Integrating Safety, Health and Well-being
Exploring NIOSH Total Worker Health®

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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.
Total Worker Health®

Keep Workers Safe

Invest More in Worker Health

Create Greater Worker Well-being
Seven Critical Strategies for Advancing the Health, Safety and Well-being of Your Workers
Welcome to Fabulous Las Vegas, Nevada
Source: Dr. Kent Anger, Oregon Health and Science University, 2014.
Critical Strategy #1

“Don’t under-estimate the connection between our health at work and our health away from work”
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.

US Burden of Occupational Disease, Injury and Death

• In the United States in 1970, there were approximately **14,000** fatal work injuries per year
• In 2014, with a workforce about twice as large, **4,679** workers died from fatal injuries
• **About 12 workers** will die on the job today
• In **2010, 3.7 million** serious injuries per year
• Up to **$250 billion** in direct and indirect costs
• **1.8% of US GDP**

Sources: S. Hertlich, M. Hamilo, S. Kuvalahti [FI], WHO/ILO/J.Takala, as featured in:
“Be mindful of the significant, pervasive risks that work conditions represent to our overall health and well-being”
What is Total Worker Health™?

policies, programs, and practices that integrate protection from work-related safety & health hazards with promotion of injury and illness prevention efforts to advance worker well-being.
Total Worker Health

- Keep Workers Safe
- Invest More in Worker Health

Create Worker Well-being
Protecting Workers Is the Cornerstone of Total Worker Health™

Photo Credit: Jawad Qasrawi/Hazards Magazine, 22 July 2014
Individually-Focused Behavior Change Interventions Not Enough

“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
Total Worker Health™ Is NOT Employee Wellness

- When wellness programs take place in workplaces that are not providing safe and healthful working conditions ... this is not *Total Worker Health*.
- When wellness programs take place in workplaces in which the very way that work is organized and structured is actually contributing to worker injuries and illnesses.... (like) cardiovascular diseases, depression and anxiety...and the employee wellness program is oblivious to the contribution of work to ill-health, this is not *Total Worker Health*.
- When workplaces promote wellness programs of unproven value for workers’ well-being and are completely disconnected from workforce protection, that’s not *Total Worker Health*.
- When wellness programs do not ask employees about what work factors they think are contributing to their stress, that’s not *Total Worker Health*.

Adapted from Opening Keynote, John Howard, Director of NIOSH, October 2014. Bethesda, MD.

Photo credit:
Critical Strategy #3

“Focus first on culture-building; policies represent our “MO” and guide us to sustainable health outcomes”
“Where have all the good jobs gone?”

What TWH Policies, Programs and Practices Look Like

• Worker-centered operations and worker participation in workplace problem solving
• Paid family & sick leave, paid medical benefits
• Equitable wages
• Safe staffing, voluntary overtime
• Discrimination, harassment, and violence prevention
• Health-enhancing work organization and supervision
• Work Intensification prevention
• Respect, fair performance appraisals & advancement opportunities
• Work-Life Integration
• Attention to work factors causing chronic conditions
• Confidential occupational health services
• Support for productive aging across working life
Question:
Can the job I have predict my chances of being overweight or obese?
“Our focus must be on *Fat Jobs*....not *Fat Workers*”

### Obesity by Occupation

A sampling of U.S. jobs and the prevalence of obesity in that occupational group

<table>
<thead>
<tr>
<th>Sample Jobs</th>
<th>Obesity Rate for Group</th>
</tr>
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<tbody>
<tr>
<td><strong>HIGHEST</strong></td>
<td></td>
</tr>
<tr>
<td>Police officers, firefighters, security guards</td>
<td>40.7%</td>
</tr>
<tr>
<td>Social workers, clergy, counselors</td>
<td>35.6</td>
</tr>
<tr>
<td>Home health aides, massage therapists</td>
<td>34.8</td>
</tr>
<tr>
<td>Architects, engineers</td>
<td>34.1</td>
</tr>
<tr>
<td>Bus drivers, truckers, crane operators, garbage collectors</td>
<td>32.8</td>
</tr>
<tr>
<td><strong>LOWEST</strong></td>
<td></td>
</tr>
<tr>
<td>Janitors, maids, landscapers</td>
<td>23.5%</td>
</tr>
<tr>
<td>Cooks, bartenders, food servers</td>
<td>23.1</td>
</tr>
<tr>
<td>Physicians, dentists, EMTs, nurses</td>
<td>22.0</td>
</tr>
<tr>
<td>Artists, actors, athletes, reporters</td>
<td>20.1</td>
</tr>
<tr>
<td>Economists, scientists, psychologists</td>
<td>14.2</td>
</tr>
</tbody>
</table>

