Can Work Really Make Us Healthy?

*Seven Critical Take-Aways for a Safer, Healthier and More Engaged Workforce*

Greater Philadelphia Business Coalition on Health
June 14, 2016

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National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
My Goals for Today

• Introduce you to NIOSH Total Worker Health® approach to improving worker safety, health and well-being

• Introduce you to three workers who represent trends that will change the way we see work and safeguard our workforce

• Provide tools and strategies; reinvigorate your health-related problem solving

• Invite you to join our efforts in improving worker safety and health

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. Visit www.niosh.gov for official guidance from NIOSH.
Source: Dr. Kent Anger, Oregon Health and Science University, 2014.
Take Home Point #1

“Don’t under-estimate the connection between the work you do each day and your overall health and well-being”
Work and Health
Why is work so influential in our health and well-being?

- Work conditions determine our risk for and control over exposure to environmental toxins, chemical, biological and other hazards.
- Work conditions determine risk for injury, illness and disability
- For many, work is how we spend the majority of our waking hours
- Work decides our wages, which are often strong predictors of health
- Work provides access (or lack thereof) to most health-related benefits, including those for healthcare, workers compensation and disability
- Work provides (or fails to provide) access to dental and mental health services
- Our job influences the communities in which we choose to live, which in turn influences many health risks/opportunities/family dynamics/educational options/taxation/cost of living
- Our work influence our commutes, time spent in private or public motor vehicles; this time influences accident/other hazard exposures
- Work can lead to “time poverty”
- Work largely controls our daily schedules and opportunities for free time, rest, relaxation, sleep, physical activity, healthier nutrition practices
- Work influences leave: sick leave (paid or unpaid), family/child leave, maternity/paternity leave, access to vacation.
- Work may be a significant source of stress, exposure to violence or bullying
- Work predicts (and supports/diminishes) our options for supportive social interaction
- Shift work has been associated with elevated risks for cancer, heart disease, DM, obesity, risk of violence, and stroke severity

Does your work predict your likelihood of becoming obese?
# 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>
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<tbody>
<tr>
<td><strong>HIGHEST</strong></td>
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<td>Police officers, firefighters, security guards</td>
<td>40.7%</td>
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<td>Social workers, clergy, counselors</td>
<td>35.6%</td>
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<td>Home health aides, massage therapists</td>
<td>34.8%</td>
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<td>Architects, engineers</td>
<td>34.1%</td>
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<td>Bus drivers, truckers, crane operators, garbage collectors</td>
<td>32.8%</td>
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<td><strong>LOWEST</strong></td>
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<td>Janitors, maids, landscapers</td>
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<td>Cooks, bartenders, food servers</td>
<td>23.1%</td>
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<tr>
<td>Physicians, dentists, EMTs, nurses</td>
<td>22.0%</td>
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<tr>
<td>Artists, actors, athletes, reporters</td>
<td>20.1%</td>
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<tr>
<td>Economists, scientists, psychologists</td>
<td>14.2%</td>
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</table>

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

Source: American Journal of Preventive Medicine’s 2014 report based on 2010 data

The Wall Street Journal
OCCUPATIONAL HEALTH

By AMERICAN HEART ASSOCIATION NEWS

Researchers evaluated 5,566 employed workers to determine how many met the ideals for blood pressure, body mass index, total cholesterol, blood sugar, physical activity, smoking and diet quality.

Some of the occupations that registered the worst numbers were:

1. Police and firefighters
2. Service occupations (includes people who prepare food, do building and grounds keeping, cleaning, and deliver personal care—hairstylists, animal care, makeup artists, funeral services, healthcare support, and entertainment.)
3. Sales, office and administrative support

Some of the occupations that registered the best numbers were:

1. Management and professionals
2. Healthcare practitioners (doctors and nurses)
3. Arts, entertainment, sports and media

Sources: REasons for Geographic And Racial Differences in Stroke Study, National Institute for Occupational Safety and Health of the Centers for Disease Control, Bureau of Labor Statistics
• Shift-working men are less likely to eat vegetables & fruits

• Shift-working women get more of daily energy intake from saturated fat

Hemiö K, et. al. Food and nutrient intake among workers with different shift systems. Occup Environ Med 2015; 0: 1–8
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 impact obesity among workers, we must fix *fat jobs*...not *fat workers*."

