

Maximizing the Value of Better Safety, Health and Well-being

Making the Case for the NIOSH Total Worker Health™ Approach

**2015 Occupational Health Symposium
University of Iowa - April 16, 2015**

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.



WELCOME

TO *Fabulous*
LAS VEGAS
NEVADA

MANDALAY BAY

Obesity by Occupation

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

Sample Jobs

Obesity Rate for Group

HIGHEST



Police officers, firefighters, security guards

40.7%



Social workers, clergy, counselors

35.6



Home health aides, massage therapists

34.8



Architects, engineers

34.1



Bus drivers, truckers, crane operators, garbage collectors

32.8

LOWEST



Janitors, maids, landscapers

23.5%



Cooks, bartenders, food servers

23.1



Physicians, dentists, EMTs, nurses

22.0



Artists, actors, athletes, reporters

20.1



Economists, scientists, psychologists

14.2

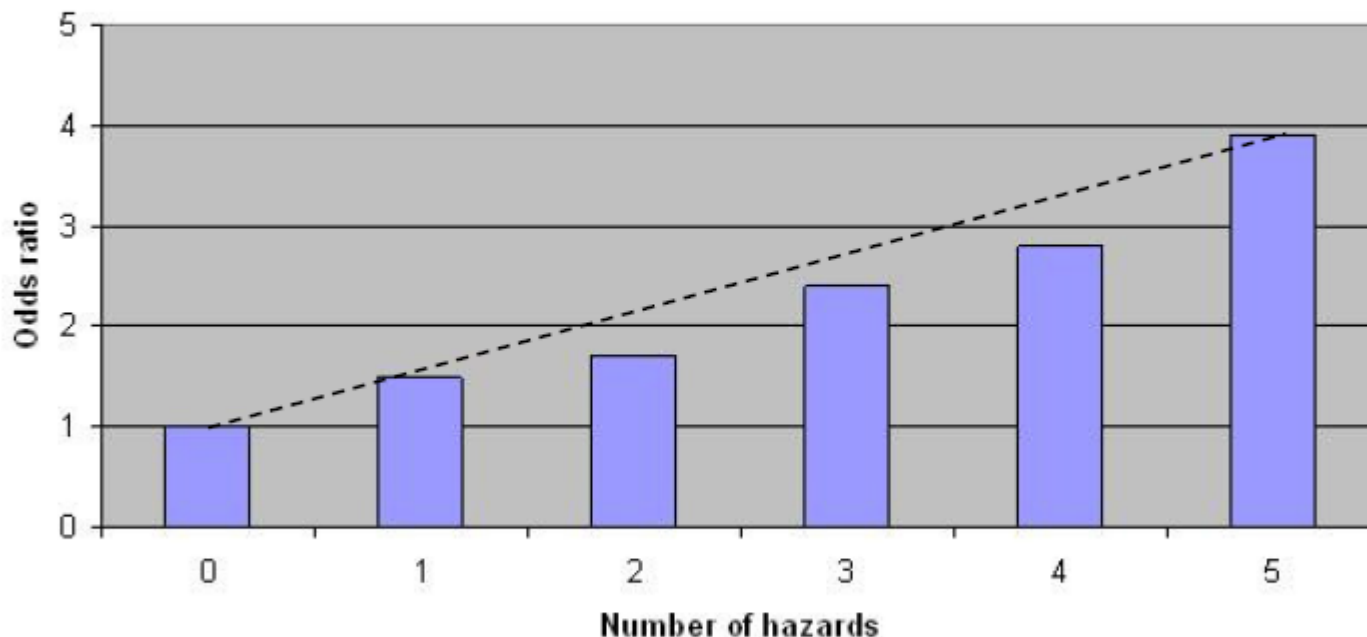
Average U.S. worker: 27.7%

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

The Wall Street Journal

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]