**Average U.S. worker: 27.7%**

Note: Obesity defined as body mass index of 30 or above

Source: American Journal of Preventive Medicine’s 2014 report based on 2010 data
Risk of obesity by number of work stressors [Nursing home study, CPHNEW]

Stressors: low decision latitude, poor co-worker support, heavy lifting, night work, physical assault at work in past 3 months. (Multivariable models adjusted for gender, age, education and region.)

“To truly impact the epidemic of obesity among workers, we must fix fat jobs....not focus on fat workers”
By 2015, one in five American workers will be 55 years of age or older.

Date accessed: September 26, 2013.
Can We Age Productively?
Nearly 50% of Americans have one chronic health condition. And, of this group almost half have multiple conditions.\(^5\)

Creating Age-Friendly Workplaces

• Prioritize workplace flexibility
• Match tasks to abilities
• Involve workers in job redesign efforts
• Avoid prolonged, sedentary work
• Manage physical hazards, e.g., noise, slip/trip
• Provide ergo-friendly work environments
• Provide health promotion & lifestyle programs
• Accommodate medical self-care
• Invest in training & skill-building for all workers
• Encourage cross-generational interactions
• Manage reasonable accommodations & return to work
• Require aging workforce management skills training for supervisors

Loeppke et al., 2013; Silverstein, 2008 in Chosewood & Nigam, 2012; Grosch & Pransky, 2010
Critical Strategy #5

“Train supervisors with health outcomes in mind”

Key Areas

- New, younger, older, vulnerable workers
- Work stress; work-family integration
- Accommodation, return-to-work
- Red flags, early interventions, social supports
21st Century World of Work

• **Salariat**
  – Those who hold steady, old-fashioned jobs at fixed workplaces, which are dwindling in the private sector and are now located mostly in government

• **Proficians**
  – Those who are highly educated and sell advanced skills that have grown in value in the knowledge economy and who more and more are multinational and voluntarily migratory workers

• **Precariat**
  – Those for whom employment is typically short-lived, uncertain, involuntarily migratory, and delivered without a health, injury compensation, or social pension benefits package

(Adapted from: Dr. Guy Standing, Professor of Economics, SOAS, University of London; from his book, *A Precariat Charter.*)
Newer Employment Patterns Affecting Worker Health

- *Precarious* Employment
  - Contingent, Temporary or Independent Contractor
- Serial Subcontracting
- Dual Employers—Employee Leasing
- Work Organizational Factors
  - Work intensification
    - Downsizing
    - Mandatory overtime
  - Lack of paid medical and family leave
  - Stressors arising from work itself
Contingent/Temporary/Leased Worker

- More workers are being employed through “contingent work”
  - Day laborers hired on a street corner for construction or farm work, warehouse laborers hired through staffing agencies, and hotel housekeepers supplied by staffing firms are common examples, because their employment is contingent upon short-term fluctuations in demand for workers.
- Little job security, low wages, minimal advancement
- Perform most hazardous work
- A small, but rapidly-growing percentage, disproportionately bears the burden of workplace injury, illness and death
Health Effects of Contingent Work

• Contingent employment increases negative consequences for the injured worker and society:
  – Lack of job protections after injury can lead to job loss and few prospects of new employment
  – Employer-based health insurance is a rarity for contingent workers, so the costs of treating injuries are typically shifted to the worker or the public at large.
  – Employers do not directly pay for workers’ compensation and health insurance, so they may be insulated from actual costs of workers’ injuries and may not respond as readily to correct harmful conditions

