

# **DISTRICTS MUTUAL INSURANCE**

Safety in the Workplace

United Heartland, Inc.  
October 13, 2006



# AGENDA

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- # Types of injury exposures seen among the 16 Technical Colleges
- # Steps to reducing injuries
  - Housekeeping
  - Storage of product
  - Safe Lifting
  - Use of carts/dollies

# Districts Mutual Insurance

What type of injuries have we seen?

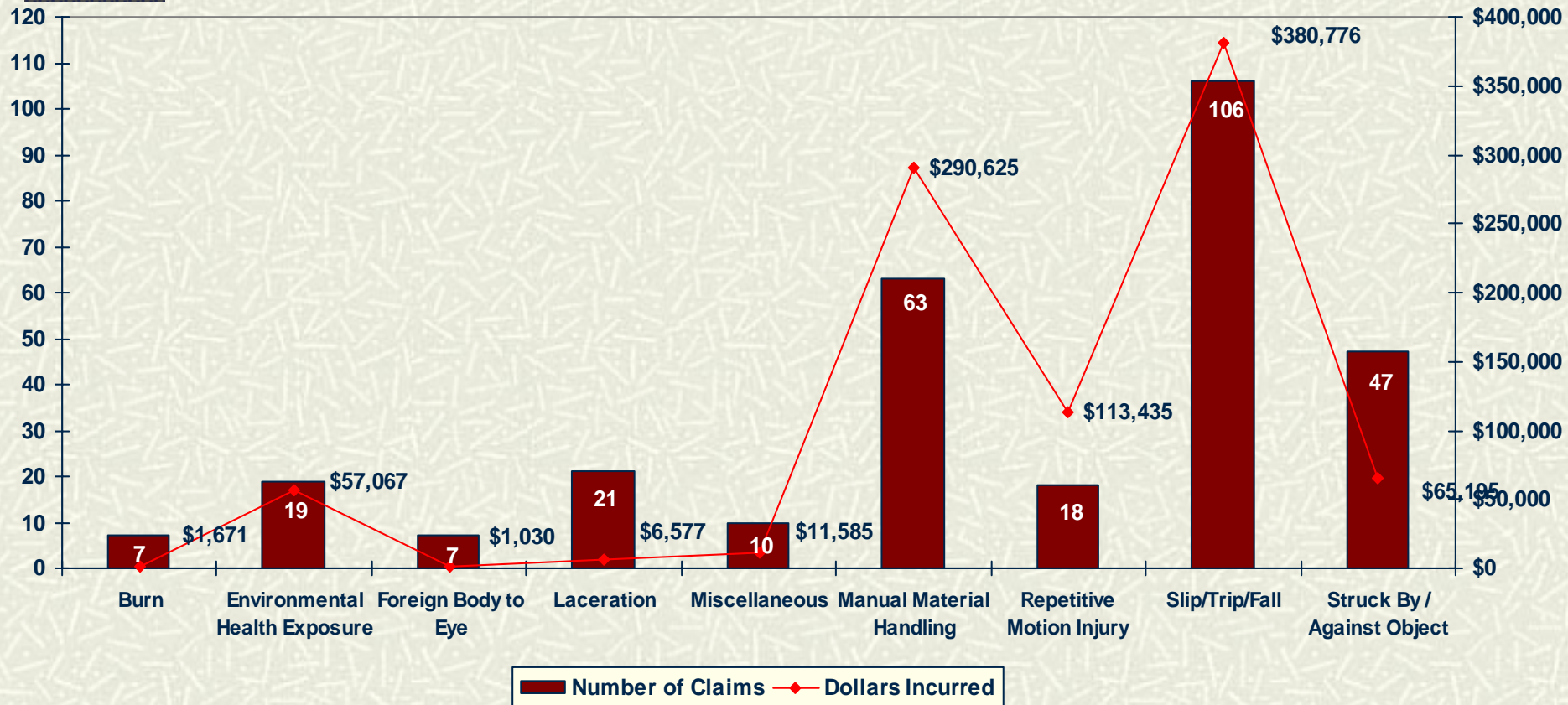
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- # Slips/trips/falls
- # Manual Material Handling
  - Lifting/Lowering
  - Holding/Carrying
  - Reaching/Bending
- # Repetitive Motion Injuries
- # Struck By / Against Objects

