Healthier, Safer and More Engaged
An Introduction to Total Worker Health™

L. Casey Chosewood, MD
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention

The findings and conclusions in this presentation have not been formally disseminated by the National Institute for Occupational Safety and Health, and should not be construed to represent any agency determination or policy.
Federal Government & Worker Health

Occupational Safety and Health Standards-Setting & Enforcement

Department of Labor (DOL)
- MSHA
- OSHA

Research and Authoritative Recommendations

Department of Health and Human Services (HHS)
- Centers for Disease Control and Prevention (CDC)
- NIOSH
Burden of Occupational Disease, Injury and Death

- In 1970, there were approximately 14,000 fatal work injuries per year
- In 2010, with a workforce twice as large, 4,547 workers died from fatal injuries
- Still, about 12 workers will die on the job today
- 3.7 million serious injuries
- $128–155 billion in direct and indirect costs
- Unaccounted pain, suffering, and economic impacts

Source: NIOSH Prevention through Design, 2011
Work-Related Deaths, 2011 (Per 100,000 Workers*)

- Fishermen (121.2)
- Loggers (102.4)
- Pilots (57.0)
- Farmers And Ranchers (25.3)
- Police Officers (18.6)
- Construction Workers (15.7)
- National Average (3.5)

- Firefighters (2.5)
- Cashiers (1.6)
- Office Admin (0.6)
- Business And Finance Staff (0.5)

* Full-time equivalent workers.

These Are the Deadliest Threats Facing Many American Workers
## Overall Health Status and Lifestyle Factors

**Adults, age 46-64**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Report “excellent” health</td>
<td>32%</td>
<td>13.2%</td>
</tr>
<tr>
<td>Using Walking Assist</td>
<td>3.3%</td>
<td>6.9%</td>
</tr>
<tr>
<td>“Limited in Work”</td>
<td>10.1%</td>
<td>13.8%</td>
</tr>
<tr>
<td>“Functional Limitation”</td>
<td>8.8%</td>
<td>13.5%</td>
</tr>
<tr>
<td>Obesity</td>
<td>29.4%</td>
<td>38.7%</td>
</tr>
<tr>
<td>Regular Exercise</td>
<td>49.9%</td>
<td>35%</td>
</tr>
<tr>
<td>No Regular Physical Activity</td>
<td>17.4%</td>
<td>52.2%</td>
</tr>
<tr>
<td>Smoking</td>
<td>27.6%</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

The Diabetes Epidemic in the United States
1980 - 2009

Number Diagnosed with Diabetes
(millions)

Isn’t Behavior Change Enough?

Sir Michael Marmot

“ It is unreasonable to expect people to change their behavior when the social, cultural and physical environments around them fully conspire against them....”

Adapted from M. Marmot/Institute of Medicine Report
Workplace Ideal Venue for Health Interventions

- Environmental influences of workplace can be powerful
- Health messages reinforce and complement safety messages
- Regular, prolonged engagement possible
- “Listening, learning, doing” already part of work routine
- Workplaces can provide structure, supports, incentives
- Synergies possible with health coverage and other benefits
- Social connectivity, camaraderie, accountability
Worker Health = Economic Health

- Employee, organizational and community health are intimately linked
- Nearly 2 in 3 Americans get healthcare through employer
- Employees
  - Spend >1/3 of day at work
  - Often more than half of waking hours
  - Limited supply, getting older, sicker
- Employers motivated to act:
  - 36% of the nation’s healthcare expenditures paid by employers
  - Workers’ compensation claims
  - Getting health strategy “right” often determines profitability
Traditional occupational safety and health protection

- focus on reducing hazards and exposures at the workplace to prevent occupational injury and illness, optimally promoting collective change; programs are often mandatory or regulated heavily

Traditional health promotion

- involves interventions aimed at reducing lifestyle risk factors by promoting healthy behaviors and actions, often focusing on promoting individual change
Total Worker Health™ is a strategy integrating occupational safety and health protection with health promotion to prevent worker injury and illness and to advance health and well-being.
Integrated Approach to Total Worker Health

Examples of Integration

• Respiratory protection programs that address tobacco use and smoking cessation
• Ergonomic consultations that include arthritis management strategies
• Stress management efforts that first seek to diminish workplace stressors, and only then work on building worker resiliency
• Comprehensive screenings for work and non-work risks
WellWorks-2 Study Results: Tobacco Use Cessation

- Rigorous study design
- Smoking quit rates among hourly workers receiving occupational safety & health AND worksite health promotion interventions were more than doubled relative to the worksites that received only worksite health promotion interventions (11.8% vs. 5.9%, p = 0.04)

Sorensen and Barbeau at http://www.cdc.gov/niosh/docs/2012-146/pdfs/2012-146.pdf
# Issues Relevant to a TOTAL WORKER HEALTH™ Perspective

## Workplace
### Protecting Worker Safety & Health
- **Control of Hazards & Exposures:**
  - Chemicals
  - Physical Agents
  - Biological Agents
  - Psychosocial Factors
  - Organization of Work
- **Prevention of Injuries, Illness & Fatalities**
- **Promoting Safe & Healthy Work:**
  - Management Commitment
  - Safety Culture/Climate
  - Culture of Health
  - Hazard Recognition Training
  - Worker Empowerment
- **Risk Assessment & Control:**
  - Making the Safety & Health Case
  - Assessing All Risks
  - Controlling All Risks
  - Root Cause Analysis
  - Leading/Lagging Indicators

