

SAFE LIFTING

INTRODUCTION

This section provides guidelines to address material handling exposures as serious injuries can result from improperly handling and storing materials. Employees should be trained on proper procedures that can help to minimize or reduce these incidents from occurring. Whether moving materials manually or mechanically, employees should know the potential hazards associated with the task and how to control them within the workplace.

The types of injuries can include:

1. Strains and sprains from lifting loads improperly or that are too heavy for the physical lifting abilities of the employee.
2. Fractures and bruises caused by being caught between material handling equipment and a fixed object.
3. Cuts and bruises caused by striking a fixed object or by a falling object.

GUIDELINES

The general requirements of this program shall be followed for material handling, and storage of material.

TRAINING

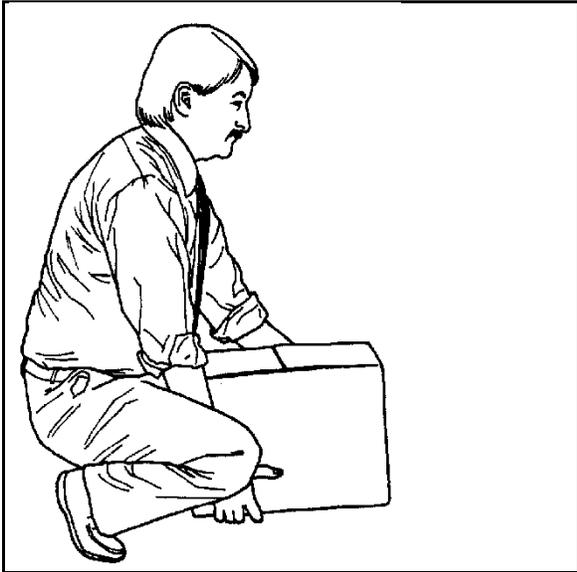
All employees shall be trained in safe methods of handling, storing, and disposing of materials. Documented retraining shall be conducted on a regular basis. Employers must train in the expected procedures and proper use of equipment in which they might operate. A record of retraining shall be maintained on file by supervision.

Employees shall be trained in the following safe work practices:

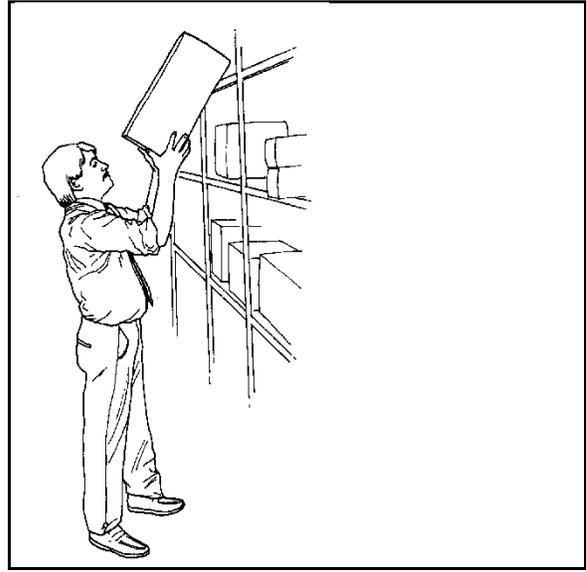
- Store all material so that it is stacked, blocked, interlocked, and limited in height so that it is secure against falling, sliding, or collapse.
- Store material so that it is at least 18" below sprinkler heads.
- Store heavy items on shelves that are between knee and shoulder level. Secure shelving units to wall to prevent tipping over.
- Do not exceed maximum safe load limits of floors.
- Do not exceed maximum safe load limits of shelving.
- Keep aisles clear and in good repair, free of tripping hazards to allow free and safe movement of material handling equipment and employees. Permanent aisles and passageways shall be appropriately marked.
- To survey the travel areas prior to the lift to ensure it is free of obstacles
- Ensure the aisle way offers sufficient clearance when using mechanical aids. This will minimize the chance of employees from being pinned between the equipment and fixtures in the workplace.
- Use ramps (if available) when a difference in work levels exists.
- Store material at least six feet away from floor openings.
- Separate non-compatible materials.
- Band boxed materials or secure them with cross-ties or shrink plastic wrap.
- Block the bottom tiers of drums and barrels to keep them from rolling or shifting in either direction.

- Stack and bag materials by stepping back the layers and cross keying the bags at least every ten bags high.
- Inspect loads to verify they are stable and secure (to prevent displacement during handling operations).
- Keep storage areas free from accumulations of materials that could cause tripping, fires, explosion, or could harbor pests.
- Follow these requirements when manually handling materials:
 - Do not lift awkward or heavy materials by yourself. Get a fellow employee to help you.
 - Use power and mechanical lifting equipment in place of manual lifting when available.
 - Plan the lift when two or more persons are handling an object. Only one person should give instructions. Decide the route you plan to take before carrying the object and discuss all possible problems prior to moving the object. Work as a team!
 - Inspect the object you are going to move or lift for sharp edges, nails, splinters, and other problems that may cause injury prior to lifting.
 - Do not stack carried objects so they block your view of your path of travel.
- Follow these steps when manually lifting material, (see Exhibit A):
 - Keep feet apart; with one foot alongside the object being lifted and one foot behind it.
 - Keep your back straight (nearly vertical).
 - Tuck your chin to your chest. This will help you keep head, neck, and spine in proper alignment.
 - Grip the object with the whole hand and use a firm grip. Do not lift your fingers only gripping the object.
 - Tuck your elbows and arms in close to your sides. This will add to your leverage and help keep your body weight centered.
 - Keep your body weight centered over your feet.
 - Start the lift with a thrust of the rear foot, and allow your legs to perform the work. Do not twist during a lift. This is one of the most common causes of back injury. By simply turning the forward foot out and pointing it in the direction of the eventual movement, the greatest danger of twisting is avoided.
 - Keep the object close to your body.
 - Turn your feet and face the direction in which you will unload the object. Avoid lifting and twisting motions, turn your feet!
 - When unloading the object, keep the object close, and maintain same body positions as described above.
 - See your supervisor if you have any questions on the proper way to lift.
 - Ensure that all mechanical lifting equipment is in proper working order before using.
 - Do not overload or exceed the rated capacity of the mechanical aid.
 - Let the weight, size and shape of the material being lifted dictate the type of equipment used.

