



# Material Handling Safety

Presented by: Allied Insurance  
Brokers, Inc.

**COMMONWEALTH**  
**SCAFFOLD** | X | X |  
Quality Scaffolding Across New England

# In this presentation...

- Handling materials and its importance at Commonwealth Scaffold, LLC
- Types of ergonomic improvements
- Lifting guidelines
- Loading and emptying guidelines
- Carrying guidelines
- Handling guidelines
- Proper workstation set-up
- Identifying potential problems

# What is Material Handling?

According to the National Institute for Occupational Safety and Health (NIOSH), material handling is:

“seizing, holding, grasping, turning...or working with the hands” to lift, lower, fill, empty or carry containers.

# Why Ergonomics is Important in the Workplace

- Reduces or prevents injuries from grasping loads or leaning against hard surfaces
- Decreases unnecessary lifting, handling, reaching, pushing and pulling
- Reduces risk factors associated with bending and twisting
- Avoids maintaining a fixed position for a long period of time
- Increases productivity and morale



# Ergonomic Improvements

## Engineering Improvements:

- ❖ Rearrange, modify or redesign the workstation
- ❖ Use additional equipment, tools or materials to help get the task completed

## Administrative Improvements:

- ❖ Alternate heavy tasks with light tasks
- ❖ Take rests between tasks

# General Handling Guidelines

- ✓ Check the tag for the weight of the load to take the necessary precautions
- ✓ Test the load for stability
- ✓ Wear the appropriate shoes to avoid slipping, tripping or falling
- ✓ Wear gloves that fit properly
- ✓ Lift only as much as you can handle on your own. If the load is too heavy, get help.

# General Handling Guidelines

- ✓ Keep the load in your “power zone” or core
  - ✓ This is the area above your knees, below your shoulders and close to your body
- ✓ Exercise caution while lifting unstable loads
- ✓ Get a secure grip and use both hands
- ✓ Use smooth, even motions
- ✓ Use your legs to lift up the load; avoid using your back

# Lifting Guidelines

Avoid lifting from the floor and do not bend at the waist.



Hold the load near your body and lift with your legs.

# Loading and Emptying Guidelines

To raise heavier loads, use a scissor, load or pneumatic lifter.

Use a turntable to position the loads close to you.



Turntable on a load leveler

# Loading and Emptying Guidelines



Stationary scissors lift

To raise or lower yourself, or the load, and to access it more easily, use:

- A step stool
- Catwalks or platforms
- A pneumatic scissors lift
- Powered stackers
- A mobile scissors lift
- A stationary scissors lift

Or:

- Stack pallets to create a higher surface

# Carrying Guidelines

- ✓ Avoid carrying large loads that obstruct your vision
- ✓ Carry only as much as you can safely handle alone
- ✓ Avoid slopes and stairs while carrying loads
- ✓ Beware of slippery surfaces



# Carrying Guidelines

- ✓ Keep loads close to your body
- ✓ Make sure you have a clear view of the path in front of you
- ✓ Use two hands to carry objects
- ✓ Exercise caution when handling unsteady loads

# Carrying Guidelines

- ✓ Use the handles, grips or handholds while carrying
- ✓ Hold the container close to your body
- ✓ Use smaller containers versus trying to carry a load that is too excessive
- ✓ Increase the size of a bucket handle with padding for a better grip



# Handling Individual Containers

- Instead of lifting and pouring a drum, insert a siphon or a pump.
- Use a hook to grab light-weight containers instead of reaching with your arms.
- Use the following for individual loads: drum dolly, cart or platform truck, hand truck, conveyor, slide, chute, hand pallet truck, crane, stacker, powered hand truck, air ball table, forklift, carousel or tilter.



# Workstation Set-Up

- ✓ Maintain a clean workspace free of obstacles, spills and elevation changes
- ✓ Utilize non-skid cushioned floors
- ✓ Make sure lighting is adequate
- ✓ Make sure your workstation is at a comfortable height
- ✓ Report injuries immediately!

# Identify Problem Jobs

- Are the weights of loads to be lifted manageable?
- Are materials moved over minimum distances?
- Is the distance between the object load and the body minimized?
- Are walking surfaces level?
- Are objects easy to grasp?
- Are there handholds on these objects?
- When required, do gloves fit properly?

# Identify Potential Problems

- Are you wearing the proper footwear?
- Is there enough room to maneuver?
- Are mechanical aids used whenever possible?
- Are working surfaces adjustable to the best handling heights?
- Does material handling avoid movements below knuckle height and above shoulder height?
- Is help available for heavy or awkward lifts?
- Are high rates of repetition avoided by job rotation?

# Identify Potential Problems

- Are pushing or pulling forces reduced or eliminated?
- Do you have an unobstructed view of handling the task?
- Is there a preventive maintenance program for equipment?
- Are you trained in correct handling and lifting procedures?
- Have any problems? Notify your supervisor immediately!



# Material Handling Safety

Thank you for your attention  
and participation!

© 2007 Zywave, Inc. All rights reserved.