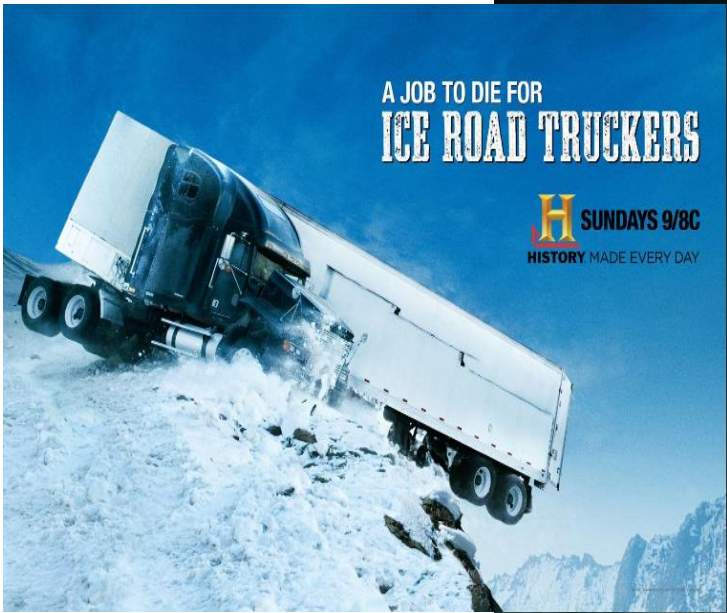


Stressors: low decision latitude, poor co-worker support, heavy lifting, night work, physical assault at work in past 3 months.
(Multivariable models adjusted for gender, age, education and region.)

