NATIONAL ERGONOMICS & Conference ErgoExpo®
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# Overcoming Common Ergonomics Program Challenges

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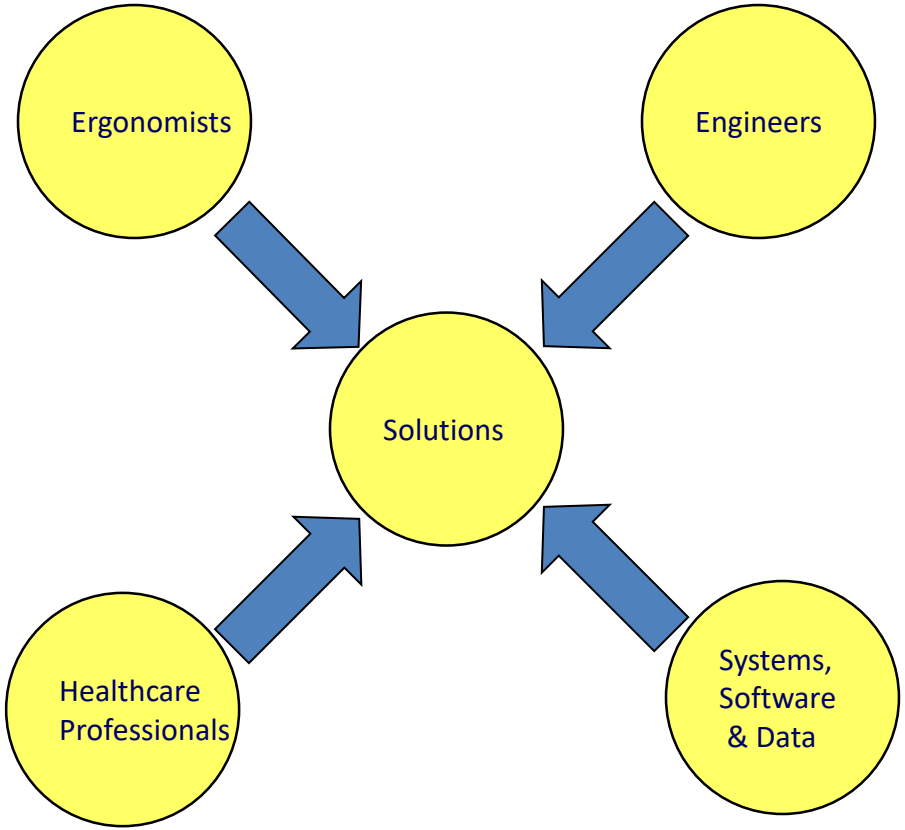
Atlas Injury Prevention Solutions

# Agenda

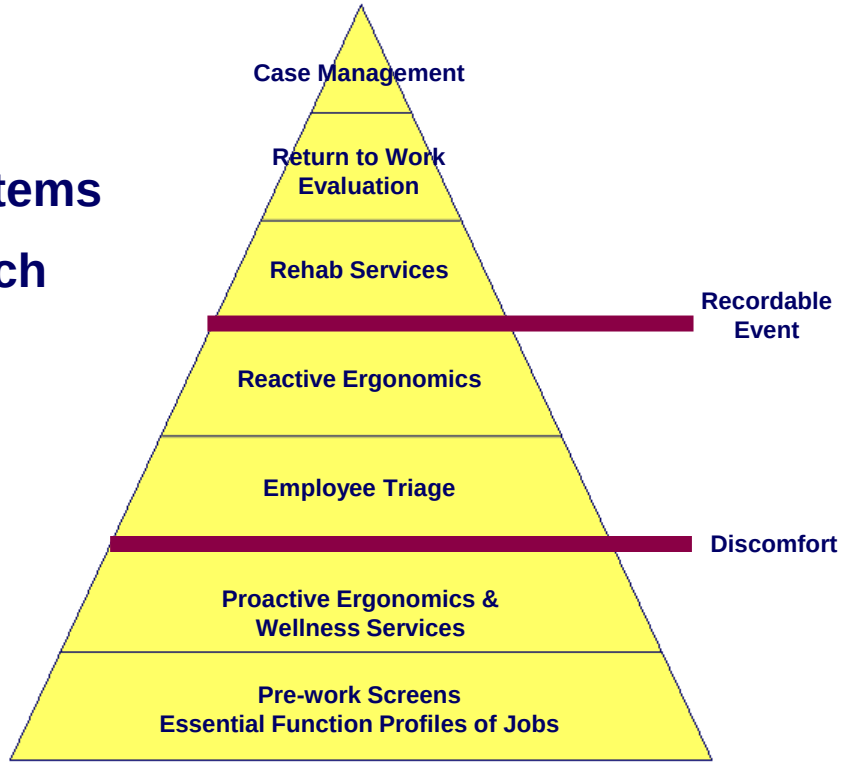
- Atlas overview
- Common ergonomics program challenges
- Recommended approach to address common program challenges

