

From Good Idea to Great Impact

Exploring the Total Worker Health[®] Model for Healthier Work



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Why do we need Total Worker Health[®]?

What exactly is it?

How do we spread the word and build new interventions?

Why do we need Total Worker Health?









Is This the Future of Work?

“My father had one job in his life, I’ve had six in mine, my kids will have six at the same time”

“The future of work: Five ways work will change in the future,”
The Guardian, Nov 29, 2015

- Rapid job extinction and creation
- “Gig” economy
- Less/no job security
- Minimal advancement
- Hazardous work “outsourcing”
- Separation of benefits and employment
- Responsibility for safety more diffuse
- Union representation disappearing
- Vulnerable populations may be more vulnerable

Potential Health Effects of Contingent Work

- Uncertain, interrupted work leads to reductions in earnings
- Negative consequences for the worker and society after injury
 - Risk for severity of injury and likelihood of disability may be elevated
 - Return to work is more challenging
 - Cost of treating injuries may be shifted to the worker or the public at large
 - 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?

Will a Robot Be Your Next Supervisor?

- Within the next 10-20 years, **robotic automation will principally replace or support humans** in administrative jobs to varying degrees across industry sectors.
- Nearly 70% of business leaders expect the term “workforce” to eventually encompass both human employees and intelligent machines, creating the “**hybrid workforce** of the future”.
- Some predict **robotic supervision** will become commonplace in some industries and occupations.

The average American worker takes less vacation time than a medieval peasant

Lynn Parramore, Reuters

Nov. 7, 2016, 11:45 AM



Life for the medieval peasant was certainly no picnic. His life was shadowed by fear of famine, disease and bursts of warfare. His diet and personal hygiene left much to be desired.

But despite his reputation as a miserable wretch, you might envy him one thing: his vacations.

Plowing and harvesting were backbreaking toil, but the peasant enjoyed anywhere from eight weeks to half the year off.

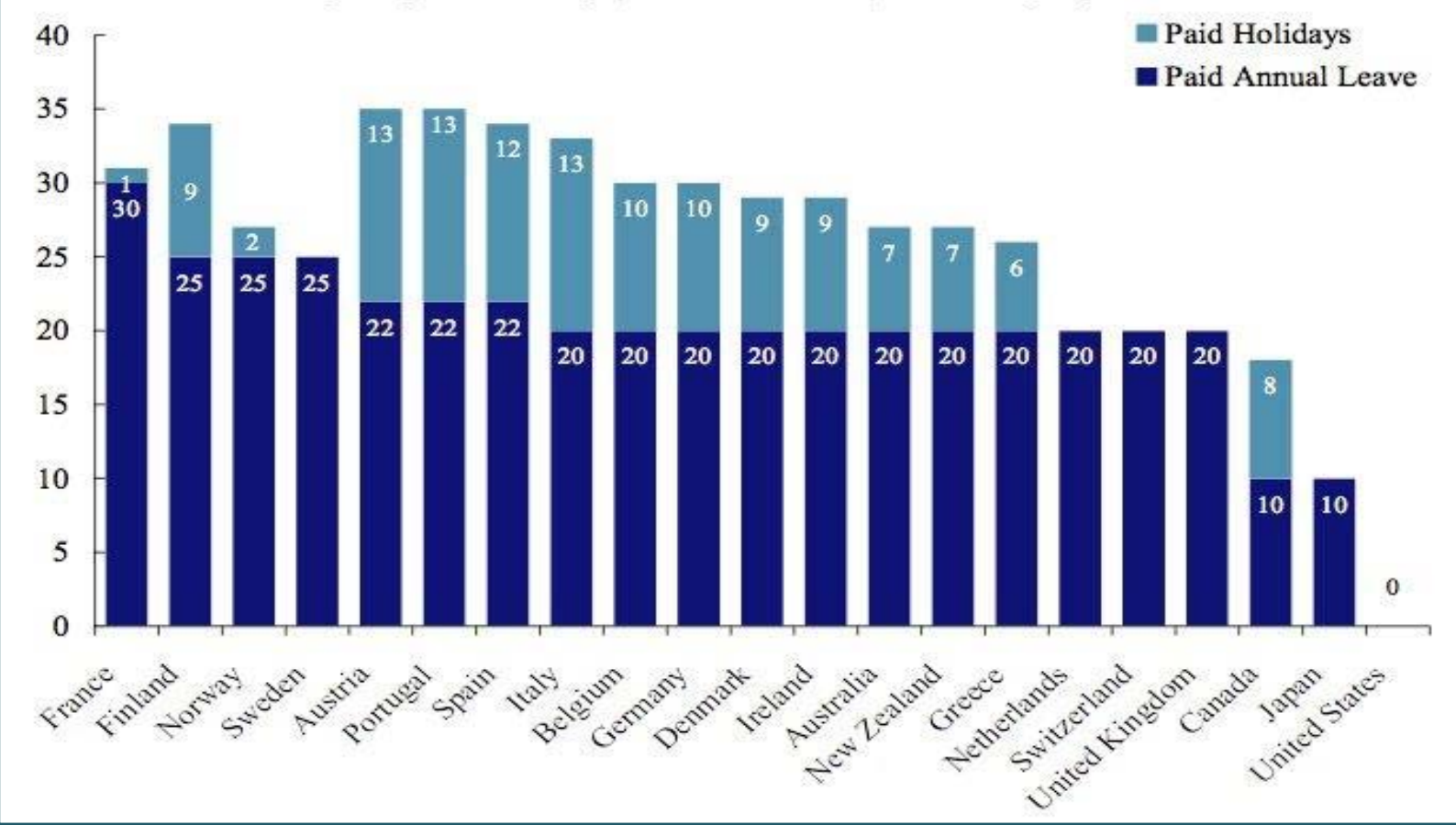
The Church, mindful of how to keep a population from rebelling, enforced frequent mandatory holidays. Weddings, wakes, and births might mean a week off quaffing ale to celebrate, and when wandering jugglers or sporting events came to town, the peasant expected time off for entertainment. There were labor-free Sundays, and when the plowing and harvesting seasons were over, the peasant got time to rest, too.



