

Material Handling Training

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Risk Related Activities Department

What's the Concern?

- 80 percent of Americans will have a back injury requiring medical attention (American Chiropractic Association).
- Back injuries are the leading injury cause of lost days away from work (www.osha.gov).
- Injured backs are subject to re-injury.
- Severe back injuries can linger for life.

The Back

- The back itself is composed of the spine (vertebrae), the spinal cord, and discs.
- The back is surrounded by soft tissues (muscles, ligaments, and tendons) that can be injured.



Back Safety – Prevent the Injury

- The spine has an “S” curve to it.
- Maintain the back’s natural alignment:
 - Stand straight, don’t slouch;
 - Sit up straight, don’t hunch over;
 - Maintain good posture;
 - Exercise proper lifting technique.

Back Safety – Prevent the Injury

- Use equipment whenever it is available, don't put yourself at risk if you don't have to! (Powered equipment, hand trucks, etc.).
- Lighten the load whenever possible.
- Regularly stretch your back, these are things you can do at home in 5-10 minutes that can keep your back healthy.
- Exercise Demonstration

Back Safety – Prevent the Injury

- Before lifting, have a plan to do so safely:
 - Size up the load:
 - Weight, shape, size;
 - Determine if help is needed.
 - Clear the pathway
 - Objects;
 - Tight spaces (doorways, corners).
 - Unloading zone.
 - Take the time to do the job safely.

Proper Lifting Technique

- 1) Stand close to the load with a wide stance.
- 2) Bend at the knees, not at the waist.
- 3) Pull the load close to your body before lifting.
- 4) Ensure a strong grip on the load.
- 5) Tighten your stomach muscles, keep your head looking forward.
- 6) Lift the load up using your legs.
- 7) Don't twist while carrying the load.

Lifting Demonstration – Part 1



Lifting Demonstration – Part 2



Team Lifting Techniques

- Communicate with each other!
- Designate one person to lead the lift.
- Lift at the same time.
- Keep the load level.
- Slowly unload together.

Carry the Load Appropriately:

- Make sure you can see.
- Take small, stable steps.
- Do not twist your back.

Unload Properly

- Squat down with the load.
- Do not bend your back over the load.
- Be careful of your fingers when placing the load down.



Handling Overhead Loads

- Stand facing the load.
- Slide the load close to your body.
- Don't over- reach to get the load.
- Maintain good posture.



Handling Long Loads

- Ensure the load doesn't weigh more than you can handle.
- If too heavy, get help!
- Pick up one end.
- Place the balance point on your shoulder.
- Watch the ends, keep them balanced.



Load Examples

- Does this ring a bell?
- Considerations:
 - 1) Width of load
 - 2) Weight of load
 - 3) Grip (wear gloves)
 - 4) Team lift?
 - 5) Load wet?



Load Examples

- Seems awfully familiar...
- Considerations:
 - 1) Don't lift too many at once
 - 2) Grip
 - 3) Wet?



Load Examples

- I've Seen This Before...
- Considerations:
 - 1) Team lift situation?
 - 2) Make sure load doesn't shift
 - 3) Maintain load balance
 - 4) Watch length of load



Load Examples

- Been there, done that...
- Considerations:
 - 1) Reduce load weight (ensure empty)
 - 2) Two-person lift
 - 3) Different sized handled, know which handle you are gripping
 - 4) Watch footing when placing load down



Load Examples

- Been down this road before...
- Load Considerations:
 - 1) Multiple person lift
 - 2) Grip
 - 3) Body positioning
 - 4) Communicate with teammate
 - 5) Clear path of travel during carry
 - 6) Watch footing when placing load down



Questions?