E.A.S.E. Ergonomic Assist Systems and Equipment
A Product Council of Material Handling Industry
Thank you for allowing me to be here!

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Ergonomics and Manual Material Handling
Ergonomics and Manual Material Handling

Federal Ergo Standard - What Happened?

- Original standard in 2000 was long / controversial
- Congress Overturned Original Standard
- CRA rules would not allow another standard
Federal Ergo Standard - What Happening?

- Fed OSHA - “Ergonomic Guidelines”
  - Nursing Homes, Poultry Processing, Retail Grocery, Shipyards

- National Advisory Committee on Ergonomics
  - Charged with reducing workplace MSDs
  - Determines industries covered
Ergonomics and Manual Material Handling

MMH Guideline Advantages

A “Best Practices “ or Guideline Approach is Better Than A Standard

- Focuses On Improvements Not Problems
  - You Folks (not government or safety and health professional) dictate the improvements / fixes
  - Our Job Together - get the word out about what you have to “fix” things and improve the workplace
Ergonomics and Manual Material Handling

**MMH Guidelines Advantages**

- **MMH Friendly** - have your voices heard / products advertised nationally / internationally

- **Promote Improvements / Economic Savings**
  - balancers, work station cranes, hoists, manipulators, conveyors / other equipment
  - reduced employee turnover / workers comp rates
  - increased productivity and worker morale

- **Practical and non-regulatory**
Ergonomics and Manual Material Handling

MMH Guidelines Advantages

- Chance for MHIA to Get In on the “Ground Floor” to partner with government to help write the guidelines

- National / International Scope
  - Federal OSHA publishes / distributes nationally Cal/OSHA Ergonomic Products
  - Same for MMH guidelines
So what is needed?

INTRODUCING … The NATIONAL

“ The Ergonomics Guidelines for Manual Material Handling ”
What Does Cal/OSHA “Bring To The Table”

- A national / international “pipeline” to distribute and promote your products
  - Federal OSHA / State OSHA Consultation Programs nationwide will support the guidelines
  - Co-publishers
    - NIOSH
    - St. Paul Insurance Companies
    - MHIA
- Experience in producing high quality, user friendly educational materials
The Ergonomic Guidelines for Manual Material Handling

What Does Cal/OSHA “Bring To The Table”

- A “Best Practices” Approach
  - making informed choices
  - improvement options
  - follow-up
- Simple examples/photos/worksheets
- Problem solving exercises
- Additional resources
The Ergonomic Guidelines for Manual Material Handling

What Does Cal/OSHA “Bring To The Table”

- A “Best Practices” Approach
  - how to reduced injuries
  - examples of improvements
  - step-by-step worksheets

- Simple examples/photos/worksheets

- Additional resources
The Ergonomic Guidelines for Manual Material Handling

What Does Cal/OSHA “Bring To The Table”

• Each trade specific guide covers:
  • risk factors & MSD symptoms
  • responding to symptoms
  • how to warm up & stretch
  • typical vs. safer ways of working

• Pocket size (English / Spanish)
The Ergonomic Guidelines for Manual Material Handling

What Does Cal/OSHA “Bring To The Table”

- Ergonomics for Very Small Business
- Ergo “Best Practices” Approach
  - Basic principles
  - Before/after photo examples
  - Signs & symptoms of MSDs
  - Improvement Options / Process
  - Poster series (English & Spanish)
The Ergonomic Guidelines for Manual Material Handling

What Does Cal/OSHA “Bring To The Table”

- Credibility - a ‘High Powered’ Group of Scientists, Professors, Educators, Insurance Companies and contacts inside and outside government

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What Does Cal/OSHA “Bring To The Table”

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What Does Cal/OSHA “Bring To The Table”

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The Ergonomic Guidelines for Manual Material Handling

What Will the Guidelines Look Like?

- Why Improve Your Workplace?

- How to Improve Your Workplace? A “Best Practices” Approach

- What Changes Will Improve Your Workplace?
The Ergonomic Guidelines for Manual Material Handling

What Will the Guidelines Look Like?

Why Improve Your Workplace?
- Increase
  - productivity, product & service quality, employee morale
- Reduce Costs
  - production bottlenecks, error rates
  - medical services, workers’ compensation premiums
  - employee turnover, absenteeism, retraining
- Prevent Injuries
The Ergonomic Guidelines for Manual Material Handling

What Will the Guidelines Look Like?

- How to Improve Your Workplace?
- A “Best Practices” Approach

Integral to the MMH Guidelines and supported

- Cal / Federal OSHA & NIOSH
- Healthcare Professionals
- Industry - E.A.S.E. Council / MHIA

You Folks Can Carry the Guidelines With You and Suggest This Approach To Your Customers
The Ergonomic Guidelines for Manual Material Handling

What Will the Guidelines Look Like?

- What Changes Will Improve Your Workplace?

- Series of Job Duty Descriptions
  - Most common MMH Jobs / tasks

- Apply Across Very Broad Variety of Industries
### The Ergonomic Guidelines for Manual Material Handling

#### Manual Material Handling Job Duty Description

**Job Duty Description:** Unloading parts from containers, baskets, gaylords

**Main Body Parts Affected:**
- Back
- Neck/Shoulders

![Unloading parts from containers, baskets, gaylords](image)

**Possible Risk Factors:**
- Awkward, static posture
- Forceful exertion

#### Improvement Options:

**Alter the workplace**
- Provide a clear pathway

**Change the objects used in the task**
- XXX XXX XXX XXX XXX XXX
- XXX XXX XXX XXX XXX XXX

**Change the Job Tasks:**
- Rotate this task with other, non-loading, tasks
- Take short, frequent breaks from this task

![Improvement Options: Alter the workplace](image)

#### Improvement Options: Equipment

**Use a lift and tilt table**

![Use a lift and tilt table](image)

**Use a mobile bin tilter**

![Use a mobile bin tilter](image)

**Use a mobile bin tilter**

![Use a mobile bin tilter](image)
The Ergonomic Guidelines for Manual Material Handling

More Improvement Options

- Use a portable stacker
- Use a lift and tilt device
- Use lift and tilt tables
- Use pick and place tilt stands
- Use collapsible bins with drop down side
- Use a Container Rotator
- Use Collapsible bins with drop down sides
National Guidelines for Manual Materials Handling

What Will the Guidelines Look Like?

