



**Creating a Safe Workspace: Keeping Backs Healthy** 



### **Back Pain and Work**



- Back Pain is one of the leading causes for missing work in the United States.
- Overexertion is the biggest factor for back related injuries.





# **Back Injury Prevention Tips**

- 1. Try to eliminate as many lifts as possible. Review the job. There may be a better way, such as utilizing lifting aids or tools.
- Ask a co-worker for assistance to help control the load.
- 3. Identify departments or tasks that require lifting, and establish a set of safety rules. Train employees in these lifting techniques.
- 4. Review job descriptions for employees that do need to lift, and state the physical requirements for the job in the description. Don't needlessly place employees in harm's way.





# Contributing Factors to Handling & Lifting Injuries

- Poor Physical Condition- Stomach muscles provide a lot of the support needed by your back. If you have weak stomach muscles your back may not get all the support it needs, especially when lifting or carrying heavy objects. Good physical condition in general is important for preventing strains, sprains and other injuries.
- Poor Posture- It is best to maintain the back in its natural S-shaped curve. Avoid leaning forward, unsupported, when you sit, and hunching over while standing.





# Contributing Factors to Handling & Lifting Injuries

- Extra Weight- The more you weigh, the more stress is put on your back every time you bend over- at a 10:1 ratio.
- Stress- Tense muscles are more susceptible to strains and spasms.
- Overdoing It- It is important to recognize your physical limitations and abilities. Don't be afraid to say, "This is too heavy for me to lift alone."



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# Handling & Lifting Injuries in the Workplace

Many workplace injuries can be caused by the following:



1. Heavy Lifting

2. Pushing, Pulling or Carrying

3. Staging



Fortunately, there are a number of ways to prevent injuries associated with these practices...





## 1. Heavy Lifting

#### Potential Hazard

 Object Weight- lifting loads greater than 50lbs will increase the amount of stress placed on the back

 Posture- bending places excess stress on the spine, while reaching places excess stress on the shoulders

Repetition- repeated exertion tires muscles, and holding items for a long period of time will greatly increase the chance of back injury

#### Solution

- Use assistive devices such as pallet jacks, forklifts, winches, and dollies when possible; Break large loads into smaller loads whenever possible; Use two or more people to lift loads larger than 50lbs.
- Use your legs when lifting; Move items closer to your body before lifting; Minimize bending and reaching by placing items on shelves or racks; Avoid twisting; Carry loads closer to your body.
- Work in a team; Rotate tasks to allow for breaks; Utilize stands or jigs that can hold large materials in place.



### 1. Heavy Lifting

#### Potential Hazard

### Inadequate Handholds- create difficulty lifting, and increase the risk of injury and dropping the item

Environment- very cold or very hot temperatures, as well as poor visibility, can negatively affect work and increases the risk of injury

#### Solutions

- Move materials into containers with handholds; Wear personal protective equipment to prevent injury; Ensure gloves fit properly.
- Wear warm clothing when working in cold temperatures; Drink a lot of water to stay hydrated; Provide lighting in areas with poor visibility.





# 2. Pushing, Pulling or Carrying

#### **Potential Hazard**

Posture- bending, twisting, and reaching can lead to spinal injury and muscle strain

#### Solution

Utilize assistive devices; Push, don't pull; Do not stack materials higher than eye level; Use ramps, or stair-climbing hand trucks when using stairs; Keep the weight of the load under 50lbs.

- Forceful Exertion- exerting more force on poorlyfunctioning equipment can put strain on your back, legs and arms
- Maintain wheels on assistive devices; Avoid moving over bumpy terrain; Wear shoes with good soles to prevent slipping; Provide ramp or elevator access when necessary.



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## 3. Staging

### **Potential Hazard**

- Poor Staging- inefficient staging causes employees to lift materials from awkward positions and carry items longer than necessary
- Poor Housekeeping- an unorganized workspace increases the risk of injury, and decreases efficiency

#### Solution

- Place items on stands or racks, not on the floor; Stage materials within 25 to 50 feet of point of use.
- Create organized shelves with aisles; Regularly maintain and clean the workspace







## Safe Lifting Reminders & Recommendations

Take it Easy- Use pallet jacks, dollies, winches, pulleys, forklifts, etc. when possible;
 Break large loads into smaller loads; Work as a team.

- Lift with Your Legs- This will allow for your leg muscles to do the work, preventing back injury; Avoid bending at the waist.
- Plan Your Route- Choose the safest and fastest route to your destination; Avoid stairs and areas with poor footing; If you must use the stairs, get help; Plan rest stops along your route to prevent muscle fatigue.







# Safe Lifting Reminders & Recommendations

- Avoid Tall Stacks- Do not reach over a surface to pick up an object; If you cannot reach an object slide it toward you; Stacking objects too high can obstruct your view, leading to injury.
- Stay Organized- Keep the workspace clean to prevent tripping hazards; Organization will increase productivity, efficiency, and create a safer work environment.









### **Worker Evaluation**

When evaluating a worker's lifting habits, consider the following variables:

Frequency of Lifting

Duration of Lifting Activities

Type of Lifting

Worker's State of Health, Body Size, Age and General Physical Fitness



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### Conclusion

No approach will completely eliminate back injuries. However, proper lifting techniques can help prevent downtime due to avoidable back injuries. Simple workplace solutions can additionally create a more efficient, productive environment. With a little practice, proper techniques can become good daily habits that can help prevent back injuries both on and off the job.





