Ergonomic Risk Reduction Process

Reducing Pain and Injury

Ergonomic Risk Reduction Process

WORKING TOGETHER TO MAKE IT HAPPEN
Ergonomic Risk Reduction Process

Agenda

Background

Ergonomics

Musculo-Skeletal Disorders (MSDs) – ‘Wear and Tear’

Ergonomic Risk Reduction Process (ERRP)

Your Role in the Process
Ergonomic Risk Reduction Process

Overview of USPS

United States
2nd largest
11th largest

Employees

Revenue

World
4th largest
27th largest
1 in 15 Americans earns a living from a postal related job

$900,000,000,000 Domestic Mailing revenue
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Overview of USPS

675 - Various Processing Facilities
38,000 - Retail & Delivery units
212,138 - Vehicles
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Overview of USPS

- Transport and deliver 206 billion pieces of mail per year to 141 million addresses 6 days per week
- 2 million addresses added annually
- Entirely self-sustained federal agency
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USPS Aging Workforce

Effects of an Older Workforce:

- Higher incidences of injury
- Fatigue onsets quicker
- Slower recovery rate after physical exertion
- 66% of USPS workforce is 45 years or older

**Diagram**

- 2007:
  - National: 40.8
  - USPS: 47.5

- 2016:
  - National: 42.1
  - USPS: 49.6
...it is the responsibility of management to provide safe working conditions in all present and future installations and to develop a safe working force.

...it is the responsibility of the Union(s) to cooperate with and assist management to live up to this responsibility.
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Objective

Change the culture of the Postal Service and its employees when it comes to the identification and reduction of MSD risk factors that can cause injury to our employees.
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Goal

Implement an ongoing process to IDENTIFY MSD’s and CONTROL the risk factors that can cause injury to our employees by building self-sustaining ergonomic skill sets and competencies within the workforce.
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Home Chores

Recreation

Work
Perspectives on MSDs

MSDs are common
Most of us experience
Home or work
Usually mild & temporary
Can be disabling
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Personal Risk Factors

Knitting

Lifting objects

Golfing

Shoveling snow

Home office

Video games
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‘Wear & Tear’ on Joints and Tissues

- Muscles
- Tendons
- Joints
- Blood Vessels
- Spinal Disks
- Nerves
- Ligaments
- Cartilage
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MSD Symptoms

Soreness, pain, discomfort
Numbness or burning
“Pins and needles”
Limited range of motion
Weakness and clumsiness
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Personal Risk Factors

Health Status

Arthritis
Certain medications
Smoking tobacco
Diabetes
Poor Technique
Physical capabilities
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Controlling Personal Risk Factors

Exercise to maintain physical fitness

Stretch muscles

Don’t ignore pain

Choose safe exercises

Always check with health care provider before starting new exercise programs
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FY98-FY07 TOTAL RECORDABLE I&I’s

AVG PERCENT OF MSDs – 36.7%

Date: 10/26/2006
Ergonomic Risk Reduction Process
FY99-06 Worker’s Compensation Expense

Source: Annual Reports 1999 - 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>Expense</th>
<th>Change</th>
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<tbody>
<tr>
<td>1999</td>
<td>$603</td>
<td>51%</td>
</tr>
<tr>
<td>2000</td>
<td>$911</td>
<td>7%</td>
</tr>
<tr>
<td>2001</td>
<td>$970</td>
<td>7%</td>
</tr>
<tr>
<td>2002</td>
<td>$1524</td>
<td>57%</td>
</tr>
<tr>
<td>2003</td>
<td>$1473</td>
<td>-3%</td>
</tr>
<tr>
<td>2004</td>
<td>$1239</td>
<td>-16%</td>
</tr>
<tr>
<td>2005</td>
<td>$838</td>
<td>-32%</td>
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<tr>
<td>2006</td>
<td>$1279</td>
<td>53%</td>
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Base $603
INJURED EMPLOYEES

Miss Six Months – 50%
Miss One Year – 70%

Will Not Return to Work
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Equipment vs. Systems

Engineering focus
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2007 Total Recordable OSHA II’s by Equipment
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2007 Total Recordable by Craft – 38997
Total Number of MSD – 13002

Date: 10/26/2006
### Ergonomic Risk Reduction Process

#### 2007 Total Recordables

<table>
<thead>
<tr>
<th>Craft</th>
<th>%Total I/I’s</th>
<th>I/I’s that are MSD’s</th>
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<tbody>
<tr>
<td>Clerk</td>
<td>20.4%</td>
<td>53.4%</td>
</tr>
<tr>
<td>Mail Handler</td>
<td>10.1%</td>
<td>48.5%</td>
</tr>
<tr>
<td>Maintenance</td>
<td>3.4%</td>
<td>32.4%</td>
</tr>
<tr>
<td>Rural Carrier</td>
<td>11.7%</td>
<td>35.7%</td>
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<tr>
<td>Vehicle Services</td>
<td>2.1%</td>
<td>47.6%</td>
</tr>
<tr>
<td>Other</td>
<td>1.5%</td>
<td>26.7%</td>
</tr>
<tr>
<td>City Carriers</td>
<td>49.8%</td>
<td>22.0%</td>
</tr>
</tbody>
</table>
Greek:

