*Training* (10 min) Ergonomics/Back Safety

- What are Workplace Ergonomics?
  - The science of designing the workplace, keeping in mind the capabilities and limitations of the worker.
  - A workplace ergonomics improvement process removes risk factors that lead to musculoskeletal injuries and allows for improved performance and productivity.

- What does that mean?
  - Think about your daily job duties and how they can affect your body positively and negatively.
  - This can involve everything from your posture, to the way you get in and out of equipment, to the type of tools you use.

- What types of equipment do we use every day that aid us in maintaining good ergonomics?
  - Examples may include: weights of drills, height of work stations, seat positions in equipment, chair designs in office settings, floor mats, or handles for getting in and out of equipment.

- The Waste Commission can provide engineering controls, administrative controls, and training to positively affect ergonomics but it is up to each individual to follow the advice and training.
  - **Engineering Controls** – Methods that are built into the design of a plant, equipment, or process to minimize the hazard.
  - **Administrative Controls** – Changes in work procedures such as written safety policies, rules, supervision, schedules, and training with the goal of reducing the duration, frequency, and severity of exposure to hazardous chemicals or situations.

- Musculoskeletal Disorders (MSD’s) – They are the most common injury found in the workplace. They are injuries or pain in the human musculoskeletal system, including the joints, ligaments, muscles, nerves, tendons, and structures that support limbs, neck, and back.

- Musculoskeletal Disorders (MSD’s) are commonly caused by the following:
  - Poor posture
  - Poor physical condition
  - Improper body mechanics
  - Incorrect lifting
  - Jobs that require high energy

- Prevention
  - Maintain good posture throughout the workday. Your body should be in the “neutral” position as much as possible. This posture will minimize the stress applied to muscles, tendons, nerves, and bones and allows for maximum control and force production.
Before you lift you should ask yourself:

1. Is the load big, bulky, or heavy?  Examples… (Facility specific)
2. Do I need help? Generally, if a material is 1/3 to 1/2 your body weight, you should get help.
3. Is the load height located inside your safe lifting zone? The safe lifting zone is in-between the knees and shoulders. Use a ladder if the material is above your shoulders. If you are moving a material frequently, place the item in an easily accessible location.
4. Must you twist or stretch to get it? Re-adjust the load or your position before you lift.
5. Is the pathway clear of obstacles?

- Safe lifting
  - Avoid lifting if you can. See if you can use other means such as a dolly or fork truck.
    - Make sure you push rather than pull
  - Plant your feet firmly on the ground about shoulder width apart
  - Bend at the knees, not at the waist
  - Tighten your stomach muscles
  - Use both hands and make sure you have a good grip prior to lifting
  - Keep the load close to your body
  - Use the leg muscles to lift
  - Keep your back in a neutral position
  - Lift steadily and smoothly
  - Take breaks to rest back muscles

True/False Questions:

1. Workplace ergonomics are directed at field staff only.
2. Job rotation is an example of an administrative control.
3. Adjustable workstations are an example of an engineering control.
4. Proper posture includes the positioning of your upper body only.
5. When lifting, keep the load close to your body and use your legs.
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