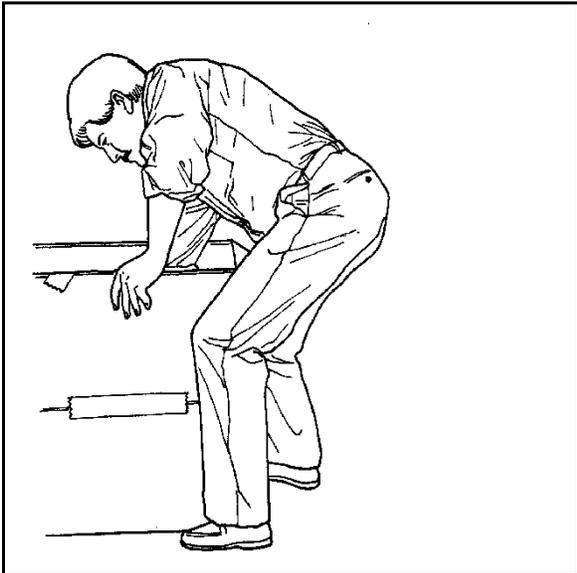
EXHIBIT A - Proper Lifting Technique



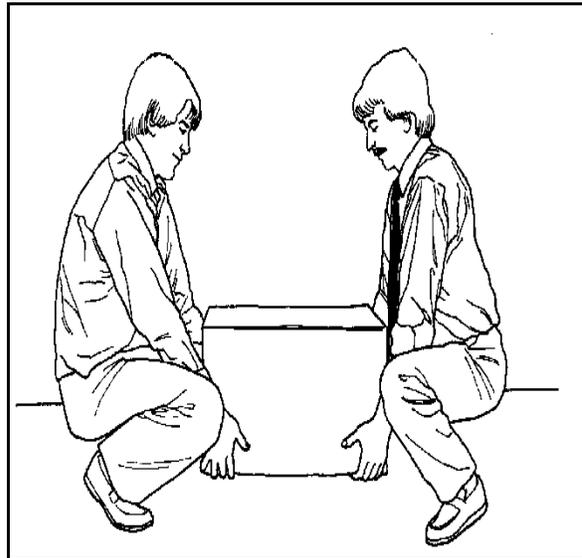
1. Lifting a boxed object from the floor



2. Lifting from overhead



3. Lifting a small, light-weight object from a basket or bin



4. Two-handed, two person lift

**CITY OF WARRENVILLE STANDARD OPERATING GUIDELINE
EFFECTIVE DATE:**

LIFTING AND MOVING TECHNIQUES

PURPOSE

The purpose of this Standard Operating Guideline (SOG) is to provide proper lifting and moving techniques in order to reduce injury. Using proper body mechanics, power lifting, and a power grip can help provide a safe lifting practice. Know your own limitations and the limitations of those around you.

DEFINITIONS

Body Mechanics: The proper use of the body to facilitate lifting and moving and prevent injury.

Power Lift: A lift from a squatting position with weight held close to body, feet apart and flat on the ground, body weight on or just behind balls of feet, back locked in. The upper body is raised before the hips, also called the "squat–lift position."

Power Grip: Gripping with as much hand surface as possible in contact with the object being lifted, all fingers bent at the same angle, hands at least 10 inches apart.

GOAL/OBJECTIVES

The goal of this SOG is to protect members from work related injuries while attempting to lift equipment or other items. The overall goal is **injury prevention** for our members.

LIFTING PROCEDURES

- a. Considerations you must think of before lifting:
 - 1) The object's size and weight
 - 2) Your limitations
 - 3) Communication with partner

- b. Five rules you must follow in order to prevent injury when lifting:
 - 1) Position your feet properly having the feet shoulder width apart with toes pointed slightly outwards.
 - 2) Use your legs, not your back
 - 3) Don't turn or twist
 - 4) Do not compensate when lifting with one hand — don't lean!
 - 5) Keep the weight close to you

- c. When you have to exert a lot of effort in reaching, follow these four rules:
 - 1) Keep your back in a locked–in position
 - 2) Avoid twisting while reaching
 - 3) Avoid reaching more than 15–20 inches in front of your body
 - 4) Avoid prolonged reaching when strenuous effort is required

- d. When you have to exert a lot of effort in pushing or pulling, follow these seven rules
 - 1) Push, rather than pull, if possible
 - 2) Keep your back locked in
 - 3) Keep the line of pull or push through the center of your body by bending your knees
 - 4) Keep the weight close to your body
 - 5) If the weight is below waist level, push or pull from kneeling position
 - 6) Avoid pushing or pulling overhead
 - 7) Keep your elbows bent and arms close to your sides

Following these steps will help ensure the safety of you and those around you. Never push your limits when trying to lift or move an item. Call for assistance when it is needed.