

# Spot the Safety Hazard: Safe Lifting Techniques Prevent MSIs



**Which Worker Is Using Safe Lifting Techniques'**

**Which of these workers is more likely to develop a musculoskeletal injury'**

**The worker on the right** is reaching high over his head to stack the box. Working in such an awkward and unnatural posture puts him in danger of fatigue and strain to the neck, back, joints, muscles and other “musculoskeletal injuries” (MSIs), especially if the task is repeated over a prolonged period.

**The worker on the left** is using a ladder platform that allows her to stack the boxes in a natural, upright position.

**The Moral:** Work tasks should fit the worker's body—not the other way around. Sometimes this requires use of mechanical devices to bring the work surface down or elevate the worker to avoid the need for reaching, bending or twisting.

## **THE DANGERS OF IMPROPER LIFTING**

### **WHAT'S AT STAKE**

#### **5 Reasons to Pay Attention**

1. MSIs don't end your life—they just ruin it;
2. MSIs are extremely painful and may render you permanently unable to work again;
3. MSIs are extremely common—causing more than 1 in 3 lost-time injuries;
4. Using improper lifting and stacking techniques like the worker on the right makes you more likely to get an MSI;
5. Using proper lifting and stacking techniques like the worker on the left makes you less likely to get an MSI.

## **THE 7 MSI RISK FACTORS**

For manual lifting, i.e., lifting and moving heavy or bulky objects without using a tool or machine like a forklift, pulley or crane, the MSI risk factors include:

### **1. THE OBJECT'S WEIGHT**



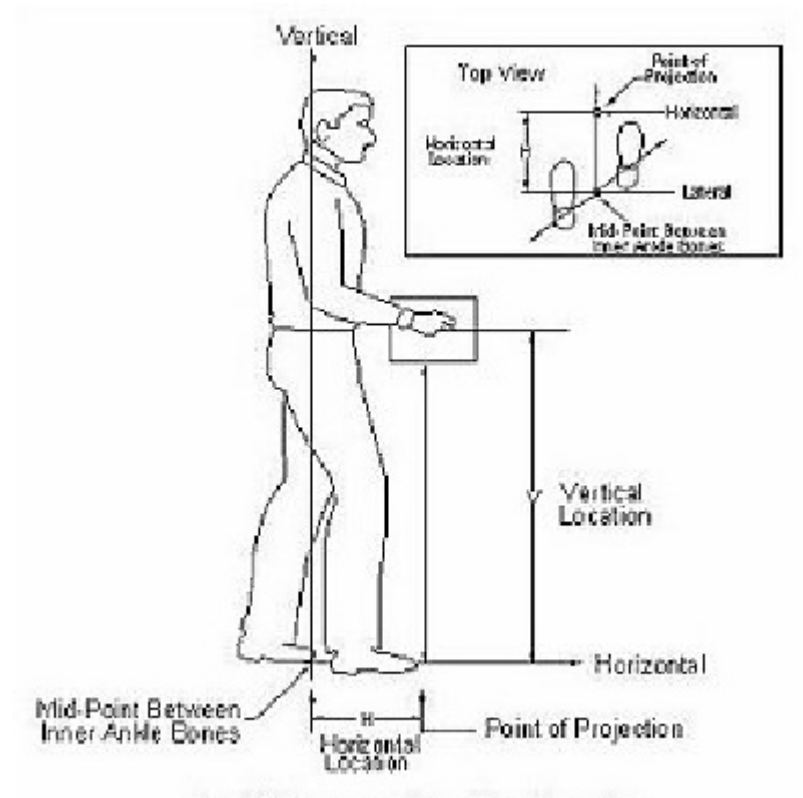
The heavier the object, the greater the energy needed to lift and move it and the greater the MSI risk

## **2. THE OBJECT'S WEIGHT DISTRIBUTION & SHAPE**



Moving lighter objects might present a high risk of MSIs if the object's shape or bulkiness makes it hard to lift and carry