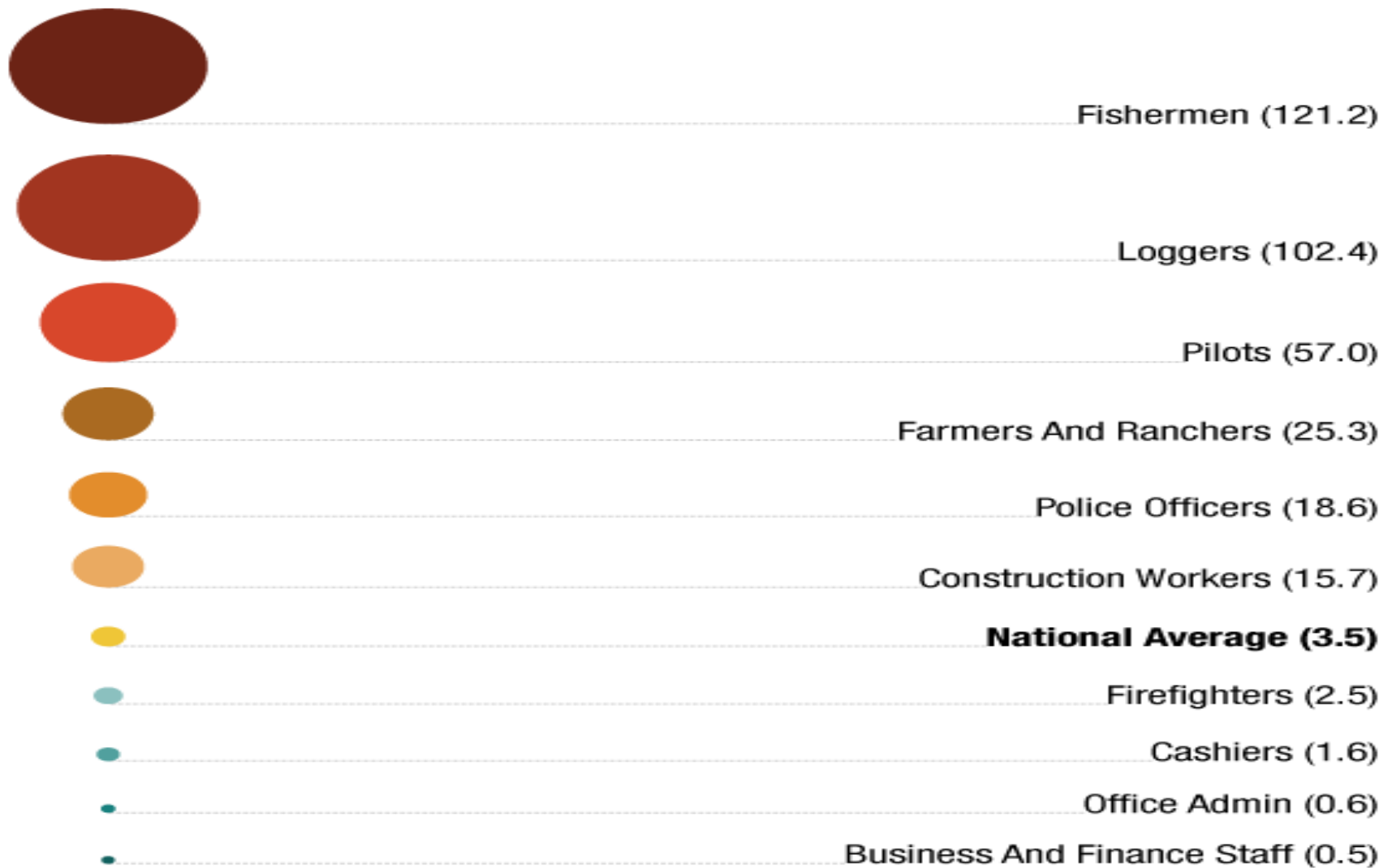
www.uml.edu/centers/CPH-NEW

Punnett L and the Center for the Promotion of Health in the New England Workplace. Recent Trends and Research in Worker Safety and Health. February 25, 2014 NIOSH Total Worker Health Webinar.





Work-Related Deaths, 2011 (Per 100,000 Workers*)



* Full-time equivalent workers.

Source: US Bureau Of Labor Statistics, 2011 (Credit: Jess Jiang and Lam Thuy Vo /NPR)

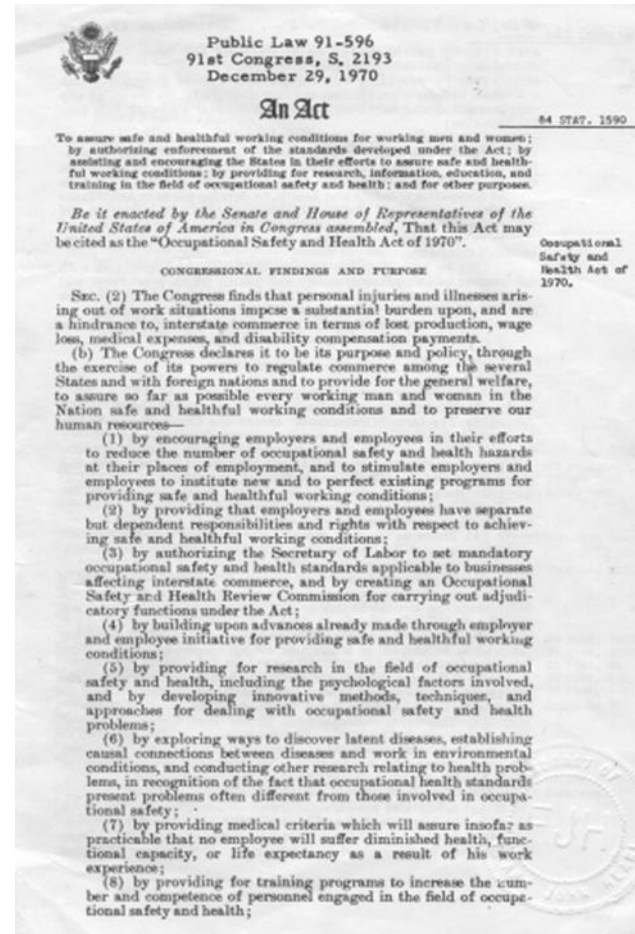
Burden of Occupational Disease, Injury and Death

- In the United States 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

Occupational Safety & Health Act

- Sec. (2)(b) . . .to assure so far as possible every man and woman in the Nation safe and healthful working conditions and to preserve our human resources . . .





What is Total Worker Health™ ?

Total Worker Health is a strategy integrating occupational safety and health protection with interventions that protect, preserve and promote the comprehensive well-being of workers.



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

- When health promotion efforts take place in workplaces that are not providing safe and healthful working conditions—workplaces at which workers' health is not protected... this is not *Total Worker Health*.
- When worker health promotion efforts take place in workplaces in which the very way that work is organized and structured is actually contributing to worker injuries and illnesses, especially cardiovascular diseases, depression and anxiety...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*.