• What do you think?
  – Are contingent workers as protected by government safety and health regulatory enforcement as are non-contingent workers?
NIOSH Studies on Paid Sick Leave

• Examined association between worker access to paid sick leave (PSL) and incidence of nonfatal occupational injuries
  – in the U.S. private sector
  – by industry and occupation, from the employer’s perspective
  • Asfaw et al. 2012
    http://dx.doi.org/10.2105/AJPH.2011.300482

• Currently examining the business value of providing PSL
  – Net (benefits) savings or costs to employers who provide PSL
  • Asfaw et al. work in progress

• Evidence of economic returns would help employers make informed decisions about providing or expanding PSL
What did NIOSH find?

- 28% lower injury likelihood of workers with access to PSL compared to workers without access to PSL, based upon data on working adults from the National Health Interview Survey (NHIS) for 2005-2008.
- Association varied across different industry sectors.
- Introducing or expanding PSL might help businesses to reduce the incidence of nonfatal occupational injuries.
- More likely to lower risks in industry sectors or occupations with a high risk of injury.
- Employers could save $16 - $56 billion per year or $375 - $1,300 per worker per year by offering paid sick leave to their employees, based on cost of $19 billion per year to provide PSL.
Predicted probability of nonfatal occupational injury by access to PSL and Sector

- **No Paid Sick Leave**
- **Paid Sick Leave**

**Services**
- Predicted pr(injury)(%): 0.57, 0.44

**Mining**
- Predicted pr(injury)(%): 0.60, 0.47

**Wholesale and Retail Trade**
- Predicted pr(injury)(%): 0.60, 0.47

**Healthcare and Social Assistance**
- Predicted pr(injury)(%): 0.64, 0.50

**Agriculture, Forestry and Fishing**
- Predicted pr(injury)(%): 0.70, 0.55

**Manufacturing**
- Predicted pr(injury)(%): 0.72, 0.56

**Construction**
- Predicted pr(injury)(%): 0.79, 0.62

**Services**
- Predicted pr(injury)(%): 1.11

**Mining**
- Predicted pr(injury)(%): 0.92
Critical Strategy #6

“Craft benefits programs with worker safety and well-being in mind; provide flexibilities and supports so workers can actually use them”
GET ENGAGED IN THE CONVERSATION AND TAKE ACTION
Ways to Connect with Total Worker Health™

Email TWH@cdc.gov

Twitter (@NIOSH_TWH)

LinkedIn (NIOSH Total Worker Health)

TWH in Action! e-Newsletter
2014 Series Summary

February 25
Making the Case for Total Worker Health: An Overview of Opportunities and Approaches

Laura Punnett, ScD
Ron Goetzel, PhD

543 registrants
357 attendees for live webinar
224 views of recording*

August 19
Intervening for Work Stress: Work-Life Stress and Total Worker Health

Dan Ganster, PhD
Leslie Hammer, PhD

582 registrants
319 attendees for live webinar
711 views of recording*

November 14
Integrated Safety and Health for Small Businesses

James Merchant, MD, DrPH
Lee Newman, MD, MA

598 registrants
234 attendees for live webinar
279 views of recording+

*Current as of 2/10/2015
+Current as of 3/12/2015

For more information, please visit http://www.cdc.gov/niosh/twh/webinar.html
2015 Series

March 12
Preserving Lung Health: At Work and Beyond

Cara Halldin, PhD
DRDS/NIOSH

David Weissman, MD
DRDS/NIOSH

Cassandra Okechukwu, ScD, MSN
Harvard School of Public Health

July 2015
Sedentary Work

Other webinars on the way.....

October, 2015

December, 2015

February, 2016

For more information, please visit http://www.cdc.gov/niosh/twh/webinar.html
Critical Strategy #7

“Workplace safety and health is a team sport and we want YOU on our team! Connect with us today!”
Why total worker health really matters...