# Atlas Overview



# Atlas Overview

**Total Systems Approach**



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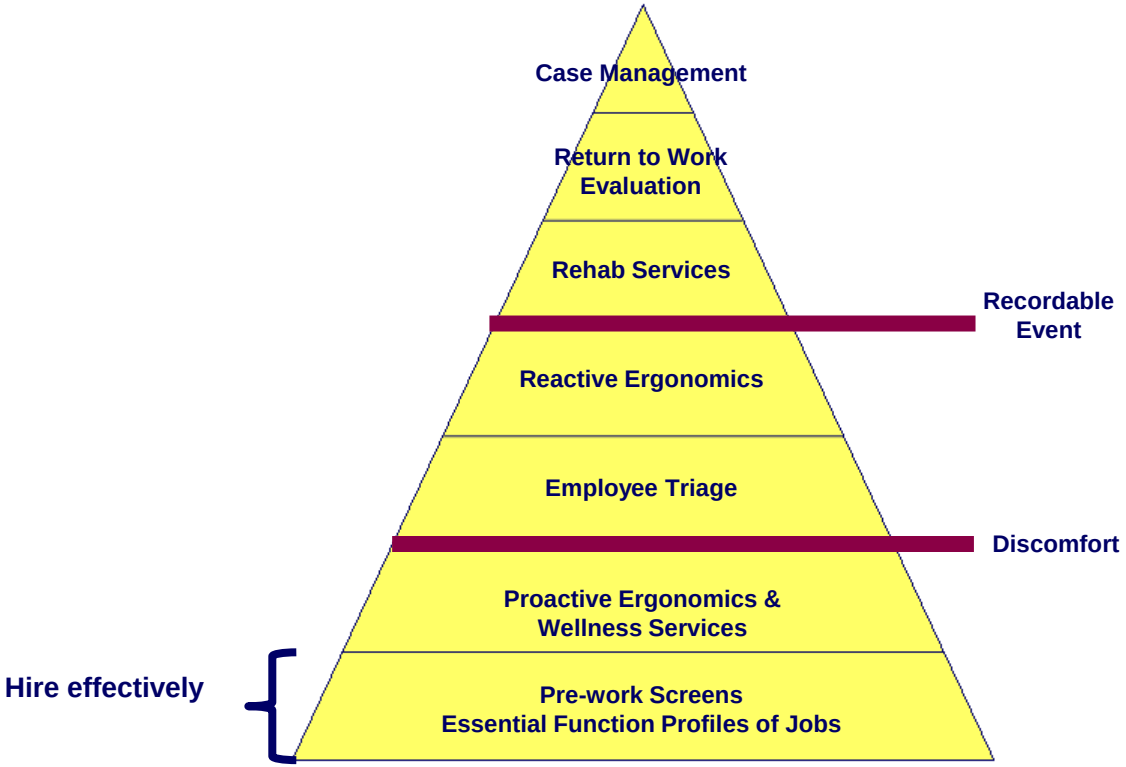