# Districts Mutual Insurance

## Loss Analysis: July 1, 2005-June 30, 2006\*

*\*results as of 8/31/06*



# Slip/Trip/Fall Exposures

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- # 35% of all claims reported in 2005 policy
- # 41% of total dollars incurred for policy
- # What areas should we look at?
  - Books in aisles
  - Cords on floors
  - Falls from ladders/stools
  - Uneven surfaces
  - Wet/Slippery Conditions

# SLIPS/TRIPS/FALLS

## Winter Weather Conditions

- # 16 (15%) of the 106 slip/trip/fall incidents were coded as slips/falls on ice
- # Wear proper footwear
- # Salt sidewalks



# HOUSKEEPING ISSUES

## Slip/Trip/Fall Exposures

### # Falls on Same Level

- 62 Claims in 2005  
Policy

### # Exposures

- Wet/slippery floor surfaces
- Cords on floor



# HOUSEKEEPING ISSUES

## Slip/Trip/Fall exposures

- # Hoses and cords in classrooms, hallways, kitchen areas present exposures to slips/trips/falls.
- # Consider an employee with an obstructed view working near these areas.



# Slip/Trip/Fall Exposures



- # Boxes in aisle ways
- # Employees walking around corners
- # Obstructed views?

# Slip/Trip/Fall Exposures



- ⌘ Empty boxes in aisle ways

# Slip/Trip/Fall Exposures

Always watch where you're going



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## Slip/Trip/Fall Examples

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### # Actual Cases:

- Employee's foot got caught on computer cord, fell to floor landing on left hip.
- Employee was waling to workstation, tripped on carpet and fell forward-sprain/strain to left foot and knee.
- Employee slipped in puddle of water, fell against wall and floor.
- Employee slipped on ice that was under snow.

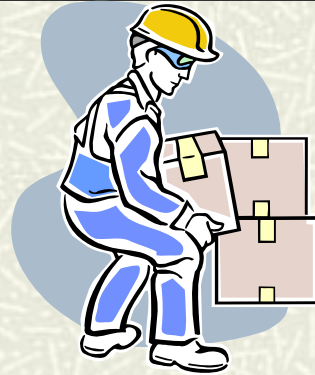
# Material Handling Exposures

- # 21% of claims in 2005
- # 31% of total incurred
- # What are the exposures to material handling injuries in the technical colleges?
  - Lifting boxes
  - Awkward Postures
  - Carrying items



# Pay special attention to...

**Heavy lifting**



**Frequent lifting**



**Awkward lifting**

# CAUSES OF BACK INJURIES

- Twisting at the waist while lifting or holding a heavy load
- Reaching and lifting . . .
  - over your head
  - across a table or other object
  - out the back of a truck
- Lifting or carrying objects with awkward or odd shapes . . . .
- Working in awkward, uncomfortable positions . .



# Not Just Back Injuries

Lifting results in:

Multiple Body Parts

Shoulders/Neck Injuries  
5 Claims

Back Injuries  
32 Claims

Abdomen/Groin Injuries  
3 Claims



8 Claims

Chest Injuries  
1 Claims

Arm/Hand/Wrist Injuries  
8 Claims

Knee/Leg Injuries  
6 Claims

# Material Handling Exposures

- # What weights are safe to lift?
  - 50-60 lbs?
- # Heaviest Products?



