

Worksite: _____ Instructor: _____ Date/Time: _____

Topic M267: Material Handling

Introduction: Tasks should be evaluated and altered to reduce awkward posture, twisting, bending, reaching overhead, excessive weight, and repetition. Following are safety guidelines for handling material at the workplace:

- Prior to handling unfamiliar and hazardous materials or chemicals, read the label for safety instructions, and refer to the material safety data sheet/safety data sheet, or consult with your supervisor. Only handle materials and chemicals in approved containers and approved locations.
- Wear specific personal protective equipment when handling materials that present health hazards such as acids, corrosives, caustics and irritants.
- Use proper tools, hand trucks, dollies, carts, and hoists to lift and move heavy objects. Do not exceed the rated capacity of a lifting device.
- Inspect items to be handled for splinters, jagged edges, burrs, and rough or slippery surfaces.
- Never carry an object you cannot see over or around.
- When moving items on dollies or hand trucks, push rather than pull whenever possible. Chains used for material handling must be made of alloy steel. Test the weight of objects to be lifted. Get help if an item is too heavy to lift alone.
- When team handling an item, one person should give voice commands to coordinate the activity.
- Avoid getting your fingers, hands or other body parts pinched between the load and objects nearby.
- All material must be stacked, racked, blocked, interlocked, or otherwise secured to prevent sliding, falling, or collapse during transit.

Wear specific personal protective equipment when handling materials that present health hazards such as acids, corrosives, caustics, and irritants.

Proper Lifting Techniques: Stand close to the load and be sure footing is firm, feet slightly apart. Squat down – bend at the knees, keeping the back straight. Grip the load firmly. Breathe in before the lift, and lift with the legs. Move the item to its new location, making sure that you turn with your feet instead of twisting your back. Keep your back straight and bend at the knees when putting the load down.

There must be safe clearance in aisles, at loading docks, through doorways and where turns are made, where mechanical handling equipment is in use. Aisles and passageways must be clear and in good repair. Use tag lines or guide ropes when manual control is needed over swinging loads.

Material must not obstruct lights and fire extinguishing equipment, including sprinklers, aisles, exits, or electrical control panels. When storing materials that could cause hazardous reactions, segregate and mark them with appropriate warning signs. All equipment, structures, and accessories used for handling materials must comply with sound engineering practices and the specifications and recommendations of the manufacturer. They must support the load of the material plus the weight of itself.

Risk factors for handling materials include: Repetitive and/or prolonged activities, forceful exertions with the hands, prolonged static postures or excessive gripping, awkward postures, including reaching above the shoulders or behind the back, and twisting the wrist and other joints, continued physical contact with work surfaces like sharp edges, hard concrete, excessive vibration, hot and cold temperatures, and inadequate handling of tools.

Reduce extreme and awkward postures by using adjustable fixtures and rotating tables, work stations, and delivery bins that can accommodate the height and reach limitations of various sized workers. Work platforms that move up and down, rotating the part in front of the worker so the wrist and waist can be straight, are excellent ergonomically correct pieces of equipment.

Conclusion: Proper lifting techniques are crucial to preventing back injuries in the workplace. All employees should be trained in the safe handling of materials. Always utilize these safety guidelines when handling materials.

Employee Attendance: (Names or signatures of personnel who are attending this meeting)

These guidelines do not supersede local, state, or federal regulations and must not be construed as a substitute for, or legal interpretation of, any OSHA regulations.