Issues Relevant to Total Worker Health™

Protect, Preserve and Promote Worker Well-being

Control of Hazards & Exposures

- Chemical, Physical, Biological
- Psychosocial Factors, Human Factors

Address the Organization of Work

- Work Intensification, Breaks/Hygiene
- Safety & Health Culture
- Overtime, Shift Work & Long Work Hours
- Flexible Work Arrangements
- Engagement
-

Account for New Employment Patterns

- Contracting, Subcontracting, Dual Employer
- Precarious/Contingent/Part-time Employment

Note Changing Workforce Demographics

- Multigenerational , Aging Workforce
- Increasing Workforce Diversity
- Workers with Disabilities, Vulnerable Populations, Disparities
- Small Businesses

Address Compensation & Benefits/Legal and Social Issues

- Living/Adequate Wage, Wage Theft, Paid Leave
- Work, Life, Family Policies & Programs
- Zero Tolerance for Abuse of Power, Bullying, Violence, Harassment, Discrimination
- Eroding Workers' Compensation Benefits
- Cost Shifting of Compensation for Work-Related Injuries & Illnesses to SSDI and health insurance

Well-Being Supports

- Safe & Health-Promoting Culture with Leadership Support
- Access to Confidential Healthcare Resources
- Chronic Disease Prevention and Work-Life Integration Programs
- Resources to Support Social & Physical Well-Being in the Community
- Healthy Food Access, Safe/Clean Environment

Where's the Value in the Total Worker Health Approach?

- Whose value?
- ROI vs. VOI
- How are health protection and program engagement connected?
- Does integration of programs matter?
- Where is greatest value obtained?
- Effectiveness vs. Fairness

When Assessing VOI, Ask... Value for Whom?



Protecting Workers Is the Foundational
Cornerstone of Total Worker Health™

Tenets of Quality Workplace Health and Well-being Programs

- Do workers have a voice in the program?
- Are incentives used wisely and positively?
- Is the focus long-term, emphasizing culture-building?
- Is participation in the program voluntary?
- Is privacy protected?
- Are related programs (safety, benefits, disability mgmt, etc) integrated?

Return on vs. Value of Investment

- **ROI – Cost Benefit Analysis**

- Savings/costs foregone per dollar invested
- \$ saved : \$ spent

- **VOI – Cost Effectiveness Analysis**

- Cost per unit of outcome: \$ spent : [health/safety or other measure}
- Emphasizes entire range of outcomes that might add value
- Emphasizes entire range of costs that might be incurred
- Allows individuals to decide what they value, customize to needs/values
- Allows decision makers to decide what calculations they think are credible or not credible
- Intuitively appealing and understandable
- Allows for apples-to-apples comparison among various intervention options
- Flexible enough to accommodate all varieties and combinations of population health management programs.

Benefits of Integration: Increased Program Participation and Effectiveness



Integrated interventions

Smoking quit rates:

11.8%



Health promotion only

5.9%

Sorensen G and Barbeau E. Integrating Occupational Health and Safety and Worksite Health Promotion: State of the Science. The NIOSH Total Worker Health™ Program: Seminal Research Papers 2012. DHHS (NIOSH) 2012-146.

Benefits of Integration: Reduced Sickness Absence & Improved Health



Reduced:

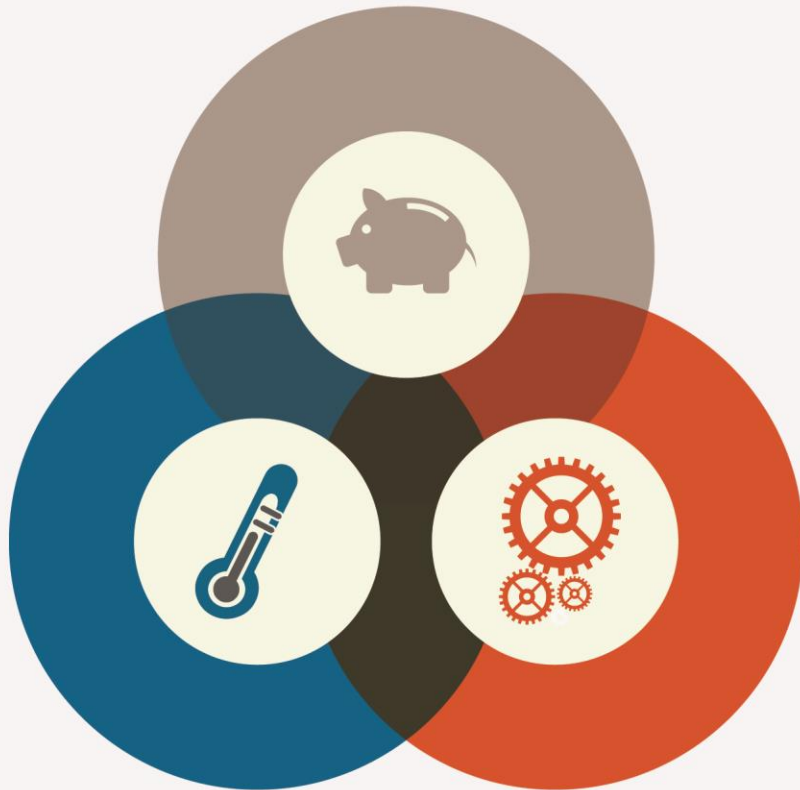
- Ergonomic risks
- Cardiovascular risks
- Job stressors

