Total Worker Health™:
A NIOSH Strategy for integrating occupational safety and health with worksite health promotion to prevent worker injury and illness and to enhance well-being.

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Center for Promotion of Health in the New England Workplace (CPH-NEW)

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- University of CT, Health Center
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Derived from the NIOSH Total Worker Health™ mission, CPH-NEW’s goals include:

1. To implement and evaluate models for improving worker health by combining:
   - Worksite health promotion
   - Workplace health & safety

2. To promote participatory approaches that engage all levels of an organization in the design of effective, sustainable workplace interventions.
Today…

• Introduce the concept of the NIOSH Total Worker Health™ strategy:

  An integrated approach, targeting both environmental and personal risk factors

  www.cdc.gov/niosh/twh

• Show examples of TWH in practice.
Occupational Trends

• Workforce is becoming increasingly diverse
• Workplaces are rapidly evolving. Shift from manufacturing to services (80%)
• Longer hours, compressed work weeks, shift & temp work, reduced job security
• Technological changes. New chemicals, materials, process, & equipment
• Downsizing, corporate restructuring
• Change in employment contract (contingent / temporary workers)

NIOSH, Total Worker Health™, 2009
Why integrate OHS & WHP?

*Working conditions link directly to health behavior and health outcomes.*

- **Organization**
  - technology
  - structure
  - culture

- Physical working conditions
- Work org & psychosocial conditions

- Health Behavior

- Employee Health Status
  - MSDs
  - CVD
  - Mental Health
Example 1: Possible contributors to back pain

Work organization influences personal behavior

- Fast work pace
- Patient demands
- Low use of lifting equipment

Workplace exposures
- Heavy lifting
- Awkward postures

Personal characteristics
- Sedentary home life
- Overweight
Example 2: Possible contributors to CVD

Work organization influences personal behavior

- Sedentary job
- Stress at work
- Obesity, smoking
  - Stress at work
  - Shift work (sleep disruption)

Workplace exposures

Personal characteristics
  - Family meal patterns
  - Smoking
What is health promotion?

Fostering positive decision-making about health (smoking, weight loss, activity, eating, etc.)

Framing HP in terms of healthy decision-making implies that a program’s process is as important as its content.
Traditional Workplace Health Promotion:

- Common elements—information/behavioral
- More intense, more effective
- Less than 5% of employees participate in weight management
- Average 2.3 lbs lost (9 studies); average BMI reduction 0.5 (6 studies)

**GAP:** Programs do not address job-related drivers of poor health.

What is occupational safety and health?

Reducing exposures to hazards in the workplace that can cause injury or illness.

- **BEST**—Eliminate source of the hazard through engineering or design solutions.
- Lesser alternatives—Administrative controls (equip./procedures/scheduling) or personal protective equipment to reduce impact of hazards.
Traditional management approach

*Silos, top-down*

- **Occ. Health and Safety**
  - Reducing hazards and exposures at work to prevent injury and illness

- **Health Promotion**
  - Reducing lifestyle risk factors to prevent disease
Total Worker Health approach

*Break down the silos*

Coordinated planning
All levels participate
Potential Benefits of Integration

- Can address root causes – greater impact
- Greater participation and sustainability
- Can share resources, avoid duplication
- Use a common set of metrics
- Coordinates and aligns management focus
Examples of Integration

• Respiratory protection that comprehensively addresses tobacco use

• Ergonomic consultations that also discuss arthritis management strategies

• Stress management efforts that first seek to diminish workplace stressors, and only then work on building worker resiliency

NIOSH, Total Worker Health™, 2009
TWH Example 1: Erikson Living Retirement Community

Provides a large array of occupational health and wellness services

– On-site health services
  • Free 30-min consultations
  • Free 45-min physicals

– Wellness resources
  • Smoking cessation
  • Weight Watchers
  • Exercising facilities

TWH Example 1: Erikson Living Retirement Community

• Goal: Integrate their wellness offerings with changes in work environment

• Ex: Reduce back injury among staff
  – Occ health: ergonomic assessment of job tasks
  – Wellness: strength training, group walking
  – Participatory: employee input on every intervention
TWH Example 2: Correctional Facility in Connecticut