Lower-Wage Workers

Workers Earning Less Face

- Increased risk of job stress
- Lower levels of decisional latitude, control, respect
- Greater job insecurity
- Higher rates of forced overtime
- More discrimination
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.

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<th>5-9</th>
<th>10-14</th>
<th>15-24</th>
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Take Home Point #3

“Traditional workplace hazards still threaten many workers. We cannot forget that the most direct path to healthier workers is SAFER WORK.”
Total Worker Health

Keep Workers Safe

Introduce workplace policies, practices and programs that prevent illness & injury and promote health

Create Worker 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.
“TWH is built upon the foundation of safe and healthful work and workplaces.”
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
What Total Worker Health Is NOT

• TWH is not a “wellness program” that has been implemented without simultaneously providing safe and healthful working conditions.

• TWH is not a collection of health promotion efforts at a workplace where the very way that work is organized and structured is contributing to worker injuries and illness.

• TWH is not consistent with workplace policies that discriminate against or penalize workers for their individual health conditions or create disincentives for improving health.

• TWH is not a “wellness program” that does not ask employees about what work factors they think are contributing to their stress.
“TWH is NOT a traditional wellness program.”
Issues Relevant to Advancing Worker Well-being
Through Total Worker Health®

Control of Hazards and Exposures
• Chemicals
• Physical Agents
• Biological Agents
• Psychosocial Factors
• Human Factors
• Risk Assessment and Risk Management

Organization of Work
• Fatigue and Stress Prevention
• Work Intensification Prevention
• Safe Staffing
• Overtime Management
• Healthier Shift Work
• Reduction of Risks from Long Work Hours
• Flexible Work Arrangements
• Adequate Meal and Rest Breaks

Built Environment Supports
• Healthy Air Quality
• Access to Healthy, Affordable Food Options
• Safe and Clean Restroom Facilities
• Safe, Clean and Equipped Eating Facilities
• Safe Access to the Workplace
• Environments Designed to Accommodate Worker Diversity

Leadership
• Shared Commitment to Safety, Health, and Well-Being
• Supportive Managers, Supervisors, and Executives
• Responsible Business Decision-Making
• Meaningful Work and Engagement
• Worker Recognition and Respect

Compensation and Benefits
• Adequate Wages and Prevention of Wage Theft
• Equitable Performance Appraisals and Promotion
• Work-Life Programs
• Paid Time Off (Sick, Vacation, Caregiving)
• Disability Insurance (Short- & Long-Term)
• Workers’ Compensation Benefits
• Affordable, Comprehensive Healthcare and Life Insurance
• Prevention of Cost Shifting between Payers (Workers’ Compensation, Health Insurance)
• Retirement Planning and Benefits
• Chronic Disease Prevention and Disease Management
• Access to Confidential, Quality Healthcare Services
• Career and Skills Development

Changing Workforce Demographics
• Multigenerational and Diverse Workforce
• Aging Workforce and Older Workers
• Vulnerable Worker Populations
• Workers with Disabilities
• Occupational Health Disparities
• Increasing Number of Small Employers
• Global and Multinational Workforce

Policy Issues
• Health Information Privacy
• Reasonable Accommodations
• Return-to-Work
• Equal Employment Opportunity
• Family and Medical Leave
• Elimination of Bullying, Violence, Harassment, and Discrimination
• Prevention of Stressful Job Monitoring Practices
• Worker-Centered Organizational Policies
• Promoting Productive Aging

New Employment Patterns
• Contracting and Subcontracting
• Precarious and Contingent Employment
• Multi-Employer Worksites
• Organizational Restructuring, Downsizing and Mergers
• Financial and Job Security

November 2015
Total Worker Health® is a registered trademark of the US Department of Health and Human Services
TWH Policies, Programs and Practices