Sorensen G and Barbeau E. Integrating Occupational Health and Safety and Worksite Health Promotion: State of the Science. The NIOSH Total Worker Health™ Program: Seminal Research Papers 2012. DHHS (NIOSH) 2012-146.

Integrated Programs May...



- Address synergistic risks
- Enhance a culture of trust and increase employees' receptivity to health behavior change
- Improve morale, engagement, employee retention



The health of workers is tied to the health and productivity of organizations.⁴

4. Hymel P, Loeppke R, Baase C, Burton W, Hartenbaum N, Hudson T, McLelann R, Mueller K, Roberts M, Yarborough C, Konicki D, Larson P [2011].

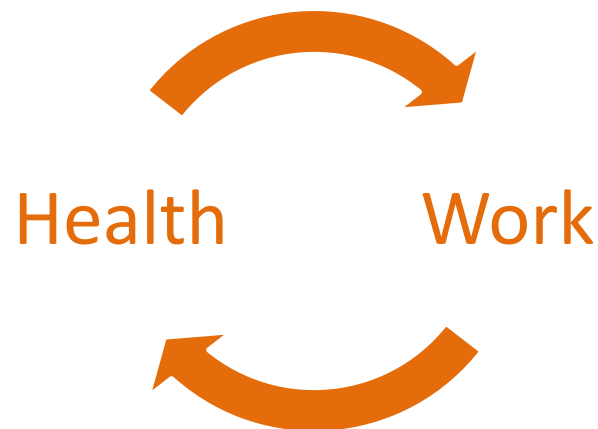
Increased Risk of Workplace Injury

14% Asthma

17% Diabetes

23% Heart disease

25% Depression



Kubo J, Goldstein BA, Cantley, LF., et. al. Contribution of health status and prevalent chronic disease to individual risk for workplace injury in the manufacturing environment. *Occup Environ Med* 2013;0:1–8.

“Companies that build a culture of health by focusing on the well-being and safety of their workforce yield greater value for their investors.”

FAST TRACK ARTICLE

The Link Between Workforce Health and Safety and the Health of the Bottom Line

Tracking Market Performance of Companies That Nurture a “Culture of Health”

Raymond Fabius, MD, R. Dixon Thayer, BA, Doris L. Konicki, MHS, Charles M. Yarbrough, MD, Kent W. Peterson, MD, Fikry Isaac, MD, Ronald R. Loeppke, MD, MPH, Barry S. Eisenberg, MA, and Marianne Dreger, MA

Objective: To test the hypothesis that comprehensive efforts to reduce a workforce's health and safety risks can be associated with a company's stock market performance. **Methods:** Stock market performance of Corporate Health Achievement Award winners was tracked under four different scenarios using simulation and past market performance. **Results:** A portfolio of companies recognized as award winning for their approach to the health and safety of their workforce outperformed the market. Evidence seems to support that building cultures of health and safety provides a competitive advantage in the marketplace. This research may have also identified an association between companies that focus on health and safety and companies that manage other aspects of their business equally well. **Conclusions:** Companies that build a culture of health by focusing on the well-being and safety of their workforce yield greater value for their investors.