# Material Handling Exposures

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- # NIOSH Safe Lifting Guide
- # Under ideal conditions
- # *51-lb max “safe” lift*
- # Dependent on:
  - Height of lift at origin and destination
  - Ability to grip object
  - Minimal twisting while performing lift

**NIOSH** *National Institute for  
Occupational Safety and Health*

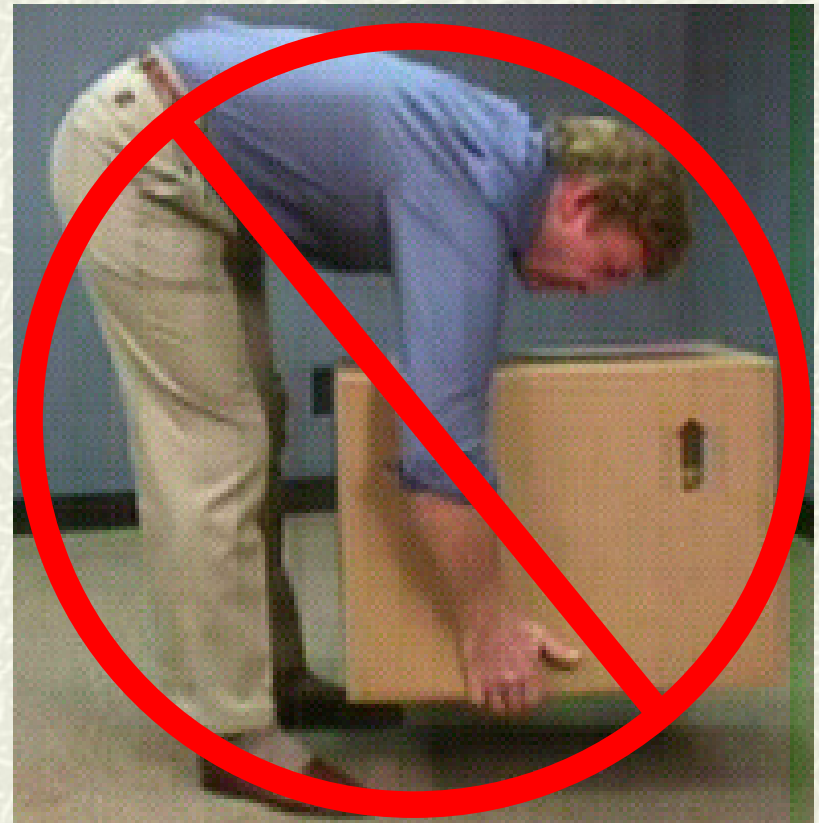
# SAFE LIFTING TECHNIQUES

- # Plan the task
- # Face the object. Feet in a staggered stance, shoulder width apart



# SAFE LIFTING TECHNIQUES

- # Bend with your knees, not the back
- # Bring the object close to the body
- # Keep nose, chin, elbows, and arms tucked with weight over the feet
- # Lift with your legs
- # Avoid twisting



# Proper Lifting

- **Lift With the Legs -- NOT THE BACK.**
  - Since leg muscles are stronger than back muscles, lift with the legs, until they are straightened.
  - Avoid jerky movements.
  - Keep the *natural curve* in the spine; don't bend at the waist.



# Proper Lifting

- # If turning is required:
  - Lift load completely
  - Move the feet around by pivoting on the toes, not by twisting at the waist.

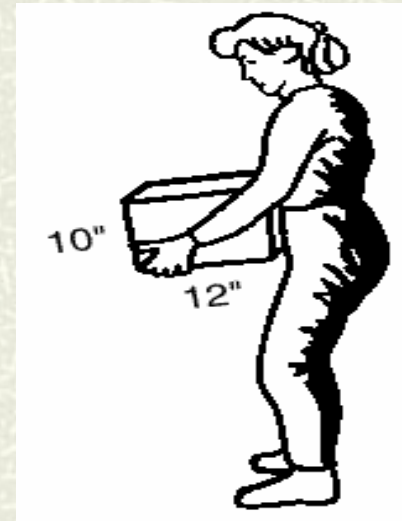
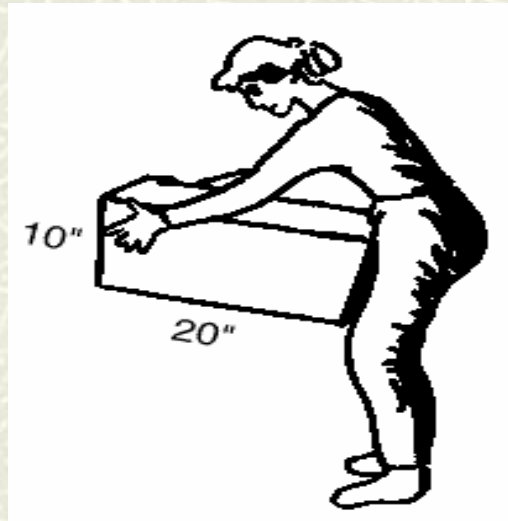


