Our Ergonomics Journey –
Learnings From Implementing a Company-wide Strategy

Sue Cooper
Weyerhaeuser Company
PPSA Safety Conference, June 2011
Our Ergonomics Journey – Presentation Outline

- Strategy drivers
- Strategy development
- Implementation – results, next steps
- Challenges
- Where are we today?
- What are we still doing?
- What are we not doing (or not doing well)?
- Key learnings
Drivers for a Company-wide Strategy

- Soft tissue injuries (in 2000):
  - 24% of recordables
  - 30% of WC costs ($2.2 MM in US)

- Company goal:
  - RIR < 1.0 by 2004

- Ergonomics standards:
  - Federal, California, N. Carolina, B.C.

- Duplication of effort:
  - Businesses developing plans, inefficient use of resources
Strategy Team

- In 2001, put together 8-person, cross-company team. Representatives covered:
  - Different businesses
  - US and Canada
  - Different positions
  - Different stages of implementing ergonomics
- Used consultant as resource - Dave Alexander (Auburn Engineers)
Strategy Objectives

- Systematic, one-company approach
- Flexibility within a framework
- Build on work already done
- Leverage resources
- Accelerate rate of improvement

Our Vision:

“Designing work to fit people – safe from the start”
Guiding Principles

- Leadership must drive process
- Employees must be actively involved in all aspects
- Early reporting and intervention are key
- Understand and use all control methods
- Existing best practices and expertise will be used to reduce duplication of effort and accelerate rate of improvement
6-Step Strategy - Overview

- Start the Process
- Achieve Initial Success
- Develop Site Plans
- Move to Steady State
- Integrate into Operations
- Provide Ongoing Maintenance
One-Company Ergonomics Strategy — OVERVIEW

Helping achieve an RIR of less than one

Start the Ergonomics Process
Purpose: To assess the need and plan appropriate process
- Determine current state
- Appoint team or coordinator
- Train team/coordinator
- Conduct leadership training
- Develop and communicate site process (deployment)
- Deployment approved by leadership

Achieve Initial Successes
Purpose: To show that ergonomics has value to the site and to energize process with early success
- Conduct initial analysis of business/site data
- Identify the "quick wins"
- Review and existing analysis/solution information
- Implement solutions for 2-3 "quick wins"
- Communicate successes
- Successful completion of initial projects

Develop Site Plans
Purpose: To formalize site process and expand initial efforts across the facility
- Identify "big hitters"
- Determine program/system improvements required
- Develop
  - Long-term plan
  - One-year plan
- Establish key metrics
- Conduct job/workstation analysis of highest risk positions

Move to Steady State
Purpose: To create self-sufficiency at the site
- Implement one-year plan
- Develop ergonomics-related processes/procedures
- Conduct training for employees and support groups
- Continue problem identification and resolution
- Reapply solutions to like workstations/tasks
- Evaluate progress against plan — celebrate successes!

Integrate Process Into Overall Management System
Purpose: To make this a way of life and sustain efforts long term
- Review and revise plans (transition from reactive to proactive)
- Include ergonomics metrics in site's annual plan
- Continue problem identification and resolution
- Share successes and "best practices"

Move to Steady State
- Short- and long-term plans approved by leadership

Develop Site Plans
- HSE questions: 8.8.3, 8.8.10, 8.8.11, 8.8.12
  - Score: 36%

Move to Steady State
- HSE questions: 8.8.6, 8.8.7, 8.8.8, 8.8.13, 8.8.14, 8.8.15
  - Score: 87%

Establish steady-state metrics
- Establish responsibilities for ergonomics within the organization

Provide Ongoing Maintenance
Purpose: To fully integrate into existing processes while maintaining effectiveness
- Plan steady state:
  - Program maintenance
  - Monitoring of emerging issues

Emerging issues monitored
- Culture survey shows ergonomics has been fully integrated into the culture
- HSE questions: 8.8.9, 8.9.16
  - Score: 100%

One Company Ergonomics Strategy
- HSE questions: 8.8.1, 8.8.2, 8.8.4, 8.8.5
  - Score: 15%

- Score: 36%

- Score: 87%

- Score: 100%
## Step One

### Start the Ergonomics Process

**Purpose:** To assess the need and plan appropriate process

<table>
<thead>
<tr>
<th>Determine current state</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Appoint team or coordinator</td>
</tr>
<tr>
<td>• Train team/coordinator</td>
</tr>
<tr>
<td>• Conduct leadership training</td>
</tr>
<tr>
<td>• Develop and communicate site process (deployment)</td>
</tr>
</tbody>
</table>

**Deployment approved by leadership**

1 to 4 months
Step Two

3 to 8 months

<table>
<thead>
<tr>
<th>Achieve Initial Successes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose:</strong> To show that ergonomics has value to the site and to energize process with early success</td>
</tr>
</tbody>
</table>

- Conduct initial analysis of business/site data
- Identify the “quick wins”
- Review and use existing analysis/solution information
- Implement solutions for 2 - 3 “quick wins”
- Communicate successes

Successful completion of initial projects
### Step Three

**Purpose:** To formalize site process and expand initial efforts across the facility

- Identify “big hitters”
- Determine program/system improvements required
- Develop:
  - long-term plan
  - one-year plan
- Establish key metrics
- Conduct job/workstation analysis of highest risk positions

<table>
<thead>
<tr>
<th><strong>Develop Site Plans</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose:</strong> To formalize site process and expand initial efforts across the facility</td>
</tr>
<tr>
<td><strong>래스다</strong></td>
</tr>
<tr>
<td>Identify “big hitters”</td>
</tr>
<tr>
<td>Determine program/system improvements required</td>
</tr>
</tbody>
</table>
| Develop:
  - long-term plan |
  - one-year plan |
| Establish key metrics |
| Conduct job/workstation analysis of highest risk positions |
| Short- and long-term plans approved by leadership |

**4 to 8 months**
Step Four

14 to 18 months

Move to Steady State

*Purpose:* To create self-sufficiency at the site

- Implement one-year plan
- Develop ergonomics-related processes/procedures
- Conduct training for employees and support groups
- Continue problem identification and resolution
- Reapply solutions to like workstations/tasks
- Evaluate progress against plan — celebrate successes!

Ergonomics integrated into site’s change management process
### Integrate Process Into Overall Management System

**Purpose:** To make this a way of life and to sustain efforts long term

- Review and revise plans (transition from reactive to proactive)
- Include ergonomics metrics in site's annual plan
- Continue problem identification and resolution
- Share successes and “best practices”

Culture survey shows ergonomics has been fully integrated into the culture
Step Six

Provide Ongoing Maintenance

*Purpose:* To fully integrate into existing processes while maintaining effectiveness

- Plan steady state:
  - program maintenance
  - monitoring of emerging issues
- Establish steady-state metrics
- Establish responsibilities for ergonomics within the organization

Emerging issues monitored
Key Features

- Applicable to different size sites, both office and manufacturing, and to different levels of sophistication and need
- Provided a framework - outlined major activities to be undertaken, but not how
- Allowed significant business/site flexibility, e.g. allowed ergonomics efforts already underway to continue
- Addressed the fact that ergonomics didn’t need to be a priority issue in all businesses

Companies implementing such an approach see a reduction in soft tissue injuries  
(per Dave Alexander, ergonomist)
Roles and Responsibilities

- **Businesses / sites:**
  - implement ergonomics strategy
  - provide resources, build competencies

- **Process owner (EHS):**
  - oversee implementation of strategy
  - provide business-level guidance
  - identify/develop/post documents relating to strategy; maintain web page
  - identify and manage vendors for outsourced services
  - track and communicate progress/trends

- **Safety liaisons (EHS):**
  - provide support services and technical assistance
  - Identify/develop “best practices”, success stories, and other resources
  - identify opportunities to eliminate duplication
Supporting Materials

Intranet web page - primary communication method for guidance documents, templates, etc

- Long-term and short-term site plans (examples)
- Job/workstation analysis checklists and methods
- Site progress checklist
- Ideas, solutions, “best practices”, and lessons learned (shared by sites)
- Early intervention information
Supporting Materials - Training

