# **Lifting Safely**



# WHAT'S AT STAKE?

#### Safe Lifting Techniques at Work

Safe lifting techniques should be stressed by all workplaces, but are commonly overlooked. Most people just want to finish the job quickly, even if that means moving heavy objects in unsafe ways.

In doing so, workers can become injured and have to miss work for extended periods of time.

# WHAT'S THE DANGER?

According to 2014 data from the Bureau of Labor Statistics, overexertion in lifting or lowering caused an average of 12 days away from work (30 percent more than the overall average), and was the fifth highest rate of days missed, per 10,000 full-time workers.

The Bureau of Labor Statistics (BLS) also says that more than one million workers experience back injuries each year. One fourth of all workers compensation indemnity claims are a result of back injuries. Low back pain is one of the most common reason that people miss work, second only to the common cold. In America, we spend more than \$100 billion annually in medical bills, disability and lost productivity at work from back injuries and illnesses. More importantly, this problem causes unnecessary discomfort and pain to workers which can have a devastating effect on their lifestyle and ability to work. A BLS survey shows that 75% of back injuries occurred while performing lifting tasks, which underscores the importance of reducing back injuries caused by lifting.

#### Lifting/handling

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.

#### Risks/Dangers

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

# **HOW TO PROTECT YOURSELF**

The big ticket item is to reduce the risks of injury.

### HERE IS THE HOW

When choosing the appropriate risk controls, the employer must consult with the joint health and safety committee or the worker health and safety representative. Be sure to test the risk control before fully implementing to make it work within your organization. To help identify potential risk controls, consider the following questions:

# **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?

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?

#### TECHNIQUES OF SAFE LIFTING

#### Safe Lifting Techniques

Prevention and planning are perfect solutions for most hazard abatement in the workplace. With proper safety training and the use of these safe lifting techniques, your team should be able to greatly reduce the risk of back and lifting injures.

- Before lifting, assess what it is you are lifting and where it is going. Recognize how heavy the object is and determine if you can lift it by yourself. Never hesitate to ask for help if it is too heavy.
- Make sure to check the pathway you are taking to your final destination. There should not be any trip hazards or debris in your path.
- To safely lift the object, get as close to the object as possible. This will create more leverage for you and less strain on your muscles.
- Next, position your feet shoulder-width apart and angle one foot slightly forward for better balance.
- When you go to bend down for the object, keep your back straight and use your legs and hips to lower yourself to the object. Never bend at the waist because this will cause immediate strain on your lower back.
- As you bend down to pick up the object, use the hand of the leg that is angled forward and place it on the side of the object furthest from you.
- After you have a firm, comfortable grip, tighten your core and focus on keeping a straight back as you lift the object with your legs and hips. Looking forward will help keep your back straight and extend your legs. Always remember to keep the object close to your body.

#### **AVOIDANCE**

Just as important as following safe lifting techniques, avoiding unsafe behavior can help you to avoid injury and to advise others on how to do the same.

Avoid the following:

- Never hold your breath while you lift an object. Exhaling out when lifting an object is the proper technique to use.
- When carrying an object, do not bend or twist at the waist. If you need to turn, slowly turn with your feet.
- Don't use a partial grip on an object. Always use two hands!
- Never obstruct your vision with an object you are carrying. Keep the object at mid-section level, from the mid-thigh to mid-chest. This is your "power zone."
- Never forget to wear your personal protective equipment, such as gloves for grip or shoulder pads to cushion the load.

#### THE LIFT EXAMINED

#### Think before you lift

Plan the lift. Where is the load going to be placed? Will help be needed with the load? Is there equipment you could use, such as a hoist, that could help with the lift?

Remove obstructions, such as discarded wrapping materials. For long lifts, such

as from floor to shoulder height, consider resting the load midway on a table or bench to change your grip on it.

#### Keep the load close to the waist

Keep the load close to the waist for as long as possible while lifting to reduce the amount of pressure on the back.

Keep the heaviest side of the load next to the body. If closely approaching the load is not possible, try to slide it towards the body before trying to lift it.

#### Adopt a stable position

Your feet should be apart with 1 leg slightly forward to maintain balance (alongside the load, if it's on the ground).

Be prepared to move your feet during the lift to maintain a stable posture. Wearing over-tight clothing or unsuitable footwear, such as high heels or flip flops, may make this difficult.

#### Ensure a good hold on the load

Where possible, hug the load close to the body. This should help you make a stronger and more solid lift than gripping the load tightly with the hands only.

# Do not bend your back when lifting

A slight bending of the back, hips and knees at the start of the lift is preferable to either fully flexing the back (stooping) or fully flexing the hips and knees — in other words, fully squatting.

#### Do not bend the back any further while lifting

This can happen if the legs begin to straighten before starting to raise the load.

#### Do not twist when you lift

Avoid twisting the back or leaning sideways, especially while the back is bent.

Keep your shoulders level and facing the same direction as the hips. Turning by moving your feet is better than twisting and lifting at the same time.

#### Look ahead

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

#### Move smoothly

Do not jerk or snatch the load as this can make it harder to keep control and increases the risk of injury.

#### **Know your limits**

Do not lift or handle more than you can easily manage. There's a difference between what people can lift and what they can safely lift. If you're in doubt,

seek advice or get help.

# Lower down, then adjust

Put the load down and then adjust. If you need to position the load precisely, put it down first, then slide it into the desired position.

# FINAL WORD

Back injuries and repetitive strain injuries are problems that all workers can do without. Good planning and safe work regimen can prevent these injuries throughout all white and blue collar workplaces.