<http://www.businessinsider.com/american-worker-less-vacation-medieval-peasant-2016-11>



Paid annual leave and paid public holidays, OECD countries, in working days











Why is work so influential to our health and well-being?

- Work conditions = Risk for injury, illness and disability
- Work = Wages, a strong predictors of health, longevity
- Work = Benefits (healthcare, workers comp, income security)
- Work = Where we live/How we commute
- Work = Time from other pursuits (sleep, exercise, preparing food/diet, relationships and rest)
- Work = Relationships



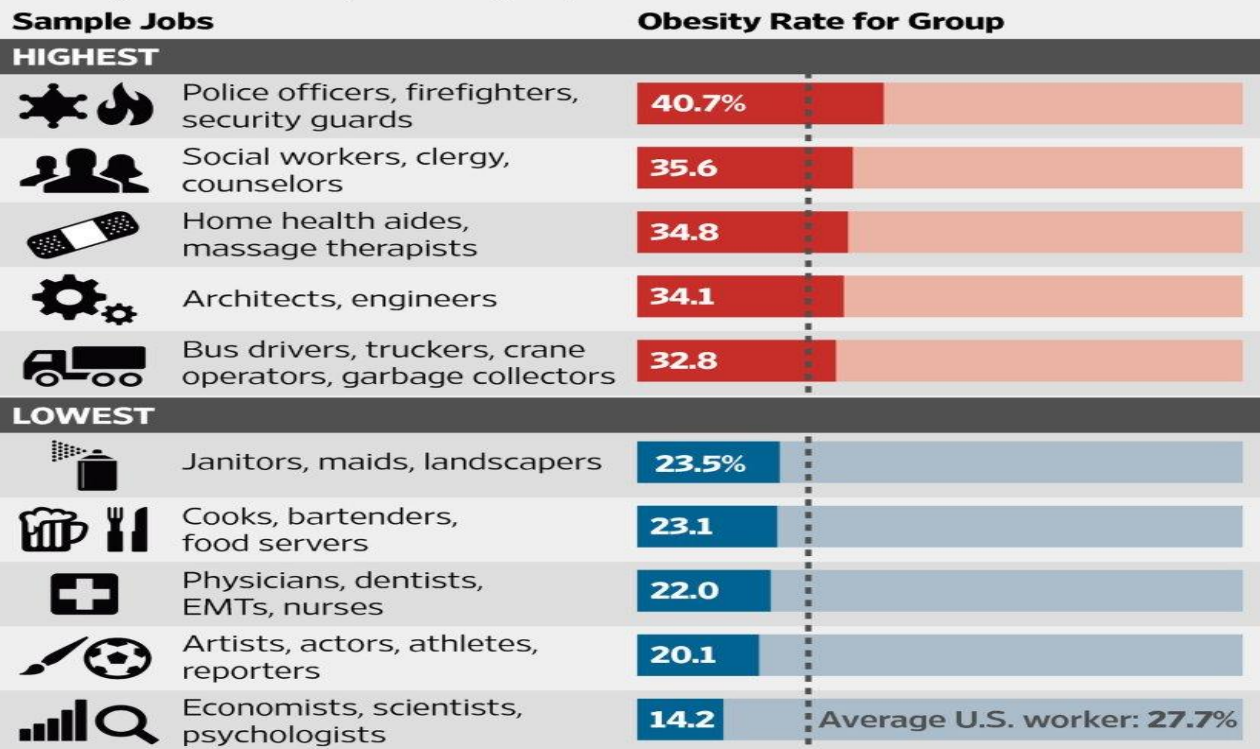
Shift work has been associated with elevated risks for cancer, heart disease, diabetes, obesity, the risk of violence, and stroke severity



