Lifting Safety – Safety Talk

WHAT'S AT STAKE?

Lifting, handling, or carrying objects at work can result in musculoskeletal injuries (MSIs), including sprains and strains and other injuries. The risk of injury increases when bending, twisting, heavy loads, and awkward postures are involved. Effective ergonomic controls can reduce the risk and prevent injuries.

WHAT'S THE DANGER?

Injuries from lifting and handling of loads can occur in many occupations. Workers are exposed to risk when they lift, lower, or carry objects. Risk factors include:

- The weight of the load
- How close the load is to the body. A load lifted far from the body imposes more stress on the back than the same load lifted close to the body
- The size and shape of the load
- The distance the load has to be carried
- The initial height of the load and the vertical distance lifted
- Lifting in combination with twisting
- How long the load has to be carried
- The number and frequency of lifts performed

Workers Are Harmed

Workers are at risk from lifting and carrying injuries particularly when:

- a load is too heavy, it's difficult to grasp, or it's too large
- the physical effort is too strenuous
- they are required to bend and twist when handling heavy loads

When a person reaches for items above shoulder height, their back becomes arched and their arms act as long levers. This makes the load difficult to control and significantly increases the risk of injury.

Injuries and Conditions can Include:

- muscle sprains and strains

- injuries to muscles, ligaments, intervertebral discs and other structures in the back
- injuries to soft tissues such as nerves, ligaments and tendons in the wrists, arms, shoulders, neck or legs
- abdominal hernias
- chronic pain

Some of these conditions are known as repetitive strain injury (RSI), occupational overuse syndrome (OOS), cumulative trauma disorder (CTD) and work-related musculoskeletal disorder (WRMSD).

HOW TO PROTECT YOURSELF

MANUAL HANDLING LIFTS

To prevent manual handling injuries in the workplace, avoid such tasks as far as possible. However, where it is not possible to avoid handling a load, employers must look at the risks of that task and put sensible health and safety measures in place to prevent and avoid injury.

For any lifting activity

Always take into account:

- individual capability
- the nature of the load
- environmental conditions
- training
- work organization

If You Need to Lift Something Manually

- Reduce the amount of twisting, stooping and reaching
- Avoid lifting from floor level or above shoulder height, especially heavy loads
- Adjust storage areas to minimize the need to carry out such movements
- Consider how you can minimize carrying distances
- Assess the weight to be carried and whether the worker can move the load safely or needs any help – maybe the load can be broken down to smaller, lighter components

IF YOU NEED TO USE LIFTING EQUIPMENT

- Consider whether you can use a lifting aid, such as a forklift truck, electric or hand-powered hoist, or a conveyor
- Think about storage as part of the delivery process – maybe heavy items could be delivered directly, or closer, to the storage area
- Reduce carrying distances where possible

FUNDAMENTALS OF LIFTING/HANDLING

Think before lifting/handling. Plan the lift. Can handling aids be used? Where is the load going to be placed? Will help be needed with the load? Remove obstructions such as discarded wrapping materials. For a long lift, consider resting the load midway on a table or bench to change grip.

Adopt a stable position. The feet should be apart with one leg slightly forward to maintain balance (alongside the load, if it is on the ground). Be prepared to move your feet during the lift to maintain your stability. Avoid tight clothing or unsuitable footwear, which may make this difficult.

Get a good hold. Where possible, the load should be hugged as close as possible to the body. This may be better than gripping it tightly with hands only.

Start in a good posture. At the start of the lift, slight bending of the back, hips and knees is preferable to fully flexing the back (stooping) or fully flexing the hips and knees (squatting).

Don’t flex the back any further while lifting. This can happen if the legs begin to straighten before starting to raise the load.

Keep the load close to the waist. Keep the load close to the body for as long as possible while lifting. Keep the heaviest side of the load next to the body. If a close approach to the load is not possible, try to slide it towards the body before attempting to lift it.

Avoid twisting the back or leaning sideways, especially while the back is bent. Shoulders should be kept level and facing in the same direction as the hips. Turning by moving the feet is better than twisting and lifting at the same time.

Keep the head up when handling. Look ahead, not down at the load, once it has been held securely.

Move smoothly. The load should not be jerked or snatched as this can make it harder to keep control and can increase the risk of injury.

Don’t lift or handle more than can be easily managed. There is a difference between what people can lift and what they can safely lift. If in doubt, seek advice or get help.

Put down, then adjust. If precise positioning of the load is necessary, put it down first, then slide it into the desired position.

EMPLOYER RESPONSIBILITY

1. Engineering controls

Making physical modifications to facilities, equipment and processes can reduce exposure. Some questions to consider:

- Can mechanical lifting ads such as hoists, pallet jacks, carts, or conveyors be used instead of manual material handling?
- Can the load be lifted within the range of knee to waist height?
- Can the vertical distance the load has to be lifted or lowered be shortened? Options include limiting shelf height, and raising the worker.
- Can stooped or twisted positions be avoided by providing unrestricted work space, or arranging the workspace differently?
- Can the size of the load be made smaller? Options include ordering smaller containers, or having workers make two trips with smaller loads rather than one trip with a heavy load.
- Can carrying distance be shortened by changing the workflow?

2. Administrative controls

Changing work practices and work policies, and training workers in proper lifting and handling techniques, can limit risk of MSIs. Some questions to consider:

- Can the task design be changed? For example, changing a carrying task to a pushing or pulling task.
- Can workers be given time to rest or recover when lifting or handling loads?
- Can work demands and work pace be balanced more effectively
- Can the tasks be varied?

FINAL WORD

It is incumbent for joint-health and safety committees to conduct and assemble actual demonstrations with all employees in the employ of proper lifting, handling, or carrying objects in the course of workplace regimen.