A growing body of evidence supports the concept that focusing on the health and safety of a workforce is good business. Engaging in a comprehensive effort to promote wellness, reduce the health risks of a workforce, and mitigate the complications of chronic illness within these populations can produce remarkable effects on health

- Recently, an article by Loeppke and colleagues,⁴ reported that for every dollar of medical and pharmaceutical costs spent, an employer lost an additional \$2.30 of health-related productivity costs. Health-related presenteeism (health risks and medical conditions impacting work performance) was shown to have a larger impact on lost productivity than absenteeism, with executives and managers suffering higher losses. Comorbidities demonstrated the largest effects on productivity loss.⁴

These facts led to a hypothesis: Companies that create an environment for their employees and dependents that reinforces both conscious and unconscious safer and healthier lifestyle choices as well as provides more effective accessing of appropriate health care (ie, surround them with a “culture of health”) should be more productive and that productivity should drive business performance and be reflected in the price of their stock.

To more objectively test this hypothesis, we tracked the stock market performance of companies with proven health, safety, and environmental programs under four different scenarios. To find such companies, we turned to the recipients of the American College of Occupational Medicine's (ACOFM's) Corporate Health Achieve-

**GET ENGAGED IN THE
CONVERSATION AND TAKE ACTION**

NIOSH **TOTAL WORKER HEALTH™**

Webinar Series

2014 Series Summary

February 25

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



Laura Punnett,
ScD



Ron Goetzel,
PhD

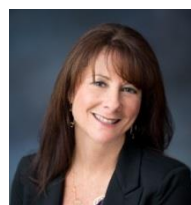
543 registrants
357 attendees for live webinar
224 views of recording*