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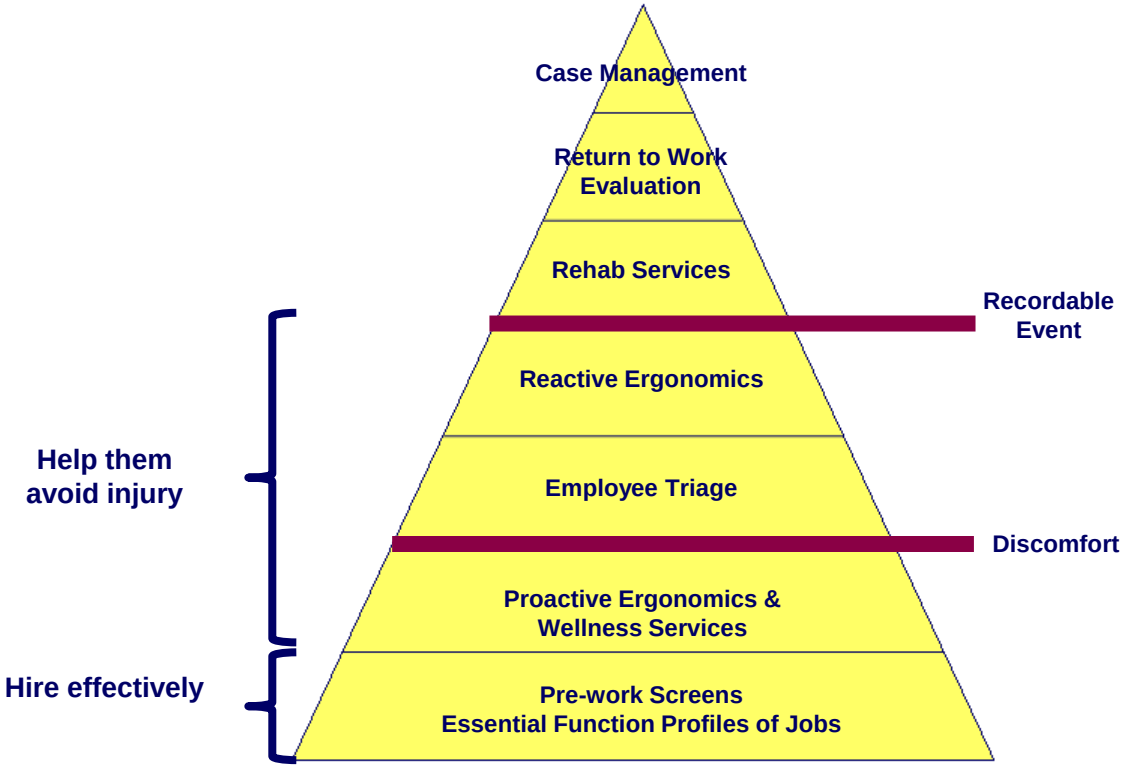

