when your muscles are tired.

TRUE FALSE

Quiz Answer Key:

1. See page 1, first paragraph
2. TRUE
3. TRUE
4. TRUE
5. FALSE
6. TRUE