# Avoid Lifting and Twisting



# Carrying

- Keep load close to the body when possible
  - Reduce package / container size



# Prevent Back Injuries

## Use Proper Lift Procedures

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- # Follow these steps when lifting . . . .
  - Take a balanced stance, feet shoulder-width apart
  - Squat down to lift, get as close to the load as you can.
  - Get a secure grip, hug the load.
  - Lift gradually using your legs, keep load close to you, keep back and neck straight.
  - Once standing, change directions by pointing your feet and turn your whole body. Avoid twisting at your waist.
  - To put load down, use these guidelines in reverse.

# LIFTING CONSIDERATION

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- # Don't lift heavy objects on your own
- # TEAM LIFTS-Get two people or use dolly for assistance
- # Don't lift oversized objects



# SAFE LIFTING TECHNIQUES

- # Plan the task before you carry it out
- # Use proper body mechanics
- # Don't work in awkward positions
- # Avoid prolonged stooping or working bent over
- # Warm up before you lift



# SAFE LIFTING TECHNIQUES

- # Use dollies/carts whenever possible to reduce material handling injuries.
- # Make additional trips to reduce weight being handled.



What hazards are associated with this task?

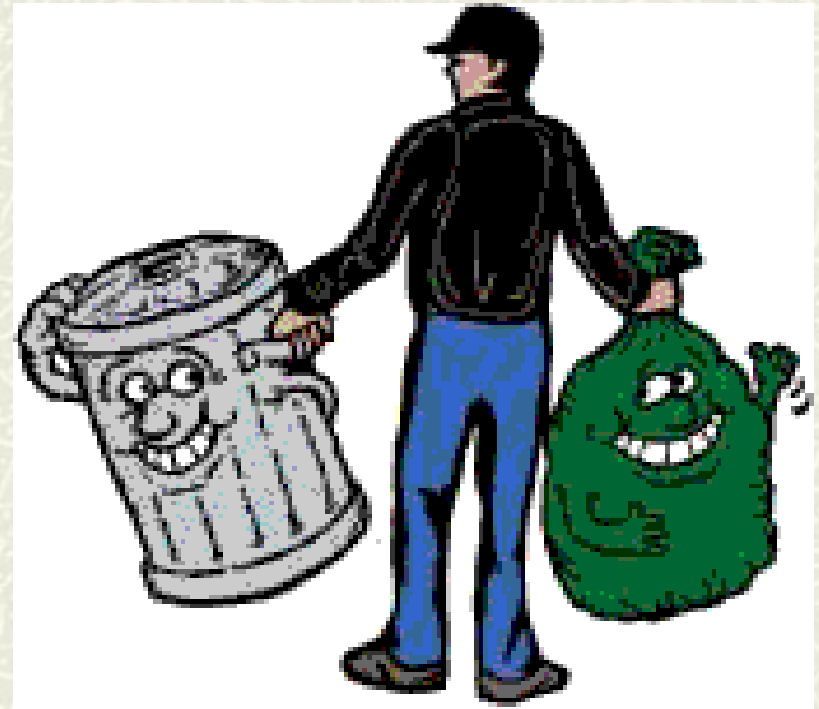


# MATERIAL HANDLING CONCERNS

## Lifting Garbage Bags

### # Hazards:

- How heavy is the bag?
- What's in the bag?
  - Chemicals
  - Needles
- PPE required?



# DISPOSING OF TRASH INTO DUMPSTERS

- Potential for back / shoulder injuries
- Possible to build platform near dumpster to reduce height?
- Empty garbage more often to reduce weight?



