



Weekly Safety Briefings

Week 45 November 4 -10

Material Handling

Lifting and carrying are jobs that require special care and training to prevent back injuries. Whether lifting at home or on the job, make an effort to do it safely.

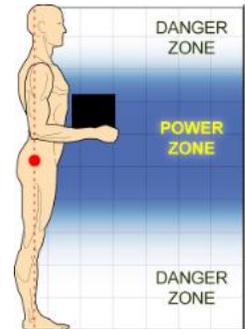
The Bureau of Labor Statistics states that back injuries account for nearly 20% of all workplace related injuries. In fact, back injuries are the second most common injuries here at EnPro. A back injury can leave you with chronic pain and hefty medical bill, so it's important to practice safe material handling.

This week, we will discuss proper lifting techniques, awkward postures, proper housekeeping, high-frequency and long-duration labor, and quick and easy warm ups you can do to get you ready for the workday.

Monday- Heavy Lifting

When we use smart lifting practices, we are less likely to suffer from back sprains and other injuries.

- **Lifting:** Lifting with good form is important. Maintaining a neutral spine and engaging your core can help keep the stress load off your back.
- **Planning:** When you know you have to lift something heavier than 35 pounds, plan ahead! Plan the routes you will take and what services and equipment you will use.
- **Power Zone:** The power zone for lifting is the area close to your body, between mid-thigh and mid-chest. This is the zone where your arms, back and legs can lift the most with the least amount of effort.



Discussion: Do you know what the manual lifting limit is for a single person at EnPro?

Tuesday – Awkward Postures

OSHA states that working in awkward postures increases the exertion and muscle force an employee must apply to complete a task. Awkward postures compress tendons, nerves, and blood vessels. The more extreme the posture, the more force is needed to complete the task, and the more likely an injury will occur. Examples of awkward postures include prolonged overhead work, twisting to lift an object, typing with bent wrists, and squatting with improper form.

Keep in mind these potential hazards that are present when working in awkward postures:

- Bending while lifting places strain on the back to support the upper body weight, even when lifting something as light as a screwdriver. Reaching forward while bending moved the load away from the body and increases the stress on the lower spine. Reaching can also increase the amount of stress on the shoulders leading to overuse injuries.
- Carrying loads on one shoulder, under an arm, or in one hand, creates uneven pressure on the spine.
- Poor housekeeping limits proper access to objects and forces awkward postures.
- Holding object for a long time increases the risk of back and shoulder injuries as muscle began to fatigue.

Here are possible solutions to working in awkward postures:



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- Move items close to your body and use your legs when lifting an item from a low location. Remember to engage your core, keep your elbows close, and maintain a neutral spine.
- If possible, store and place materials that need manual lifting and transportation at “power zone” height. This reduces the likelihood of having to reach or bend to pick up and carry the object.
- Minimize bending and reaching by placing heavy objects on shelves, tables, or racks.
- Avoid twisting, especially when bending forward while lifting. Turn by moving the feet rather than twisting the torso.

Wednesday – High-Frequency and Long-Duration Lifting

In most facilities, there is a central staging area where materials are dropped off and distributed to separate work areas. Moving objects can involve manual pushing, pulling, and lifting. Sometimes you use the help of a hand truck or utility cart to move heavy objects.

The following hazards may exist when we move materials around the worksite:

- Operating transport devices with bad wheels makes moving materials more difficult.
- Exerting more force to guide a hand cart with under-inflated or unevenly pressurized tires puts unnecessary stress on an employee's arms, back, and legs.
- Moving carts or hand trucks over bumpy, rough terrain or up and down stairs exposes you to potentially abrupt or jarring impacts that can cause sprains and strains.

How to prevent injuries during high-frequency and long-duration lifting:

- Replace wheels on carts if they are wobbly, deflated, or uneven.
- Select hand trucks or carts with pneumatic wheels for moving things over bumpy, uneven terrain or up and down stairs. Check the air pressure of pneumatic tires and fill them to the recommended pressure.
- Use transport devices if they are available and use ramps to help you overcome curbs or transport the object to a higher or lower surface. Make sure you know how to use them properly before you start working.
- Reduce the size of the load you carry. It’s better to go back for a second or third time, than to carry everything at once and risk injury.

Thursday – Housekeeping

Everyone benefits when we work together to create good staging and housekeeping practices. Productivity rises, quality improves, profits increase, and injury risk is reduced. When housekeeping and staging is in tip-top shape, we can spend less time moving materials and more time performing our skilled tasks.

The risks associated with bad housekeeping are:

- Lifting materials from awkward locations due to poor placement or carrying materials longer than necessary.
- Disorderly workspaces decrease productivity and increase the risk of musculoskeletal injuries due to poor ergonomics.



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How can you achieve good housekeeping?

- Ensure materials are off the floor and are placed in their proper spots. This minimizes the potential to bend or reach to access materials.
- Ensure that heavy materials are staged within 25 to 50 feet of the point of use to reduce walking distances.
- Place frequently used equipment in a central location so all employees have easy access to them.
- Make housekeeping a priority by performing regular housekeeping tasks daily.

Friday – Warming Up

Starting each day with a warm up can help you increase your mobility and get your body ready for work. Think of yourself as a manufacturing athlete. All professional athletes spend time warming up before practice and games. Warming up before any manual labor can help decrease the potential for injury.

Leg and Hips:

- To help stretch your hips before starting the work day, try to perform a deep bodyweight squat. Drive your knees out and engage your glutes.
- Prop one leg on a low table or chair behind you. Lean into a lunge like position to help stretch your hips, quads, and knee flexors. This position is known as a “couch stretch” and may take some trial and error to reach a good stretch. Once you find a tight zone, hold the position and maintain good posture.
- Stretch your hamstrings by reaching for your toes. When you begin to feel a stretch, hold that position. Do not hyperextend your knees. Maintain a neutral spine. Do not arch or round your back.

Back and Upper Body:

- If you have access to a PVC pipe or broomstick, you can use it to stretch your shoulders. Grip it in an overhand position and bring the pipe over your head and behind your body (or as far as you can comfortably go). Keep your ribcage down, squeeze your glutes, and engage your core to prevent hyperextending your lower back. You may start with a wide grip but narrow it as your mobility improves.
- Engage your glutes and core and reach your arms up and back. This can help stretch your back muscles and get you ready for the day. Do not hyperextend your low back.

Remember to always wear your personal protective equipment (PPE). No amount of stretching or safety tips can protect you if you forget the most important step.