Ergon = “Work”
Nomos = “Rules of”

The “Rules of Work”
“Fit the task to the person”

“Make things user-friendly”

“Work smarter, not harder”
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Principles of Ergonomics

- Posture
- Force
- Reach
- Height
- Motions

- Fatigue
- Pressure
- Clearance
- Movement
- Environment
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Principle

Magnitude

Frequency

Duration
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Goals of the Process

Identify Risk Factors

Eliminate/Reduce MSD risk factors

Improve the quality of performance

Enhance the efficiency of each process
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Process Development - 2000 Pilot
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Ergonomic Strategic Partnership

April 4, 2003

Ergonomic Work Group Established
Four partners working with one objective:

To implement an ongoing process to identify MSD risk factors early, and control the elements that can cause injuries and illnesses to postal employees.
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The process in action

Training

Problem recognition

Common sense evaluation

Management backing

Brainstorm & select

Implement

Evaluate & refine

Follow Up
Provide the knowledge that will lead to reduced wear and tear on all postal employees, improving the quality and efficiency of their environment.
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Overcoming Obstacles

CHALLENGES

• Mistrust at the kickoff

• “Flavor of the month” programs

• Tool for Discipline

RESULTS

Developing trust
Overcome perceptions/History

Creating a common objective

Relationships
Challenge existing relationships
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ERRP

Before

After
Before – Bending and reaching into a hamper to retrieve a bundle of mail

After – Container tilter lifts and tilts the hamper resulting in less bending and reaching
Before – Straight nozzle on the vacuum hose results in awkward wrist and shoulder position to vacuum equipment

After – Flexible nozzle allows operator to vacuum equipment with a straight wrist
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Best Practices – Pallet Lifters

Before – Frequent bending to lift trays of mail from a pallet on the floor

After – Pallet lift allows the person to raise the trays to waist height
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Measures of the ERRP Process

Employees understanding ergonomic risk factors and the effect on their health and job

Managers and employees actively participate in the identification, prioritization, and control of ergonomic risk factors
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Cornerstones to success

One Goal – One Focus

A clearly defined Systematic Process

Data driven projects and measures

COMMUNICATION
## Ergonomic Risk Reduction Process

Results a/o 1-11-08

<table>
<thead>
<tr>
<th></th>
<th>Value</th>
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<tbody>
<tr>
<td><strong>ERRP Sites</strong></td>
<td></td>
</tr>
<tr>
<td>Plants</td>
<td>153</td>
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<tr>
<td>CS Districts</td>
<td>7</td>
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<tr>
<td><strong>Employees Trained</strong></td>
<td>117,254</td>
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<tr>
<td><strong>Task analysis conducted</strong></td>
<td>12,775</td>
</tr>
<tr>
<td><strong>Task analysis resolved</strong></td>
<td>10,419</td>
</tr>
<tr>
<td><strong>Fixes implemented</strong></td>
<td>7,245</td>
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</table>
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FY 08 Trend Chart – OSHA MSD’s at ERRP Sites

ERRP SITE OSHA II MSD PERFORMANCE TO SPLY:
FY03 (-) 1,709 or (-) 22.4%
FY04 (-) 819 or (-) 13.8%
FY05 (-) 650 or (-) 12.7%
FY06 (-) 461 or (-) 10.3%
FY07 (-) 386 or (-) 9.6%
FY08 (-) 202 or (-) 20.3%

# of MSD's

OCT  NOV  DEC  JAN  FEB  MAR  APR  MAY  JUN  JUL  AUG  SEP

FY 2007  364  341  292  315  280  306  322  320  265  257  306  274
FY 2008  333  242  220

FY 2007

FY 2008
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Key Benefits

Empowers employees to have input in problem resolution in their jobs

Provides knowledge to all involved postal employees

Improves quality and efficiency of work and home environment

Reduces the number of employees with MSD related illnesses
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Changing a Culture

Fostered trust and engendered a cooperative attitude

Better working relationships with management, unions and OSHA

Problem solving by working together

Changed attitudes

Nurtured a belief that the USPS cares about its employees
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Employee Participation

Active involvement

Knowledge of symptoms

Knowledge of risk factors

Understanding the process

Supporting the process
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ERRP

Identify Risk Factors

Eliminate/Reduce Risk Factors
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ERRP Vision: All Postal employees will be able to do their job without pain and enjoy their retirement without physical restrictions.