ERGONOMICS and MUSCULOSKELETAL DISORDERS (MSDs)

TOOLBOX SAFETY TALK

LIST MUSCULOSKELETAL HAZARDS

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EXPLAIN DANGERS

- Cumulative Trauma Disorders (CTDs)
- Repetitive Strain Injuries (RSIs)
- Occupational Overuse Syndrome (OOS)

These terms describe a collection of injuries that affect muscles, tendons, tendon sheaths, ligaments, cartilage, and nerves. They can affect nearly all areas of the body, including common areas such as the back, neck, shoulders, wrists, and knees.

EXPLAIN RISK FACTORS

Common risk factors which increase the likelihood of a worker developing a musculoskeletal disorder include:

Forceful exertion: The amount of effort required to complete a task.

Repetitive movements: A movement completed multiple times without a change in posture or positioning.

Awkward postures: Postures which deviate away from the body's neutral position.

The body's neutral posture is when the spine has its natural curvature, head is balanced over the shoulders, elbows are at 90 degrees, and wrists are in handshake position.

Contact stress: External pressure placed onto soft tissues of the body such as the wrist or underside of thigh, which can place strain on tissues and minimize circulation to the muscles.

IDENTIFY CONTROLS

Manual handling of tools and materials:

- Use equipment (dollies, carts, hoists, motorized buggies) and other mechanical devices to help. Don't forget that other workers can help too.
- Break loads into smaller units; carry a 50lb load twice instead of a 100lb load once.
- Prepare by stretching and warming up before performing lifting tasks, labeling the materials, and using proper lifting techniques.

Ground level work:

- Bring it up to your neutral posture by using tables or stands, and keep regularly accessed materials at waist height.
- To perform low-level work, change your position often (kneel, crouch, squat, or sit).
- If you need to kneel, make sure you use high quality knee pads.
- Use equipment with longer handles to minimize low level postures if possible.

Overhead work:

- Use material lifts, scissor lifts, scaffolds, or other equipment that brings you closer to your work. This will minimize how far you move away from the neutral posture.

Hand tools:

- Use tools that properly fit your grip. **One size does not fit all.**
- Select tools that keep your wrist in a neutral posture, especially while exerting force.
- Maintain your tools, this will help minimize vibration.

DEMONSTRATE

Awkward Postures and Force

Demonstrate neutral standing posture, and neutral sitting posture.
Demonstrate awkward posture (wrist) and how it affects strength.