### **3. HORIZONTAL DISTANCE OF LOAD FROM THE BODY**



#### 4. THE OBJECT'S VERTICAL LOCATION



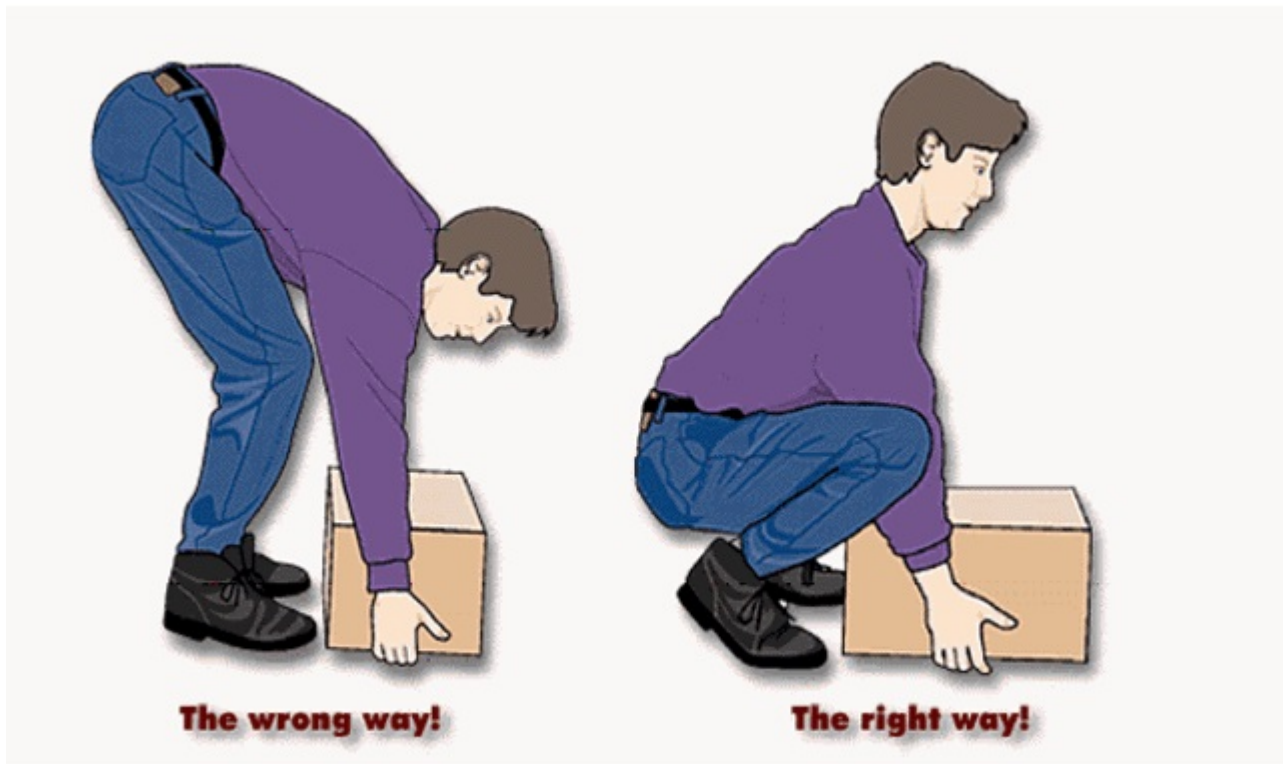
Vertical location means where the object is located in relation to the floor before, during and at the end of the lifting process

## 5. HOW LONG YOU HANDLE THE OBJECT



Lifting and moving objects involves a greater risk of MSIs when you do it over a frequent or sustained period

## 6. YOUR LIFTING POSTURE



Bending the back and bending forward—like the worker in the photo above—puts major stress on your spine; bending your knees and using your legs to lift significantly reduces that stress

## 7. YOUR GRIP





In addition to increasing the risks of dropping the object, a poor grip reduces the amount of weight you can safely carry

## **10 DO's & DON'Ts for SAFE LIFTING**

1. Stretch your muscles before lifting
2. Size up the load before you try lifting it to ensure you can handle it safely
3. Get as close as possible to the load before lifting it
4. Keep the load as close to your body as possible
5. Don't lift objects that obscure your vision or footing
6. Don't twist your back and waist when you lift
7. Don't jerk the load
8. Organize the work so you can avoid lifting from floor to shoulder level or above
9. If possible, spread your lifting chores throughout the day rather than trying to complete them all at once
10. Use dollies, carts and other lifting tools whenever

possible—rule of thumb: try not to carry loads more than 10 feet without getting mechanical help