# FOLDING CAFETERIA TABLES

- # How can this job be improved?
- # **Require two people to avoid jerking motion and need to use feet to stabilize the load.**



# TRANSPORTING PRODUCTS WITHIN FACILITY

- Adding false bottoms to bins to help reduce the amount of bending performed by these employees.
- As product is removed from the bin, the bottom will elevate, raising the height of the items.



# USE OF CARTS/DOLLIES

Select the appropriate device for the task



Which carts are used for what purpose?

# Material Handling Injuries

Whenever possible, Push or Pull Rather Than Lift



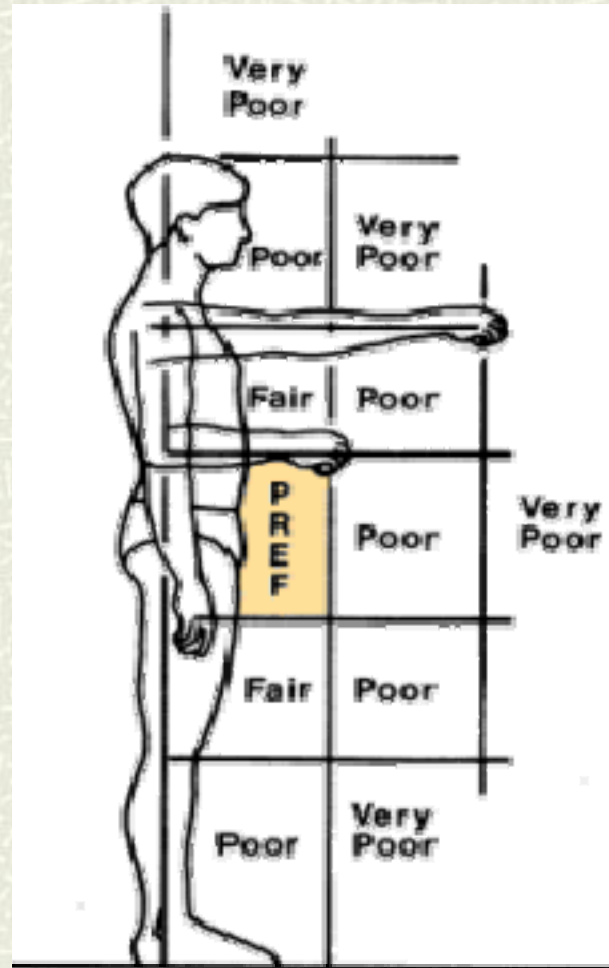
# LIFTING CONSIDERATION

## Extended Reaching

- # Keep items as close to the body as possible
- # Avoid extended reaching
- # Move objects to allow you a closer reach
- # Store objects in the **“SAFE LIFTING ZONE”**