- Job Duty Description – Loading
  1. boxes, cartons or crates onto pallets
  2. flat sheets of material (wood, plastic, metal) onto pallets
  3. sacks of material onto pallets
  4. drums onto a platform truck, cart, or pallet
  5. buckets of material (powder, liquid, granular) into a hopper
  6. material onto a scale or table for Quality Assurance Testing
  7. boxes, trays / totes from a conveyor to a vertical wheeled rack or shelf
  8. boxes up into a truck or semi-trailer from the ground
  9. boxes from a pallet to a conveyor
  10. parts from an industrial container (wire basket, Gaylord, metal or plastic) into a machine center
National Guidelines for Manual Materials Handling

What Will the Guidelines Look Like?

- Job Duty Description – Unloading

11. boxes, cartons, or crates from pallets
12. flat sheets of material (wood, plastic, metal) onto pallets
13. sacks of material from pallets
14. drums from a platform truck or cart
15. buckets of material (powder, liquid, granular) from a cart
16. boxes, trays or totes from a conveyor to a wheeled rack, or shelf.
17. boxes from a truck or semi-trailer to the ground
18. parts from an industrial container (wire basket, Gaylord, metal or plastic) into a machine center
National Guidelines for Manual Materials Handling

What Will the Guidelines Look Like?

- **Job Duty Description – Transporting Materials (Moving)**
  19. material with a cart
  20. material with a hand dolly
  21. heavy boxes with a hand dolly
  22. drums

- **Job Duty Description – Manipulating/Reorganizing**
  23. Stretch wrapping material on a pallet
  24. Assemble part of product at a workstation or bench
  25. Organize plastic bottles of various liquid into a package
  26. Loading parts from an industrial container (wire basket, Gaylord, metal or plastic) & hanging them on a overhead conveyor
National Guidelines for Manual Materials Handling

What Will the Guidelines Look Like?

- **Job Duty Description - Work Positioning**
  27. Locating large work pieces on assembly bench
  24. Assemble part of product at a workstation or bench
  25. Position welding a large workpiece
  26. Position a large electrical panel for assembly

- **Job Duty Description - Miscellaneous**
  27. Stacking / unstacking pallets
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### Manual Material Handling Job Duty Description

<table>
<thead>
<tr>
<th>Job Duty Description:</th>
<th>Possible Risk Factors:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loading and unloading boxes, crates, cartons, and other material onto or from pallets</td>
<td><img src="image1" alt="Awkward, static posture" /> <img src="image2" alt="Forceful exertion" /></td>
</tr>
</tbody>
</table>

### Main Body Parts Affected:
- Back
- Neck/Shoulders
- Hands

### Improvement Options:
- **Alter the workplace**
  - Provide a straight pathway by removing obstructions
  - Use a conveyor to transport box, cartons or crates from the picking location to the pallet

- **Change the nature of the task**
  - Reduce the weight of the load by transporting fewer items
  - Reduce the weight of the box, crate or carton
  - Change the shape of the box, crate or carton
  - Add or improve the handles on the box, crate or carton
  - Don’t over stack the pallets. Keep the height of the stack at or below shoulder height
    - Lower lift into recess in the floor

- **Change the Job Tasks**
  - Rotate this task with other, non-loading, tasks
  - Take short, frequent breaks from this task

### Improvement Options: Equipment
- Use Vacuum Lifts
- Use a Lift and Positioner
- Use an Adjustable Pallet Lift

### Add or improve handles
- Reduce the size of the load
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More Improvement Options

- Use a Scissor Lift with Turntable
- Use a Spring Actuated Pallet Lift
- Use a Pneumatic Lift Table
- Use a Portable Pallet Lift
- Use Automatic Load Leveling Devices
- Use a Vacuum Lift
- Use a Portable Pallet Lift
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What Can the E.A.S.E. Council & the MHIA “Bring to the Table”

- What Changes Will Improve Your Workplace?
  - You Folks (not government /safety & health professional) have improvements / “fixes”
  - Our Job Together - get the word out about your “fixes” to improve the workplace
The Ergonomic Guidelines for Manual Material Handling

What Can the E.A.S.E. Council & the MHIA “Bring to the Table”

- What Changes Will Improve Your Workplace?
  - You Folks Have The Improvements / “Fixes”
  - For Each Job Duty Description We Need As Many Improvements / “Fixes” As Exist
The Ergonomic Guidelines for Manual Material Handling

What Does E.A.S.E. “Bring To The Table”
The Ergonomic Guidelines for Manual Material Handling

What Can the E.A.S.E. Council & the MHIA “Bring to the Table”

- DELIVERABLES
  - Each individual member company of the EASE Council and each MHIA Product Section
    - 3 application photos for each product / product type
    - cut-line of 20 words or less for each picture
    - before/after pictures for each product / product type
  - Received By November 15th, 2003
The Ergonomic Guidelines for Manual Material Handling

What Can the E.A.S.E. Council & the MHIA “Bring to the Table”

- DELIVERABLES - Send to either:

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Questions?

The Ergonomics Guidelines for Manual Material Handling
Thank you!

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