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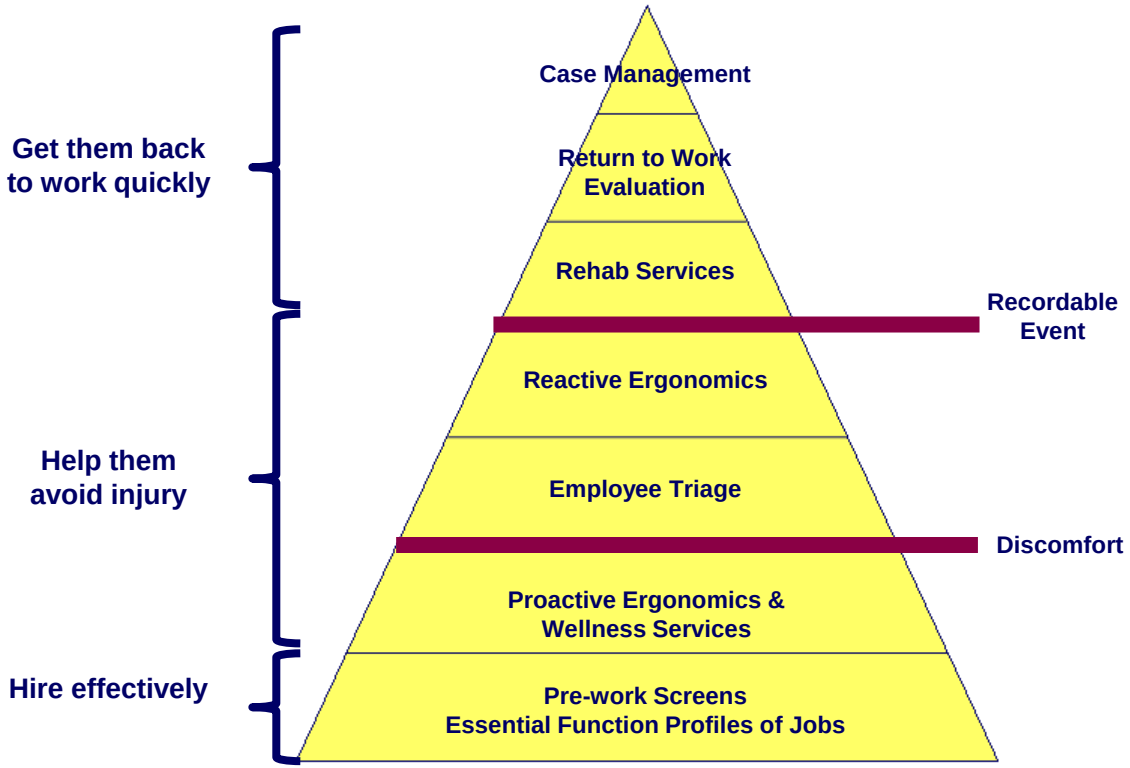


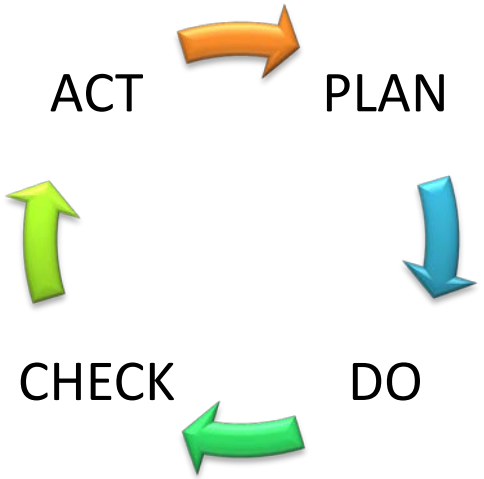
Atlas
Injury Prevention Solutions

# Common Program Challenges

- Gaining management and workforce buy-in
- Communicating across different facilities
- Tracking and deploying resources
- Establishing a return on investment

# Best-in-Class Approach

- Create a continuous improvement process using the proven PDCA model:
- Plan
- Do
- Check
- Act



# PLAN

- Assess current state, develop a case for change and build consensus
- Process owner outside of Health and Safety
- Create the foundation with a written program
- Develop common set of design standards
- Communication plan

# Assess Current State

- OSHA 300 logs
- Loss run reports
- Incident frequency and costs
- Assess the site ergonomics culture
  - Identify the strengths of existing processes upon which to build on
  - Determine factors which will facilitate or challenge efforts
- Overarching corporate or country requirements