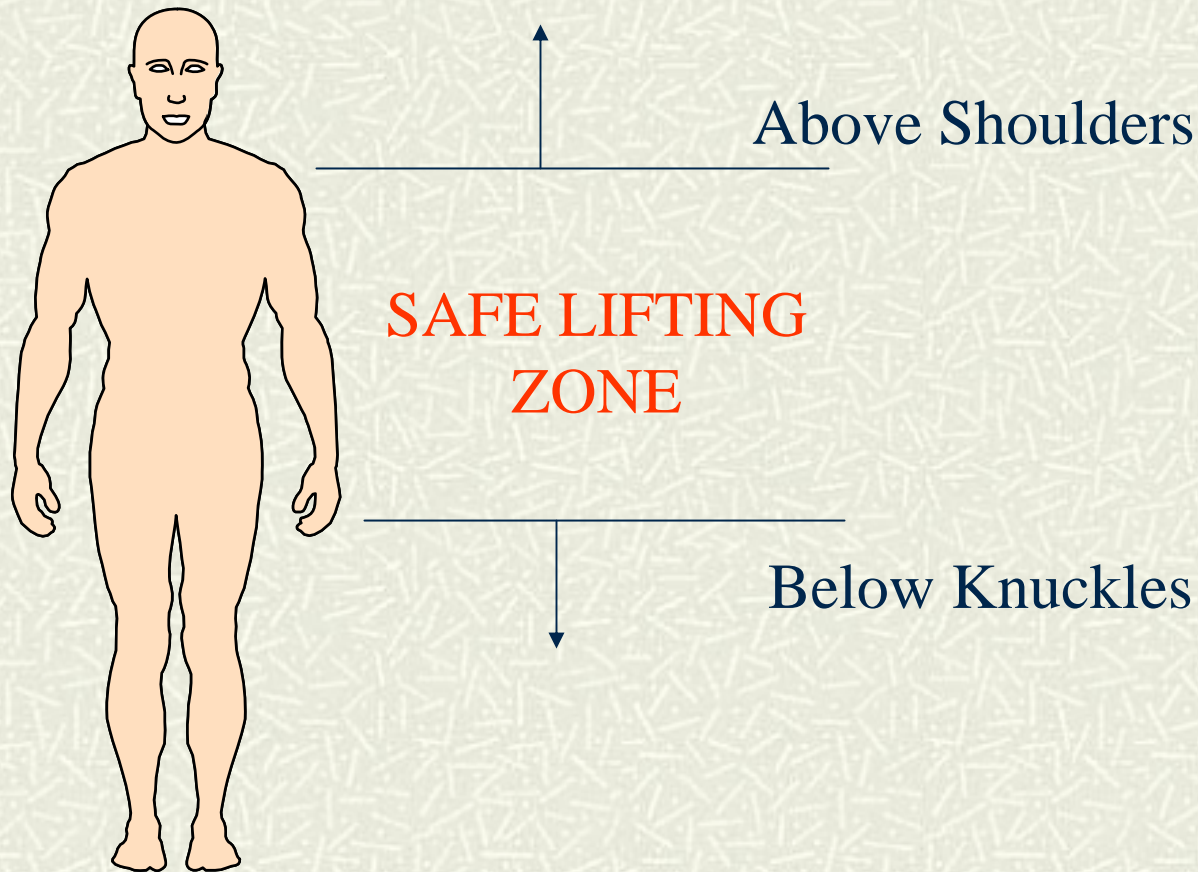


# “SAFE LIFTING ZONE”



# “SAFE LIFTING ZONE”

- Danger Zones for Lifts



# MATERIAL HANDLING

Know your capabilities and limitations.



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## Material Handling Injury Examples

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- Actual Case #1: Employee was helping a supervisor move a table. Employee was also carrying a 30lb table from room to room. Strain/pain to back area.
- Actual Case #2: Employee attempted to lift heavy box off cart and strained his lower back.
- Actual Case #3: Lifting boxes of pamphlets from shelf overhead, down to the floor, and then back up again.

# STRUCK BY/AGAINST OBJECTS

- # 15% of claims reported in 2005 policy
- # What is the exposure to injury?
  - Falling books
  - ???



# STRUCK BY/AGAINST OBJECTS



# STRUCK BY/AGAINST OBJECTS

- # Keep items in neat stacks
- # Avoid moving stacks
  - Is anybody on the other side of the aisle?
- # Use step ladders safely to avoid extended reaching



# SAFE USE OF LADDERS

Numerous options are available to accommodate needs.



# ACCESSING HEIGHTS

Don't use carts as a substitute!!



# LADDER SAFETY

- # Inspect ladders/steps prior to use-if in disrepair, do not use!!!
- # Place feet of ladder/stool on a level, stationary surface
- # Make sure feet are locked before using rolling ladder to prevent from slipping.



# LADDER SAFETY (continued)

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- # Always face the ladder/stool
- # Never put a ladder in front of a door
- # Avoid carrying books or other materials in your hands when climbing
- # Maintain three points of contact when possible
  - 2 feet / 1 hand
  - 2 hands / 1 foot

