NATIONAL OCCUPATIONAL RESEARCH AGENDA (NORA)

PROPOSED NATIONAL TOTAL WORKER HEALTH™ AGENDA FOR PUBLIC COMMENT

A NATIONAL AGENDA TO ADVANCE **TOTAL WORKER HEALTH™** RESEARCH, PRACTICE, AND POLICY

September 2014

Abbreviations

HHS	U.S. Department of Health and Human Services
NIOSH	National Institute for Occupational Safety and Health
NORA	National Occupational Research Agenda
OSH	Occupational Safety and Health
TWH™	Total Worker Health™
WHP	Worksite Health Promotion

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Table of Contents

Abbreviations 2
Introduction 4
History of Total Worker Health™ 4
Rationale for Total Worker Health™ 4
Total Worker Health™ Defined 5
Issues Relevant to Total Worker Health™ 5
Figure 1: Issues Relevant to a Total Worker Health™ Perspective 5
The NIOSH Vision for Total Worker Health™ 6
National Occupational Research Agenda 7
The National Occupational Research Agenda 7
The National Total Worker Health™ Agenda 7
Stakeholders' Input 7
Goals for the Nation 8
Research 9
Practice 10
Policy 10
Capacity-Building 11
References 12
Appendix A 13
NIOSH Contributors to the National Total Worker Health™ Agenda 13
Centers of Excellence Contributors to the National Total Worker Health™ Agenda 14

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The findings and conclusions in this report 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.

Introduction

History of Total Worker Health™

In 2003, the National Institute for Occupational Safety and Health (NIOSH) started the Steps to a Healthier U.S. Workforce Initiative to explore the benefits of integrating occupational safety and health protection program activities with health promotion program activities. One of the important outcomes of this initiative was the 2004 Steps to a Healthier U.S. Workforce Symposium that received overwhelming support from the stakeholder community (Schill and Chosewood 2013). Building on this enthusiastic support, the "Steps" initiative developed into the WorkLife Initiative and a second highly successful symposium was convened in 2007.

During these foundational years, NIOSH primarily focused on funding extramural research Centers of Excellence to Promote a Healthier Workforce (Centers of Excellence) to complement intramural efforts. In 2006 and 2007, NIOSH funded three Centers: the University of Iowa Healthier Workforce Center of Excellence (University of Iowa), the Center for the Promotion of Health in the New England Workplace (University of Massachusetts Lowell and University of Connecticut), and the Harvard Center of Excellence to Promote a Healthier Workforce (Harvard University). In 2011, a fourth Center-Oregon Healthy Workforce Center-was funded (Oregon Health and Sciences University).

Also in 2011, NIOSH renamed its efforts focused on integration of occupational safety and health protection and health promotion from WorkLife to the Total Worker Health™ (TWH™) Program. In addition to continuing support of the extramural Centers of Excellence, NIOSH also committed to further developing its TWH intramural research program. In 2014, NIOSH created the Office for TWH Coordination and Research Support (TWH Office) to coordinate and advance these extramural and intramural efforts.

While the development of the TWH Office is recent, there has been long-standing interest in integrated worksite health protection and health promotion programs in the scientific community (Sauter 2013). The literature on this subject is rich. For example, more than 20 years ago, DeJoy and colleagues (McLeroy et al. 1988, DeJoy and Southern 1993) argued for taking an ecological or systems approach to occupational safety and health—one that would recognize that worker injury and illness have myriad causes and, therefore, require coordinated interventions that take into account individual as well as occupational risk factors.

Rationale for Total Worker Health™

TWH promotes the integration of occupational safety and health protection with health and wellness promotion through research, interventions, partnerships, and capacity-building to meet the needs of the 21st century workforce. The rationale for this approach was presented in three NIOSH commissioned white papers at the 2004 Steps Symposium. These white papers were updated and published by NIOSH as a Research Compendium in 2012 (NIOSH 2012). As illustrated in these papers, a small, but growing body of evidence suggests that integrating occupational safety and health protection program activities with health promotion program activities is more effective for safeguarding worker safety, health, and well-being than either of these programmatic activities on their own.

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Total Worker Health™ Defined

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

Issues Relevant to Total Worker Health™

Issues relevant to a TWH perspective are illustrated in Figure 1. These issues include a wide-ranging assortment of topics pertinent to the 21st century workplace[1]. They are organized into three groups: workplace, employment, and workers. As noted in the figure, these lists are not meant to be exhaustive nor do they necessarily reflect equivalent importance or exclusive categories. Rather, this graphic is intended to quickly convey the breadth of TWH interests.