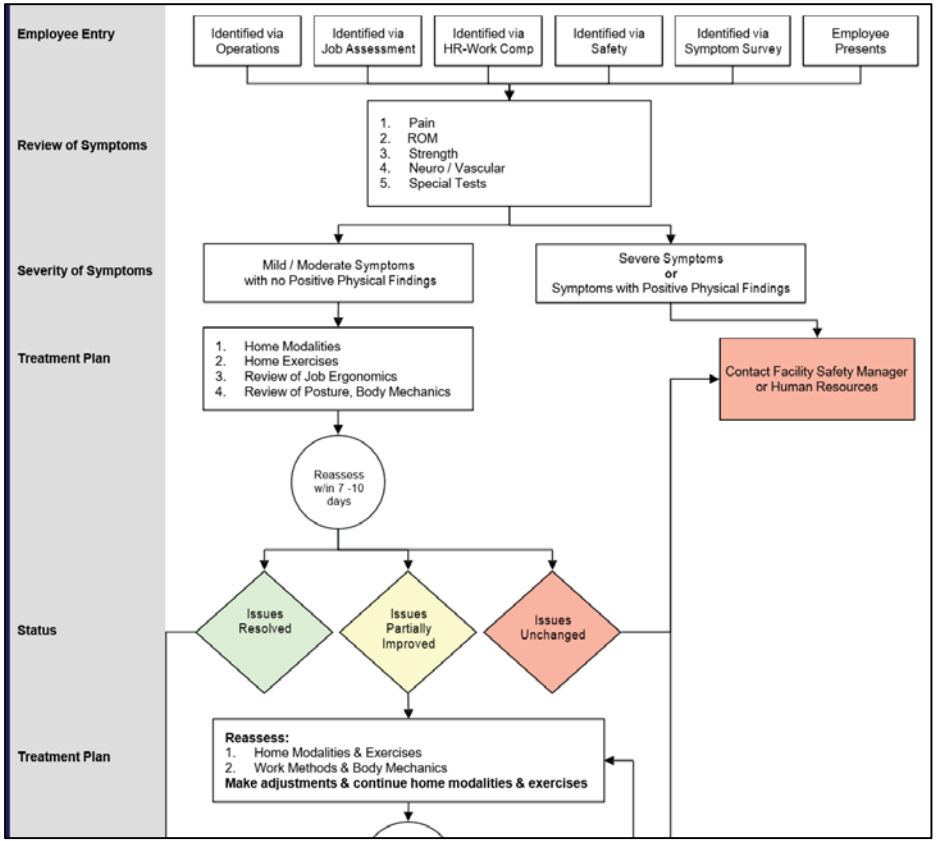
# Written Program

- Components of a good written program include:
  - Site Plan and Metrics
    - Focus on the Wildly Important
    - Act on Lead Measures
  - Roles and Responsibilities
  - Risk Assessment Methods
  - Early Intervention Protocol

# Not in Health and Safety

- Identify a process owner to manage ergonomics
- High performing
- Excellent communicator
- In Ops, Engineering, Quality or CI
- Helps to operationalize ergonomics

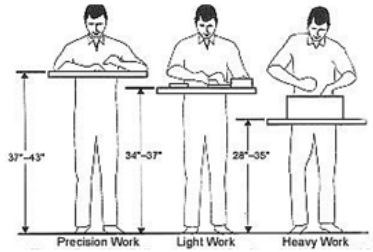
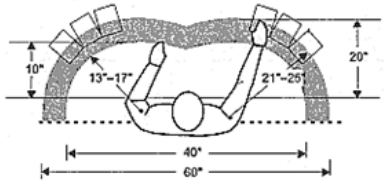
# Well Defined Protocols



# Ergonomic Design Standards

- Focus on the critical few (80/20 rule)
- Often these areas:
  - Manual material handling
  - Standing workstations
- Use relevant anthropometric data
- Use in the selection and evaluation of new equipment and workstation designs