Work influences critical choices around tobacco use, physical activity and other health behaviors

Obesity by Occupation

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



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

Links between Chronic Disease and the Nature of Work

➤ Cardiovascular disease

- Decreased physical exertion and inactivity, shift work, environmental exposures, job strain or stress
- Estimate 10–20% of all deaths caused by cardiovascular disease among working-age population are work-related

➤ Cancer caused by work exposures

- Between 2–8% of all types of cancer worldwide due to carcinogen-related exposure
- Up to 14% of cancer deaths in men
 - 20% of lung cancer deaths
 - 8% of bladder cancer deaths

Kecklund G, Axelsson J [2016]. Br Med J 355:i5210.

Vyas M, et al [2012]. Br Med J 345:e4800.

Theorell T, et al [2016]. Eur J Public Health 26: 470-477.

International Commission on Occupational Health [2013]. Newsletter 11;(2,3):4.

Driscoll T, et al [2005]. Am J Ind Med 48:491-502.

Steenland K, et al [2003]. Am J Ind Med 43:461-482.

Rushton L, et al [2010]. Br J Cancer 102: 1428 – 1437.

What exactly is Total Worker Health®?

Defining 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.



Keep Workers Safe



**Establish Workplace Policies,
Practices, and Programs that
Improve Health**



Create Worker Well-Being

Example of Integrated Approach to Musculoskeletal Challenges

Reorganizing
work



Ergonomic
consultations

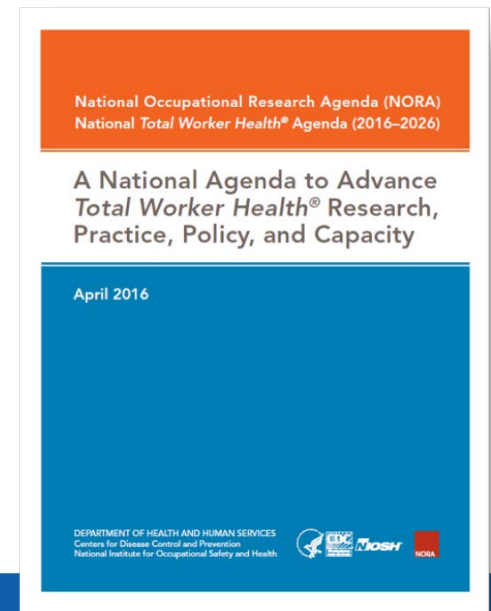


Arthritis self-
management
strategies



Policies, Programs and Practices Build A Safer and Healthier Culture

- Worker-centered operations, worker participation in decisions
- Healthier work design and organization
- Paid family and sick leave, paid medical benefits
- Fair wages, safer staffing levels,
only voluntary overtime
- Greater flexibility, respect, fairer performance
appraisals and advancement opportunities
- Attention to work–life integration