- Goal: Reduce joint pain among correctional officers
  - Occ health: change of equipment (i.e., shoe inserts)
  - Wellness: weight loss program
  - Participatory: employees themselves suggested these interventions
TWH Example 3: Wellworks-2 Study

- 15 manufacturing workplaces of 400 to 2000 workers each
- Products manufactured
  - Adhesives, food, jewelry, paper products, automobile parts, etc.
- Intervention
  - 8 organizations: wellness without workplace changes
  - 7 organizations: wellness with workplace changes
## Wellworks-2 Results

### Table 3. Mean (and Standard Deviation) of Worker Reports of Awareness of, and Participation in, Programs Targeting Individual Behavior Change on the Final Survey and Smoking Cessation Rates of Hourly Workers by Intervention Condition

<table>
<thead>
<tr>
<th>Variable</th>
<th>HP M % (SD)</th>
<th>HP/OHS M % (SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of the WellWorks Program</td>
<td>59.9 (15.4)</td>
<td>78.5 (7.5)</td>
</tr>
<tr>
<td>Awareness of programs or activities addressing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quitting smoking</td>
<td>55.2 (8.4)</td>
<td>67.8 (12.2)</td>
</tr>
<tr>
<td>Healthy eating or nutrition</td>
<td>52.4 (9.7)</td>
<td>65.8 (6.8)</td>
</tr>
<tr>
<td>Company workplace health and safety</td>
<td>52.3 (13.8)</td>
<td>69.9 (9.7)</td>
</tr>
<tr>
<td>Programs combining all of the above</td>
<td>23.6 (8.1)</td>
<td>37.6 (7.3)</td>
</tr>
<tr>
<td>Participation in programs or activities addressing:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quitting smoking</td>
<td>3.2 (2.0)</td>
<td>5.9 (3.5)</td>
</tr>
<tr>
<td>Healthy eating or nutrition</td>
<td>16.6 (4.1)</td>
<td>22.7 (4.3)</td>
</tr>
<tr>
<td>Company workplace health and safety</td>
<td>21.6 (10.5)</td>
<td>28.0 (10.0)</td>
</tr>
<tr>
<td>Programs combining all of the above</td>
<td>3.1 (2.2)</td>
<td>6.2 (2.9)</td>
</tr>
<tr>
<td>Any of the above programs</td>
<td>34.4 (9.6)</td>
<td>45.8 (9.5)</td>
</tr>
<tr>
<td>Smoking cessation rates among hourly workers</td>
<td>15.1 (7.3)</td>
<td>30.8 (11.8)</td>
</tr>
</tbody>
</table>

### Source
“A healthy workplace is one in which workers and managers collaborate [in] a continual improvement process to protect and promote the health, safety and well-being of all workers and the sustainability of the workplace…”

World Health Organization, 2010
“Healthy workplaces: a model for action”
http://www.who.int/occupational_health/publications/healthy_workplaces_model.pdf
How to Integrate Wellness and OHS Programs: Ten General Principles*

1. Actively engage workers
2. Actively engage management
3. Develop a clear plan with adequate resources
4. Integrate systems: Break down “silos”
5. Focus on organizational solutions
6. Customize your design
7. Provide appropriate incentives
8. Protect confidentiality
9. Stay flexible
10. Evaluate your program

To Recap:
Total Worker Health is…

- Integrated: wellness and safety

*But also*

- Participatory: involves front-line workers
CPH-NEW Resources

• Website www.uml.edu/cphnew
  – Mailing list
  – Quarterly Newsletter
  – CPH-NEWs and Views—fact sheets

• Speakers Bureau

• Pilot grants

• Healthy Worksite Program Toolkit
  – Launch scheduled for September 2013
Healthy Worksite TOOLKIT

What’s Inside?

• Participatory program start up guides

• IDEAS intervention planning tool for integrated health protection/health promotion

• Assessment guides and instruments

Join our mailing list for training announcements! www.uml.edu/cphnew
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