# HOW MANY POINTS OF CONTACT??



# SAFE USE OF LADDERS?



# SAFE USE OF LADDERS?



# Milwaukee Area Technical College

## What Hazards are Present?



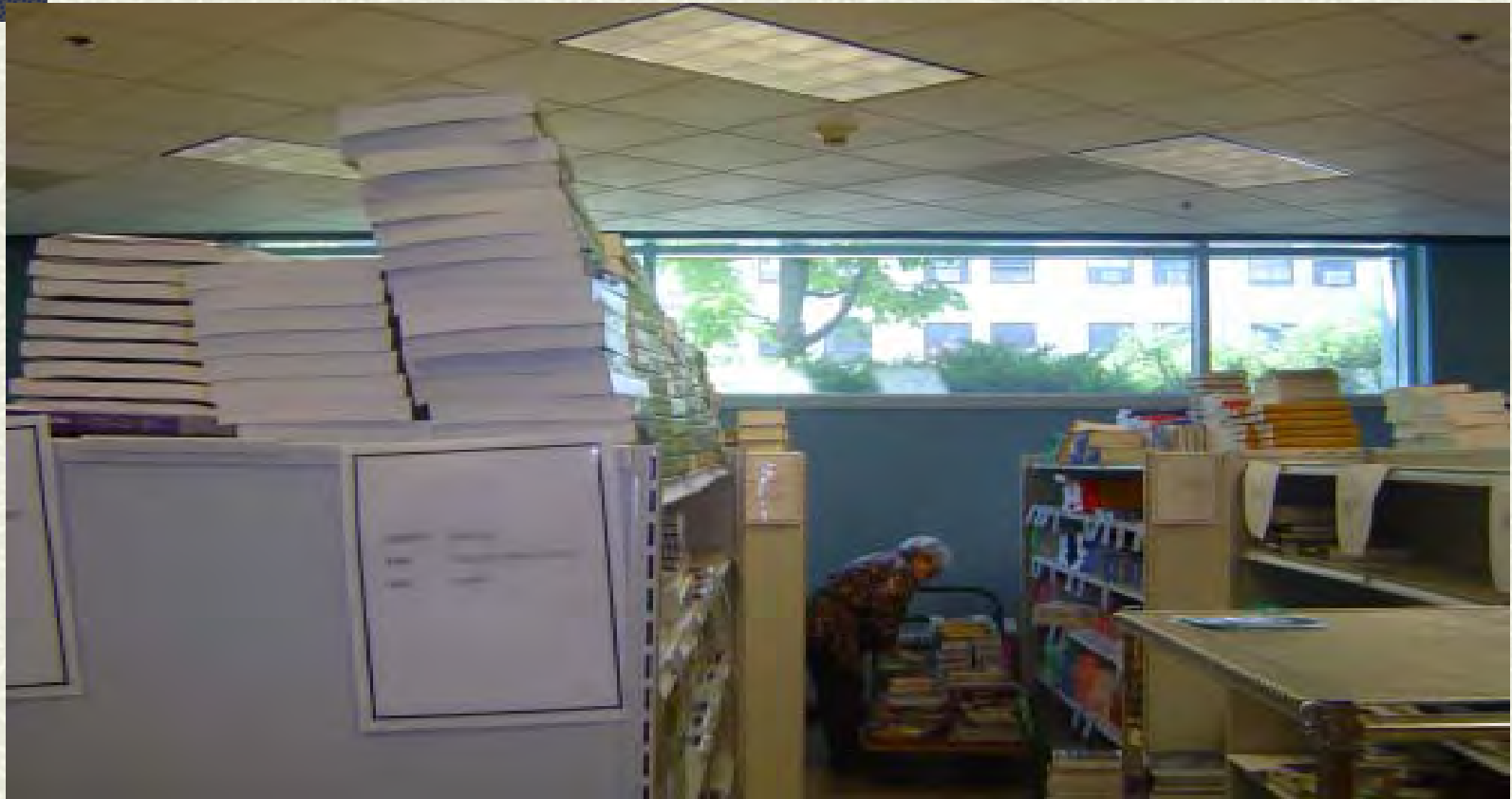
# Milwaukee Area Technical College

## What Hazards are Present?



# Milwaukee Area Technical College

## What Hazards are Present?



# Body Mechanics Training

- # Giving training alone on body mechanics is not effective
- # Making changes to jobs and the equipment available is better
- # Making changes along with training is most effective at reducing material handling injuries



**ANY QUESTIONS?**

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Thank you for your participation!!

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