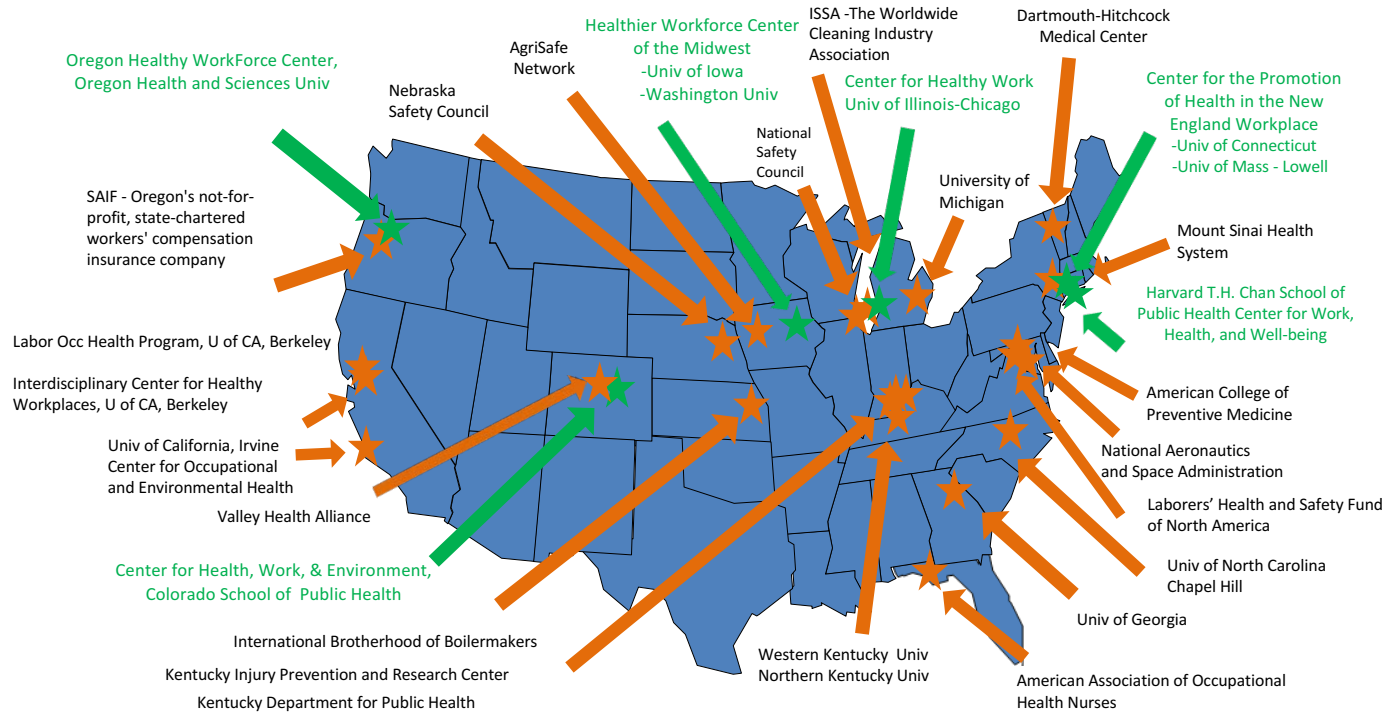


What is the promise of Total Worker Health?

- Reduction in workplace injuries and illnesses
- Safer, healthier, and more productive employees
- Improved workers' job satisfaction
- Enhanced organizational culture (of trust, of safety, of health)
- Improved health opportunities, more informed decision making
- Reduction in healthcare costs
- Family, community and societal gains

How do we spread the word and build new interventions?

NIOSH Total Worker Health® Affiliates and Centers of Excellence



Newly added Affiliates: Industrial Minerals Association - North America, University of Buffalo, Eskinazi Health System, National Security Administration, Ohio Bureau of Workers' Compensation, Association of Occupational Health Professionals in Healthcare, Communications Workers of America (CWA), St. Louis Area Business Health Coalition, American Industrial Hygiene Association, HealthPartners Institute, Society for Occupational Health Psychology, National Institutes of Health, American College of Occupational and Environmental Medicine, University of Rochester

NIOSH Total Worker Health® Affiliates and Centers of Excellence

NIOSH TWH CENTERS OF EXCELLENCE
Center for Health, Work & Environment
Center for the Promotion of Health in the New England Workplace
Harvard T.H. Chan School of Public Health Center for Work, Health, and Well-being
Healthier Workforce Center of the Midwest
Oregon Healthy Workforce Center
University of Illinois Chicago Center of Healthy Work