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>

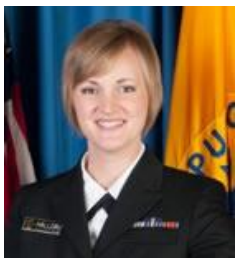
NIOSH **TOTAL WORKER HEALTH**™

Webinar Series

2015 Series, to date:

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

603 registrants

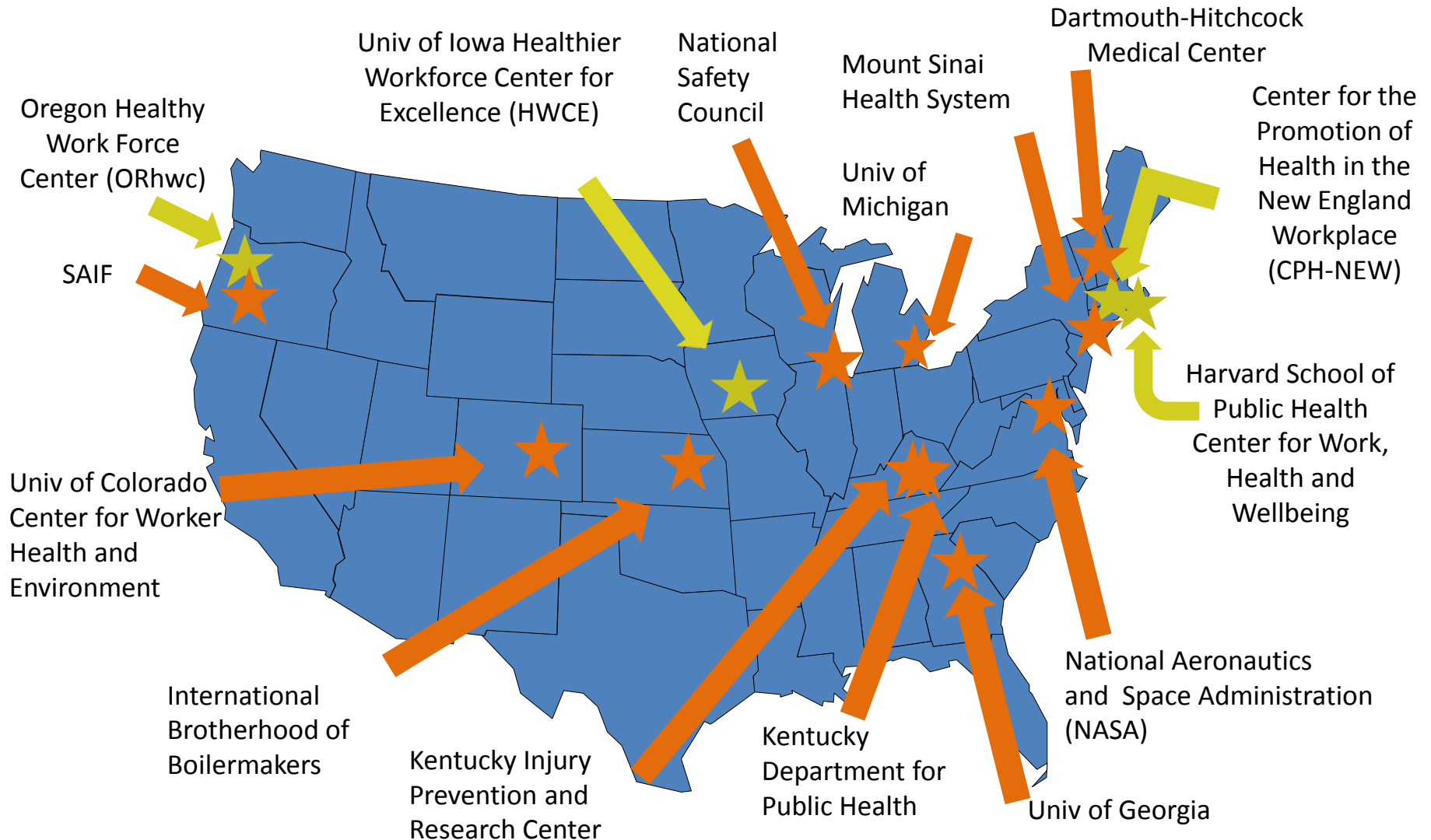
Coming in June

[Topic: Sedentary Work]



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

Centers of Excellence & TWH™ Affiliates



Not Yet Shown on Map: Boilermakers International, ISSA, Nebraska Safety Council, UNC



NIH Pathways-to-Prevention

- NHLBI and TWH partnering
- Examine the TWH approach and identify research gaps/opportunities
- Workshop in November 2015 to examine the current evidence base
- What are opportunities for future investment in research in TWH?

Gallup Well-being Research

- Projects underway in 3 NIOSH Divisions - DSHEFS, DART, and NIOSH Office of the Director
- 12 projects underway in NIOSH

NIOSH Well-being Project with RAND

- Year-long project to “operationalize” the concept of well-being for Total Worker Health
- RAND will make recommendations on well-being domains and drivers , to include in a final definition of well-being from a worker/workplace perspective

NIOSH National Center for Productive Aging and Work (NCPAW)

- First Announced January 2015
- First named Total Worker Health™ Specialty Center
- Co-Directors: Dr. Juliann Scholl and Dr. Jim Grosch
- Enable productive aging for working Americans of all ages through research, programs and policies in collaboration with partners
- External Launch – Summer 2015

<http://www.cdc.gov/niosh/topics/healthyagingatwork>

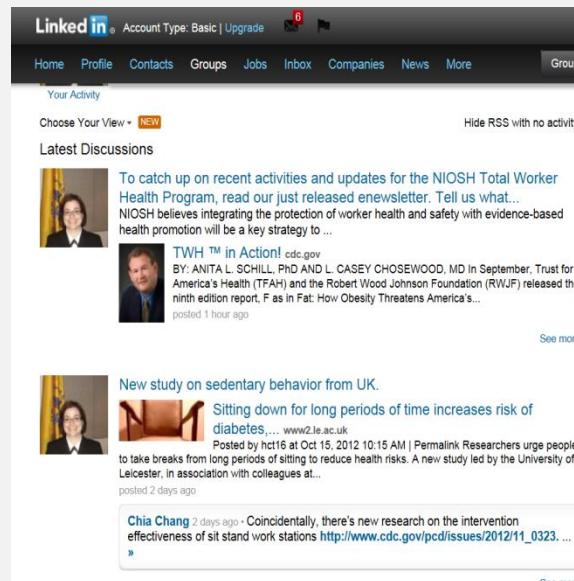
Ways to Connect with Total Worker Health™

Email TWH@cdc.gov

Twitter
([@NIOSH_TWH](https://twitter.com/NIOSH_TWH))



