

# BACK LIFTING SAFETY

Environmental Health and Safety

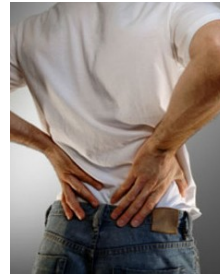


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## LOWER BACK PAIN

Lower back pain is the most common work-related medical problem in the United States and the second most common reason for doctor visits among U.S. citizens, according to the National Center for Health Statistics.

Affecting more than 20 million Americans, it is the leading cause of disability among people ages 19-45. It hits the bottom line fairly hard too: lower back pain is the #1 leading cause of missed work days, costing Americans \$60 billion per year in treatments and American Businesses about \$15 billion annually. It's estimated that at least 80 percent of all Americans will experience some form of low back pain at some point in their lives.



## YOUR SPINE

The spine includes vertebrae (bones), discs (cartilaginous pads or shock absorbers), the spinal cord and nerve roots (neurological wiring system) and blood vessels (nourishment). Ligaments links bones together and tendons connect muscles to bones and discs. The ligaments, muscles and tendons work together to handle the external forces the spine encounters during movement, such as bending forward and lifting.

## DIAGONAL LIFT

This is the most common lift and the key to its success is in maintaining the spinal curve and using the legs to lift.



- » Straddle the object with one foot ahead.
- » Lower the body by bending your knees and hips.
- » Firmly grasp the object.
- » Bring the object as close to you as possible.
- » Straighten up and make sure that your head rises before your hips.

## POWER LIFT

This is the lift of choice for bulky or heavy loads.



- » Stand almost over the object with knees in a semi-squat position.
- » Have a wide firm base with one foot just ahead.
- » Grasp the object firmly.
- » Begin lifting by moving the head first then straightening out the legs.
- » When the hips begin to straighten, pull the object towards your waist.

## TRIPOD OR SHOULDER LIFT

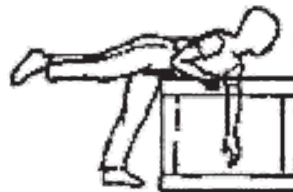
This is a good lift for people with little arm strength but is not suitable for anyone suffering from knee problems.



- » Place one foot at front edge of the object
- » Kneel down on other knee
- » Grasp the object firmly, maintaining a straight back
- » Lift or roll the object onto your thigh
- » Ensuring that you maintain a straight back, use both legs to stand up while cradling the object

## GOLFER'S LIFT

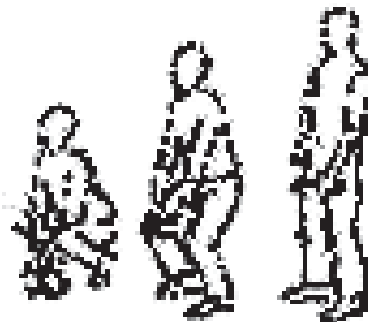
This lift is used for people with limited strength or for reaching over a barrier such as a fence.



- » Place one hand on a firm surface to support the upper body
- » While maintaining the curve of the spine, bend at the hip and raise one leg behind
- » Look up while picking up the object
- » Use the hand on the firm surface to push yourself back

## DEEP SQUAT LIFT

This lift is used for lifting small, light objects but is unsuitable for people with knee problems.



- » Stand in front of the object with feet shoulder width apart
- » While maintaining natural spinal curve, squat fully and grasp the object close to your body
- » Use your legs to raise yourself up

## PARTIAL SQUAT LIFT

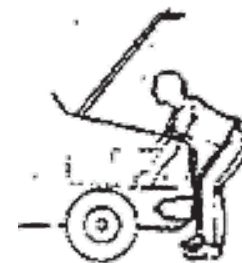
This lift is useful for heavy and bulky objects.

- » Stand with feet shoulder width apart while placing one foot in front of the other
- » Place one hand on thigh or a fixed surface
- » Bend at the hips and knees to do a partial squat
- » Pull the object close and push with supporting hand to stand up



## STRAIGHT LEG LIFT

This lift is only used for situations where the hips and knees cannot be bent and other lifts cannot be used, special care should be taken when using this method.



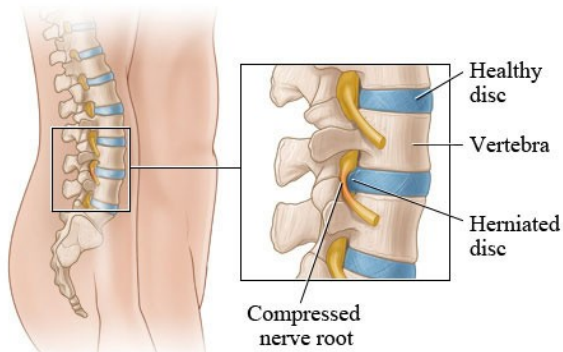
- » Stand as close to the object as possible
- » With knees slightly bent and resting against the object over which you are lifting
- » Bend at the hips to firmly grasp the object
- » Lift by extending the hips while maintaining the curve of the spine.



**Bend with your knees, not with your back!**

## BACK INJURIES

Some back injuries involve the “soft tissue” that is the muscle, ligament type injury. A more serious injury occurs when the discs of the spine are involved.



## LIFTING METHODS

There are a number of techniques which can be used when lifting that are explained inside this brochure. The method of lift chosen will depend on several factors including:

- » The weight and size of the object
- » The distance of the move
- » The strength, flexibility and capability of the individual

## TOP TIPS ON LIFTING

First and foremost, stop and think!

- » Place the feet correctly
- » Adopt and maintain a good posture
- » Get a firm grip of the object
- » Move your feet (don't twist the body)
- » Keep the load close to you
- » Put the load down before adjusting it
- » Do not use jerky movements
- » Get help or break the load up into smaller sizes if needed
- » Use a cart

When lifting, keep your spine in line!



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