NIOSH TWH AFFILIATES	
AgriSafe Network	National Safety Council
American Association of Occupational Health Nurses (AAOHN)	National Security Agency
American College of Occupational and Environmental Medicine (ACOEM)	Nebraska Safety Council
American College of Preventive Medicine (ACPM)	Northern Kentucky University
American Industrial Hygiene Association (AIHA)	Ohio Bureau of Workers' Compensation
Association of Occupational Health Professionals in Healthcare (AOHP)	SAIF Corporation
Communications Workers of America (CWA)	Society for Occupational Health Psychology (SOHP)
Dartmouth Hitchcock Medical Center	St. Louis Area Business Health Coalition
Eskenazi Health	University of Buffalo Industrial & Systems Engineering
HealthPartners Institute	Interdisciplinary Center for Healthy Workplaces, U of CA -Berkeley
Industrial Minerals Association –North America (IMA-NA)	Labor Occupational Health Program, U of CA -Berkeley
International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers, and Helpers (IBB)	U of CA –Irvine, Center for Occupational and Environmental Health
ISSA—The Worldwide Cleaning Industry Association	University of Georgia
Kentucky Department for Public Health	University of Michigan
Kentucky Injury Prevention and Research Center	University of North Carolina, Chapel Hill
Laborers' Health & Safety Fund of North America	University of Rochester
Mount Sinai Entities	Valley Health Alliance
National Aeronautics and Space Administration	Western Kentucky University
National Institutes of Health	

NIOSH Total Worker Health® Professional Development Framework

*Envisioning the Workplace Health
Professional of the Future*

TWH Workforce Capacity Building Is Part of the National Total Worker Health® Agenda

Strategic Goal 4

Build TWH professional workforce capacity to strengthen the TWH field to successfully integrate occupational safety and health protection *and worker well-being* activities in the workplace

Proposed TWH Professional Development Goals

- Identify educational and training needs
- Develop *Total Worker Health* competencies
- Develop guidance for integrated curricula and training programs
- Integrate TWH Concepts into workplace practice through more holistic training of OSH and allied professionals
- Establish an entity to standardize and certify TWH professionals

TWH Competencies for Consideration

1. Subject Matter Expertise
2. Program Planning, Implementation, and Evaluation
3. Communication, Marketing
4. Leadership and Management
5. Advocacy

Critical Areas of TWH Research and Progress

- How can healthier job design and work organization principles advance worker well-being?
- 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?
- 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 broaden the training of OSH professionals to encompass TWH principles?

Coming soon!
Edited Volume on Total Worker Health

Total Worker Health®: Integrative Approaches to Safety, Health, and Well-being

Editors: H. L. Hudson, J. A. S. Nigam, S. L. Sauter, L. C. Chosewood, A. Schill, & J. H. Howard

- The *Total Worker Health*® Vision
- Evolution of the Concept
- Interrelationships of Occupational and Personal Risk Factors in the Etiology of Disease and Injury
- Effectiveness of Integrated TWH Interventions
- A Conceptual Model for Guiding Integrated Interventions and Research
- A Participatory Framework for Integrated Interventions
- Occupational Safety, Health, and Well-being Programs in Small Midwest Enterprises
- Creating and Sustaining Integrated Prevention Approaches in Large Businesses
- A Labor-Management Approach to Addressing Health Risks in the Unionized Construction Sector
- Community health programs: Promising practices and opportunities for expanding the reach and impact of *TWH*
- Developing An Integrated Approach to Workplace Mental Health
- Productive Aging and Work
- Integrated Interventions for Shift Work, Long Work Hours, and Related Workplace Fatigue Issues
- Integration of Workplace Prevention Programs and Organizational Effectiveness
- Reducing Work-Life Stress: The Place for Integrated Interventions
- Future Directions and Opportunities for *Total Worker Health*



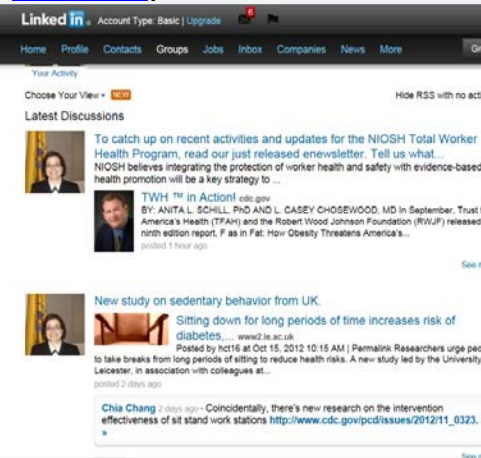
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TWH in Action!
e-Newsletter