## Employment
### Preserving Human Resources
- **New Employment Patterns:**
  - Precarious Employment
  - Part-time Employment
  - Dual Employers
  - Changing Demographics
    - Increasing Diversity
    - Aging Workforce
    - Multigenerational Workforce
  - Global Workforce
- **Health & Productivity:**
  - Leadership Commitment to Health-Supportive Culture
  - Fitness-for-Duty
  - Reducing Presenteeism
  - Reducing Absenteeism
  - Workplace Wellness Programs
- **Healthcare & Benefits:**
  - Increasing Costs
  - Cost Shifting to Workers
  - Paid Sick Leave
  - Electronic Health Record
  - Affordable Care Act
  - HIPAA* Health Information Privacy

## Workers
### Promoting Worker Health & Well-Being
- **Optimal Well-Being:**
  - Employee Engagement
  - Health & Well-Being Assessments
  - Healthier Behaviors
    - Nutrition
    - Tobacco Use Cessation
    - Physical Activity
    - Work/Life Balance
  - Aging Productively
  - Preparing for Healthier Retirement
  - Policy & Built Environment Supports
- **Workers with Higher Health Risks:**
  - Young Workers
  - Low-Income Workers
  - Migrant Workers
  - Workers New to a Hazardous Job
  - Differently-Abled Workers
  - Veterans
- **Compensation & Disability:**
  - Disability Evaluation
  - Reasonable Accommodations
  - Return-to-Work
  - Social Security Disability Insurance

*Issues in these lists are for illustrative purposes, are not meant to be exhaustive nor do they necessarily reflect equivalent importance.

*Health Insurance Portability and Accountability Act

Updated: August 2013
Why Do We Need Total Worker Health™?

- Demographic shifts and aging
- Interactions of work with obesity, health risks, and chronic disease
- Sedentary nature of work and home life
- Rise of “riskier” work: contingent, contract, part-time, shift-work, low-wage work
- Escalating need for: more flexibility, self-organization of work”, better work-life juggling given current epidemic levels of stress on the job
Work-related risk factors for overweight & obesity
  • High-demand, low-control work
  • Long work hours

Obesity may be a risk modifier
  • Vibration-induced injury
  • Some occupational MSDs

Integrated strategies of health protection and health promotion should be considered
  • Job redesign to lower demands and increase control
  • Increased opportunities for physical activity, healthier food options

Why Integration for Total Worker Health™ Matters

• Improvements in work environments and the conditions of work benefit all workers
• Participation increases in both safety and health promotion programming
• Injury, illness, disability and absenteeism rates decrease
• Overall health-related costs decline
  - Workers’ compensation
  - Personal healthcare costs
  - Absenteeism and presenteeism related costs
• Additional productivity gains realized
Partnerships and Collaboration Opportunities

Join our work as a Total Worker Health™ Affiliate

• Network of academic, government, non-profit partners
• Establishing Total Worker Health™ Clinical Centers of Excellence

Upcoming Activities

• IOM State of the Research Workshop for TWH Best Practices
• NIH-sponsored Total Worker Health Methodology Workshop
• National Meeting to Advance Total Worker Health™
  • October 2014, NIH Campus

Engage in regional work with a NIOSH Total Worker Health™
Academic Center of Excellence
NIOSH Centers of Excellence for Total Worker Health™

University of Iowa Healthier Workforce Center for Excellence
http://www.public-health.uiowa.edu/hwce/

Center for the Promotion of Health in the New England Workplace
At the University of Massachusetts
http://www.uml.edu/centers/cph-new/
At the University of Connecticut
http://www.oehc.uchc.edu/healthywork/index.asp

Harvard School of Public Health Center for Work, Health, & Well-Being
http://centerforworkhealth.sph.harvard.edu/

Oregon Healthy Workforce Center at the Oregon Health & Science University
http://www.ohsu.edu/xd/research/centers-institutes/croet/oregon-healthy-workforce-center/index.cfm
Join our efforts...
http://www.cdc.gov/niosh/TWH/

What is Total Worker Health?

Total Worker Health™ is a strategy integrating occupational safety and health protection with health promotion to prevent worker injury and illness and to advance health and well-being.

Today, emerging evidence recognizes that both work-related factors and health factors beyond the workplace jointly contribute to many health and safety problems that confront today’s workers and their families. Traditionally, workplace health and safety programs have been compartmentalized. Health protection programs have focused squarely on safety, reducing worker exposures to risk factors arising in the work environment itself. And most workplace health promotion programs have focused exclusively on lifestyle factors off-the-job that place workers at risk. A growing body of science supports the effectiveness of combining these efforts through workplace interventions that integrate health protection and health promotion programs.

Tools and Resources

Perspectives on Total Worker Health™
Guidelines for Implementing Total Worker Health™ Programs
Promising Practices for Total Worker Health™

Related Resources on Workplace Safety, Health, and Well-being

Stay Connected with TWH™

TWH™ in Action! eNewsletter
Conferences, Webinars and Trainings
Follow us on Twitter
Join us on LinkedIn
Other New and Social Media Resources

About the Total Worker Health™ Program

Program Description
History of Total Worker Health™
Centers of Excellence to Promote a Healthier Workforce
Partners

About the TWH™ Research Portfolio

Intramural Research
Extramural Research
Publications and Reports
Get and Stay Connected to NIOSH Total Worker Health™

• Follow us on Twitter
  www.twitter.com/NIOSH_TWH

• Join us on LinkedIn
  www.linkedin.com/groups/NIOSH-Total-Worker-Health-4473829/about

• E-mail
  TWH@cdc.gov