# Ergonomic Design Standards

| | Item | Illustration | Description | Do Not Exceed | Ideal Value |
|---|---|---|---|---|---|
| POSTURES | Standing working height |  | **Work surface heights measured from the standing surface:**<br>• **Precision work, such as writing or electronic assembly: 37"-43" (4" above elbow height).**<br>• **Light work, such as assembly line or mechanical jobs: 34"-37" (1" below elbow height).**<br>• **Heavy work with demanding downward forces: 28"-35" (4"-6" below elbow height).**<br>• **Fixed height = 39"** | | |
| | Reach – sitting and standing |  | **Measured from the middle of the shoulder:**<br>**Ideal 13"-17", Do not exceed 21"-25"**<br>**OR**<br>**Measured from the front edge of the work surface:**<br>**Ideal <10", Do not exceed 20"**<br>**Lateral reach:**<br>**Ideal <40", Do not exceed 60"** | | |
| | Material handling heights - hands |  | Recommended working heights when lifting, lowering, pushing, pulling or carrying. | **20" to 60" (between knees to shoulders) <12" from the front of the body** | **33" to 44" (between knuckles to armpits) <7" from the front of the body** |

# Communication Plan

- Leadership takes an active role in getting the message out
- Everyone in the organization understands the goal and the case for change for improving ergonomics
- Everyone understands their role in improving ergonomics
- There is a “two-way” system to let associates communicate issues, ideas and barriers back up the hierarchy
- Multiple forms of media

# DO

- Site-wide assessment
- Post-offer pre-employment screens
- Ergonomics training to internalize the skills necessary to sustain the ergonomics process
- Onsite early intervention
- Workplace improvement

# Site Wide Assessment

- Surgical/focused approach
- Be comprehensive
  - Job demands and essential functions
  - Ergo risk assessment
  - Discomfort surveys
- Shop floor employee involvement – they are the experts
- Make some improvements quickly

# Don’t be Afraid to Use Experts

- Unrealistic to expect individuals with little experience to complete an accurate site-wide assessment.
- Widely used assessment tools taught by ergonomics vendors are not valid.
- Long cycle times and task variability are difficult to assess.
- Don’t forget your day job
  - Site personnel time gets taken up to “fight fires” or deal with other issues.

# Leverage Technology

- Consider using software to store and manage data
- Capture info in real time via tablets, laptops and wireless connectivity
- Include job media (videos) that can be accessed by others
- Huge potential for time savings by eliminating data input/transfer

# Post Offer Pre-Work Screens

- Best results with screens when:
  - Early seniority injuries (first 12-18 months)
  - High musculoskeletal demand
  - High cardiovascular demand
- Outstanding strategy in places where workplace change is not feasible or timely
- Stay out of court!
  - Legal and ADA compliant
  - Essential job functions