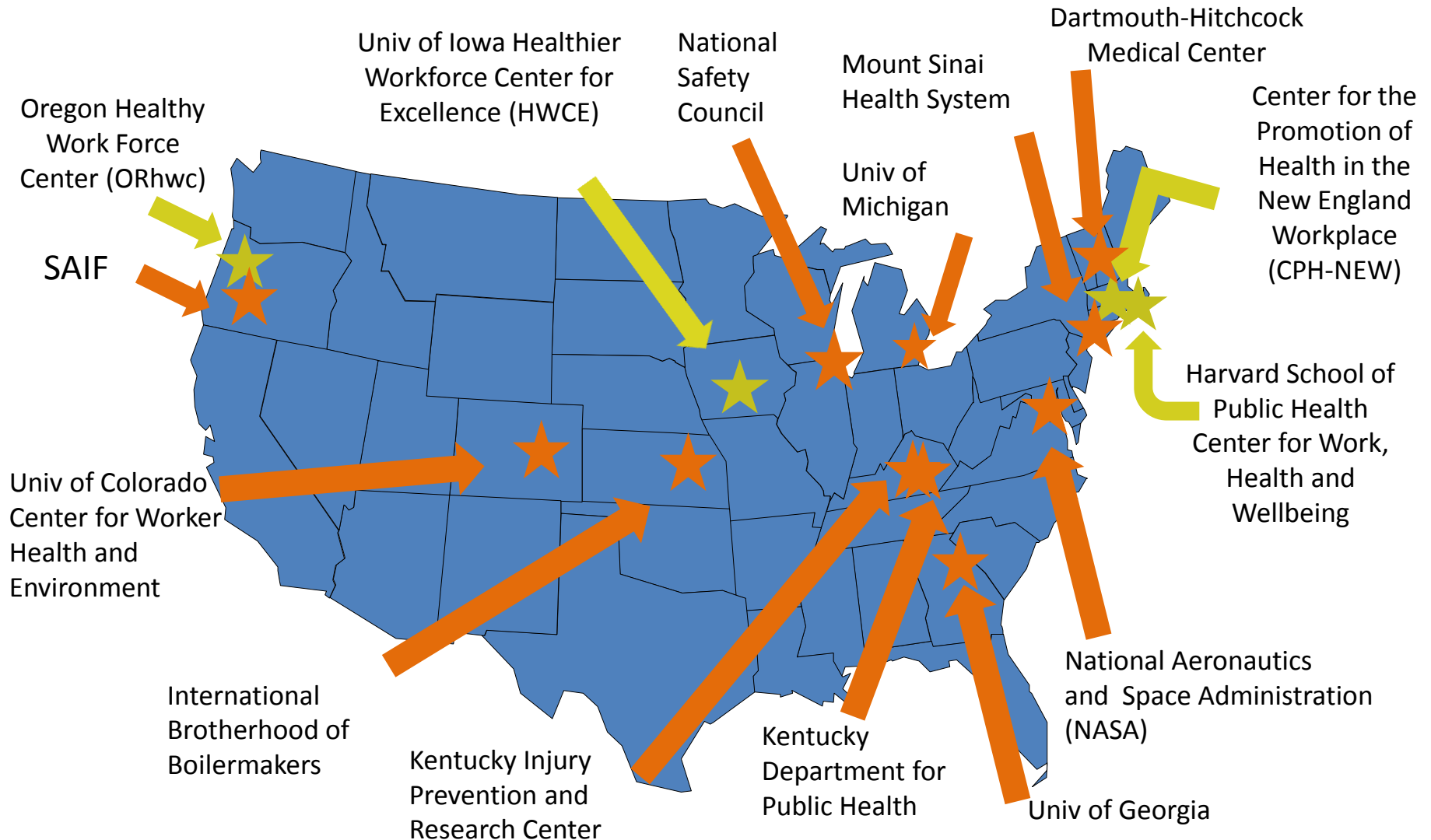
LinkedIn
([NIOSH Total Worker Health](https://www.linkedin.com/company/NIOSH_TWH))



TWH in Action!
e-Newsletter



Centers of Excellence & TWH™ Affiliates



Not Yet Shown on Map: Boilermakers International, ISSA, Nebraska Safety Council



<http://www.cdc.gov/niosh/twh/affiliate.html>

*Why total worker health
really matters...*