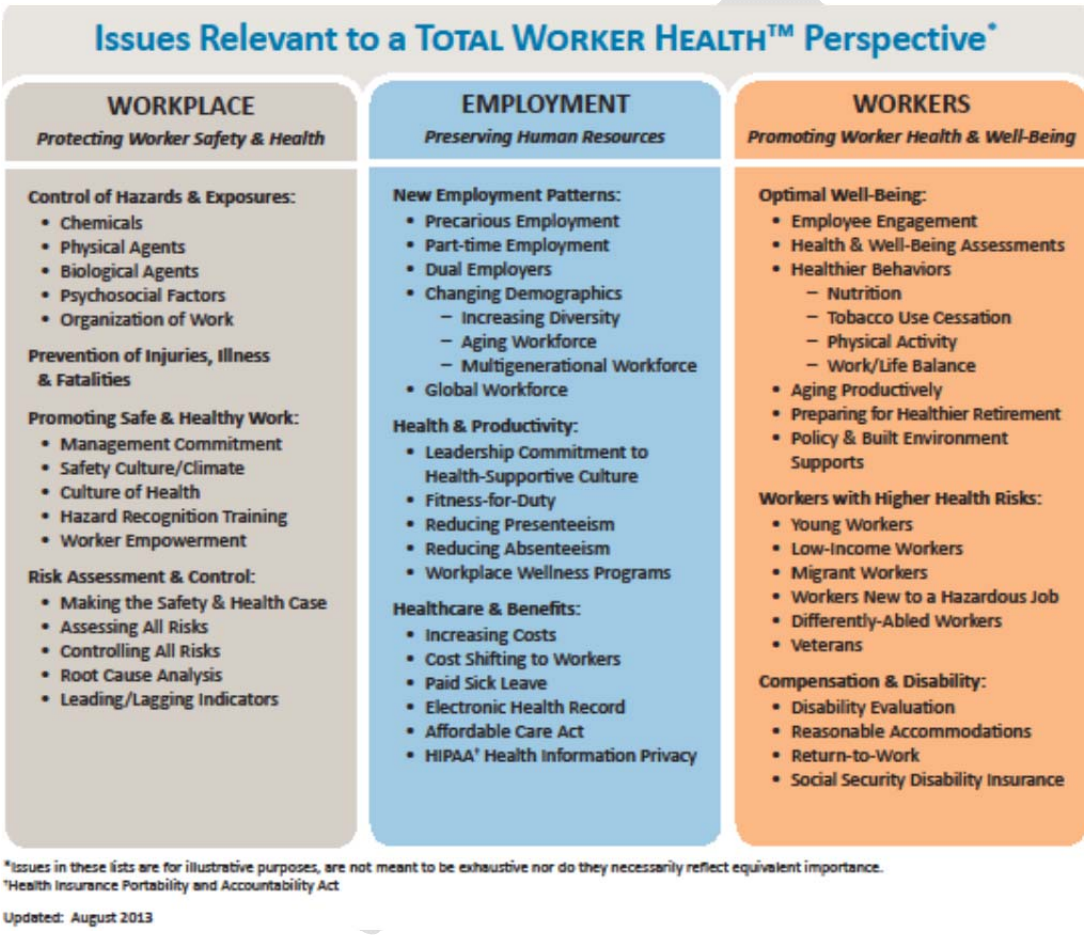

Figure 1: Issues Relevant to a Total Worker Health™ Perspective

The first group of issues relevant to TWH relates specifically to the workplace and to protecting worker safety and health. Workplace-related issues can be subcategorized as follows: control of hazards and exposures; prevention of injuries, illness, and fatalities; promoting safe and healthy

[1] For the purposes of this proposed National Total Worker Health™ Agenda, the word "workplace" refers to any location where a worker conducts work for an employer. In this sense, "workplace" could be within the four walls of a building, a construction site, a motor vehicle, a truck, a mine, or even the worker's home.

work; and risk assessment and control. Control of hazards and exposures relates to both persistent and new challenges, ranging from traditional chemical, physical, and biological hazards to the more prevalent, contemporary exposures associated with the psychosocial work environment and the organizational demands of work. Prevention of injuries, illness, and fatalities and promotion of safe and healthy work through risk assessment and control efforts are fundamental to protecting workers in the workplace.

TWH is especially relevant to today's workplace in the context of current employment-related issues and trends, including new employment patterns, health and productivity, and health care and benefits. New employment patterns may include precarious or part-time work, both of which have implications for worker safety, health, and well-being, as does the changing makeup of the workforce. Shifts in population demographics might also create new challenges (e.g., those presented by a multigenerational workforce). Such challenges encourage many employers to preserve their existing human resources in order to remain competitive both nationally and internationally. Additionally, benefits systems (i.e., benefit and retirement packages) are becoming even more strained due to increasing health care costs, which negatively impact employer-offered programs and services.

The third group of issues relevant to TWH includes those related to workers and the promotion of their health and well-being. Promoting optimal well-being is a multidimensional effort that may include employee engagement and policy support for the development of healthier behaviors, such as tobacco use cessation, increased physical activity, improved nutrition, and better management of the work/life interface. Older workers are specifically concerned with aging productively and preparing for a healthier retirement. Other groups of workers who face unique challenges include those with higher health risks, such as those who are low-income, veterans who are transitioning from military to civilian careers, workers with disabilities, and young workers.

The NIOSH Vision for Total Worker Health™

Through both intramural and extramural investments in research and transfer to practice, the long-term vision of the TWH Program is to create work environments and address employment issues to support the overall safety, health, and well-being of workers through the integration of occupational safety and health protection and health promotion programs in the workplace. It is anticipated that this goal will be achieved through knowledge generation, translation of that knowledge into practice, development of policy guidance, and building workforce capacity to fulfill the vision. Creation of a National TWH Agenda is an important step to making the vision a reality.

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National Occupational Research Agenda

The National Occupational Research Agenda

The National Occupational Research Agenda (NORA) is a NIOSH partnership program to stimulate innovative research and enhanced workplace practices. Since 1996, NORA has become a framework for NIOSH and the nation. Stakeholders with diverse interests collaborate to identify the most critical issues in workplace safety and health. