Ready, set…go!

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COEH Summer Institute
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Objectives

- Discuss organizational readiness for changes in an ergonomics program or intervention
- Assessing organizational readiness
- Benefits and challenges of change
- Case studies of ergonomic programs that were ‘not ready’ and ‘ready’
Let’s see if we are ready…
Break into groups

• Objective:
  • Everyone in your group must get from the island to the shore
  • Determine what you need to know to decide if you are ‘ready’ to perform this task
What were some of your ‘readiness’ questions?
Assessing organizational readiness

• Why did they contact you?
• How motivated are the management and employees to change?
• Who are the ‘champions’ and ‘leaders’ on the team?
• Are there clear goals, objectives, and ways to measure success?
Assessing organizational readiness (continued)

• Is the ‘climate’ right?
• Can everyone ‘swim’?
  • Is everyone on board?
• What obstacles are in the way?
• Are there mechanisms in place that will allow the efforts to be sustainable?
Benefits of change

• Changes in ergonomics program or intervention can lead to:
  • Improved efficiencies
    • Improved productivity
    • Reduction in cycle time
    • Cost savings
  • Reduction in ergonomics risks or injuries
  • Employee satisfaction
  • Fostering a culture that promotes/embraces change
Challenges of change

- Changes in ergonomics program or intervention can be challenging because:
  - Fear of:
    - Unknown
    - Failure
    - Potential risks
  - May disagree about the need for change and best course of action
  - Lack of trust
    - Costs may exceed gains
    - May not understand ‘why’
  - Requires effort
  - Lack of participation, leadership, or clear objectives/goals
Case study of ergonomics program that was ‘not ready’

• Help requested by an employee in a mail distribution center to come identify risks and solutions
  • Supervisor was supportive
  • Management was not!
Case study of ergonomics program that was ‘ready’

DOE Joint Genome Institute-Production Genomics Facility

The Human Genome 2003

Current DOE Mission Relevance

Bioenergy

Biogeochemistry

Carbon Cycling
Office & Manufacturing
Work Environments

60% staff in computer-intensive office settings

40% staff in hand-intensive production tasks
(2 shifts)
Root Causes of Ergonomic Injuries

- Equipment/instruments designed for small batches used for high throughput operation

- Culture:
  - Understanding Efficiency vs. Speed

- High force hand-intensive tasks

We are striving to determine how much is too much
Was this easy... no way!
History of Ergonomics at JGI (Dec 2005-Current)

- Dec’05: JGI Ergo Program Established
- Dec’06: JGI Wins 2007 Ergo Cup Award at Applied Ergonomics Conference
- Mar’07: JGI Ergo Points In House Risk Assessment Tool
- Aug’07: Required Practices Established to control risk
- Nov’07: December Stand Down of Production Line
- Feb’08: Early Intervention Program Established
- Apr ‘10: JGI Wins 2010 Ergo Cup!
Recordable Injury History
By Calendar Year

- Stand down 12/07
- Started Ergo Working Group 01/08
- Started Interactive Working Group 01/08
- Remedy Interactive 05/08
- RSI Guard 08/08
- 3 Rec. Injuries 2009
- No injuries YTD

# Recordable Injuries

- 2007: 7
- 2008: 4
- 2009: 3
- 2010: 0

Breaking down by quarter:

- Q1 2007: 1
- Q2 2007: 1
- Q3 2007: 1
- Q4 2007: 4
- Q1 2008: 1
- Q2 2008: 1
- Q3 2008: 1
- Q4 2008: 2
- Q1 2009: 1
- Q2 2009: 1
- Q3 2009: 1
- Q4 2009: 0
- Q1 2010: 0
- Q2 2010: 0
- Q3 2010: 0
- Q4 2010: 0
Engineering designs and solutions

Early intervention
Targets employees with discomfort
Includes bi-weekly review meeting

Proactive Efforts
- Labs and offices
- Monitoring
- Walk-abouts
- Comfort surveys

Safety Culture Working Group
- Promotion
- Awareness
- Communication

Training/education
- Risk targeted classes
- Stretch break programs
- Potty training
- Website resources

Relaxation/Rejuvenation Room

Work tool and practices
- Ergo Points
- Required Practices

Ergonomics Demo Room
Top 3 High Risk Factor Tasks (Pre-2007)

- Thermal Cycler Loading
- Peeling Seals
- Freezer Rack Lifting
Top 3 High Risk Factor Tasks (Now-2010)

- Pipetting
- Capping/uncapping
- Vortexing
Employee Driven Designs
Best Practices = Do’s and Don’ts
JGI Wins the Ergo Cup Again!

FOR…the Ergonomic Program Improvement Initiatives category: “Empowering Employees in Ergonomics,” which focused on the employee-driven elements of the JGI Ergonomics Program.
Food for thought

- Healthy to have discussions about readiness and obstacles
- Have plans to address obstacles
  - Involve ‘nay sayers’
- Sell, sell, and sell some more
  - Communicate
  - Advertise
If you think an ergonomics program may be ready to start, change, or improve....

consider participatory ergonomics
Key Elements of Successful Participatory Ergonomics Program

• Employee involvement
• Getting the employees involved to identify problems and suggest solutions
• Management commitment
Key Elements of Successful Participatory Ergonomics Program (continued)

- Establish defined processes and roles
- Allow for flexibility in doing tasks (one size does not fit all)
- Align with existing programs/efforts
How NOT to do employee participation

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“Let’s form a committee to create a task force to develop a team to determine the fastest way to deal with the problem.”
Benefits of implementation

- Increased productivity
- Improved quality of work
- Improvement in employee morale
- Cost savings both in possible reduction in injury-related and production costs
- Time savings
Challenges of implementation

- Risk of short term increase of injuries
- Buy-in from management
- Up front costs associated with training and education
- Time
- Requires risk
- Change, and the uncertainty of change
A moment about change…

People don’t resist change…they resist being changed!

“It’s an ergonomic keyboard. Once you learn how to use it, it will increase your speed by six percent!”

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How to get started?

- Assess where you are currently
- Determine who should be trained and train them on how to identify risks, preventions and control methods.
- Involve employees
- Identify problem areas
- Develop and try solutions
- Clearly define roles and responsibilities
- Determine priorities for change
- Do you have managements buy-in and commitment?
A moment on management commitment…

Lack of commitment will be very obvious to employees

“VROOOOM! VRRRROOOOM! VROOOOOOM!”

“We couldn’t afford faster computers, so we just made them sound faster.”
Employees and supervisors should have basic knowledge

- Ergonomic-related risk factors and symptoms
- Ways to identify and assess hazards specific to job tasks
- Safe use of tools, equipment and materials
- Understanding of safe work practices and processes
- Mechanisms for reporting concerns or ideas
Is there any proof participatory ergonomics works?

• What does the research say?
  Reduction in injuries and workers compensation costs
  Employees with back pain involvement in establishing job modifications

Resources/ References: Occupational Health & Safety Agency for Healthcare in British Columbia
Thank you!

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