- 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
### 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
Potential Health Effects of Contingent Work

• Uncertainty, interrupted work, reductions in earnings
• Lack of many benefits that come from traditional employment
• Negative consequences for the worker and society after injury
  – Worker might quickly be out of a job and, depending on the severity of the injury, the prospects of new employment may be slim.
  – 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 who not directly pay for workers’ compensation and health insurance may be insulated from premium adjustments based on the cost of workers’ injuries.
  • So, employers of contingent labor escape the financial incentives that drive decisions to eliminate hazards for other workers
• Are contingent workers as protected by government safety and health regulatory enforcement as are non-contingent workers?
How Many Jobs Are You Likely to Have Between Ages 18-48?

Jobs in a lifetime

Between ages 18-48

11.7 (avg.)

Spells of unemployment

ages 18–48 (avg.) 5.6
high school dropout 7.4
high school graduate 5.6
college graduate 3.9

Many More Older Workers

Projected percentage change in labor force by age, 2006-2016

- 75 and older: 84.3%
- 65 to 74: 83.4%
- 55 to 64: 36.5%
- 25 to 54: 2.4%
- 16 to 24: -6.9%

Source: U.S. Bureau of Labor Statistics
Nearly 50% of Americans have one chronic health condition. And, of this group almost half have multiple conditions.\(^5\)

Can We Age Productively?
What is Productive Aging?

The NIOSH Approach to Productive Aging

– Take a Life-Span Perspective
– Use a Comprehensive and Integrated Framework
– Place Emphasis on Outcomes for Both Workers and Organizations
– Create a Supportive Culture that Identifies and Addresses Multi-Generational Challenges/Issues
The National Center for Productive Aging and Work

Directors:
Dr. Jim Grosch
Dr. Juliann Scholl

For more information, google "NIOSH Aging"
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
“We must use optimize the work for the workforce we have....”
"the fusion of technologies across the physical, digital and biological worlds which is creating entirely new capabilities and dramatic impacts on political, social and economic systems”

“an era of automation, constant connectivity, and accelerated change, in which the Internet of Things meets the Smart Factory”

Klaus Schwab, Founder of the World Economic Forum
“Trust, transparency, purpose, and a deeper kind of connection are central to meaningful success in the Fourth Industrial Revolution”

“Work that goes beyond an obsession with shareholders, profits, and quarterly earnings toward a way of living and working that prioritizes our well-being”

“A wider definition of success…one that recognizes that in our quest for a competitive edge and enhanced performance, we actually stand to gain from putting our humanity, well-being, and sense of purpose at the center”

Themes from Davos 2016 World Economic Forum
“Safer work is human-centered. Safety must be more participatory and more transparent than ever before.”
Worker well-being is an integrative concept that characterizes quality of life with respect to:

- An individual's health and work-related environmental, organizational, and psychosocial factors

- It is the experience of positive perceptions and the presence of constructive conditions at work

- It’s what enables workers to thrive and achieve their full potential.

(in partnership with the RAND Corporation)
Examples of Critical Areas of Total Worker Health® Research

- How do conditions of work define health and well-being outcomes, on and off the job?
- How can we find targeted interventions for the highest-risk or most vulnerable workers?
- How can healthier job design and work organization principles produce healthier workers?
- What are the health consequences of the current macro-economy, new employment patterns, the changing organization of work, dramatic shifts in worker demographics, and evolving healthcare schemes?
- What pro-health interventions can improve quality of life and health opportunity for workers?
- How do we optimize the “well-being” of our families and society through employment?
- How can we prevent or mitigate the harms arising from hazardous work schedules, psychosocial stress, and unhealthy supervision?
- How can we:
  - Expand the evidence base for integrating workplace safety interventions with broader health-related program, policies, practices?
  - Show the value of investment more clearly in TWH approaches?
How Can You Connect to Total Worker Health®?
Google Us or Send an Email TWH@cdc.gov

Twitter (@NIOSH_TWH)

LinkedIn (NIOSH Total Worker Health)

TWH in Action! e-Newsletter
Why *Total Worker Health* really matters...