- **Employee awareness training packet**
  - produced by internal training group using company-specific graphics and examples
  - included overheads, trainer’s script, and off-the-shelf video
  - customizable to include site-specific information

- **Training resources for ergo coordinators and task teams**

- **Leadership awareness training module**

- **Training for engineers**

- **Upgraded on-line office ergonomics training and self-assessment**
Implementation – Initial Results

- Sites to include strategy activities in 2002 planning
  - Majority of sites did include ergonomics in site plan

- Steps 1 and 2 to be completed in 2002
  - In only one-third of businesses did all sites complete Steps 1 & 2

- Each business to have soft tissue injury RIR of less than 1.0 in 2002
  - All businesses met goal (up from 66% in previous year)
Soft Tissue Injury Data - 2003

- Soft tissue injury RIR - 0.51 (0.81 in 2000)
- 23% of all recordables (24% in 2000)
- 27% of WC costs (30% in 2000)

Soft tissue injury data differential by business; not a “big issue” in all businesses
Additional Results

- Businesses/sites implementing an ergonomics process were seeing positive results
  - Ex: business’s soft tissue RIR dropped from 2.52 in 2000 to 1.24 in 2003 after implementing ergonomics initiative in 2001
- Anecdotally, increased sharing of information and some business-level activity
- Safety audit scores for ergonomics – 56% ave. (range: 11% to 78%)
  - 50% of sites didn’t have written ergonomics program; 2/3rds didn’t have ergonomics action plan
The Challenges!

- Keeping business/site momentum going, given competing priorities, staff turnover, etc – *and no company targets or requirements around ergonomics!*
- Developing and maintaining site/business competency and expertise
- Maximizing efficiencies and reducing duplicative work (sharing/replicating across and between businesses)
- Moving from a program approach to a process approach (ie. from reactive to proactive), as outlined by the strategy
- Tracking implementation progress at company level
Recordable Soft Tissue Injuries

Strains and sprains (excluding slips, trips and falls); inflammation/irritation of joints, tendons and muscles; disorders associated with repeated trauma; carpal tunnel syndrome
Soft Tissue Injury Workers Comp Claims - Cost
(U.S. Data Only)

Strains and sprains (excluding slips, trips and falls); inflammation/irritation of joints, tendons and muscles; disorders associated with repeated trauma; carpal tunnel syndrome
Where are we today?

- **2010 safety audit scores for ergonomics:**
  - 73% of sites scored above 90%
  - Only one site scored below 60%

- **2010 soft tissue injury RIRs:**
  - 25% of businesses had an RIR of zero
  - All businesses had an RIR < 0.35
What Are We Still Doing?

- Monthly (now quarterly) conference calls/Live Meeting calls with site ergo coordinators
  - Opportunity for coordinators to “be connected”
  - Education session/provides slide presentations for use at site
  - Promotes sharing of ideas and best practices

- Included in our company safety audit, although no requirement to audit against ergonomics
  - About 15 questions covering main requirements/expectations

- Training for new site ergo coordinators
  - 1 1/2 days, put on by consultant using company-specific material
  - 1 to 3 sessions annually, based on need/interest

- Volunteer Ergo Coordinators at company headquarters
What Are We Still Doing? (cont.)

On-site early intervention programs

- Effective in preventing soft tissue conditions from progressing to injury/recordable
- Sites use local vendor of their choice
- Physical discomfort form, physical discomfort management process, physical discomfort interview form
- Service providers can give suggestions for task/workstation improvement/modification
What Are We Not Doing (or Not Doing Well)?

- Limited sharing of information/best practices (at company level)
- No company-wide early intervention program or guidelines
- No reliable process to ensure adequate consideration of ergonomics in capital projects (design and major equipment purchases)
- Ergonomics still seen primarily as “safety” – not as method to improve productivity, process reliability, etc. (minimal integration with “Lean” activities)
Key Learnings

- Team approach is good, even though may take longer
- Senior Management buy-in is critical
- Specific targets needed (track and report against)
- Simplicity is important
- Integrate with existing processes, not stand-alone
- Can develop a one-company approach and make it work for everyone – “flexibility within a framework” is key