# Training

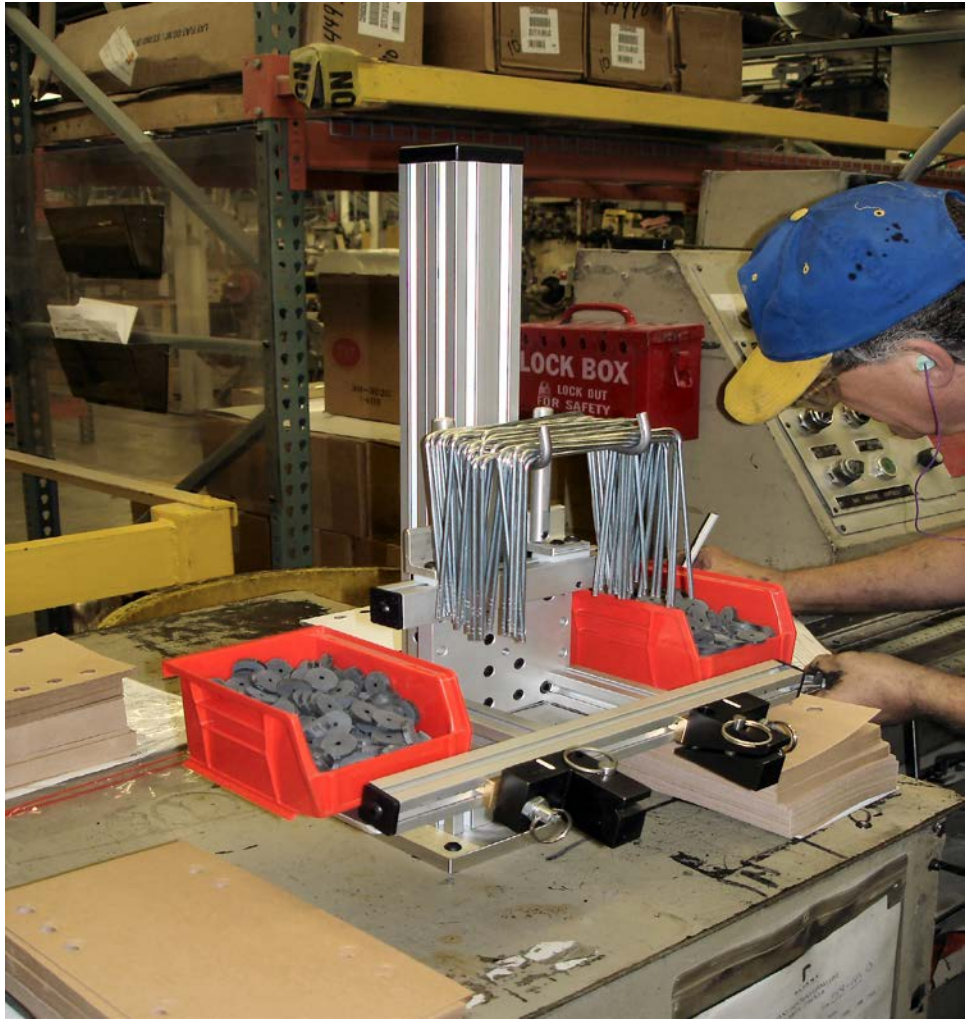
- Training objectives need to meet roles and responsibilities of those supporting the program
- Leverage different training approaches:
  - Onsite
  - Web based
  - Regional
- Provide content at time and point of use
- Include learning verification to ensure participants are competent in their new skills

# Early Intervention

- OSHA compliant
- Maximize time on the floor
- “All roads go through” the onsite specialist
- Manage minor musculoskeletal discomfort
  - Intervention e.g., RICE, first aid scope
  - Preventative warm-up / counteractive stretching / strengthening / work hardening
  - Better work practices and body mechanics (e.g., lifting techniques, job coaching)
  - Reducing job / task ergonomic hazards

# Workplace Improvement

- Consider Kaizen or other methods to implement workplace improvements quickly
  - Proven approach
  - Set specific targets for ergo improvements
  - Productivity, quality and other issues are addressed
  - Include maintenance


LOCK BOX
LOCK OUT
FOR SAFETY


LOCK BO

# CHECK

- Covey- 4 Disciplines of Execution
  - Focus on the Wildly Important
  - Act on Lead Measures
  - ***Keep a Compelling Scoreboard***
  - ***Create a Cadence of Accountability***

# Compelling Scorecard

- Focus on the risk
- Track these key measures associated with calculating and reducing the ergonomic risk:
  - % Job risk assessments completed
  - % Jobs at low/no risk
  - Average time to implement solutions
  - % New equipment / workstations introduced at low/no risk

# Cadence of Accountability

- Regular checkpoints to get the most important work done
- Build activity metrics into people's performance plans to drive accountability
- Create a cadence of frequent, periodic meetings so ergonomics remains at the forefront and is communicated regularly to stakeholders

***That which gets measured gets done***

# ACT

- Evaluate performance to goals and create action plans
- Return on investment

# Evaluate Performance

- Formal, on-site process reviews at 6 and 12 months following program implementation
- Observe conditions, behaviors and attitudes on ergonomics
- Meet with all groups, including leadership and shop floor employees
- Consider outside resource audit

# Return on Investment

- Capture productivity and quality improvements
- DART rates
- Incident reports to capture exposure
- Use internal loss run to determine company specific costs
  - Consider average incident costs
- Refer to health insurance carrier for typical medical costs

# Questions/Comments

- Thank you!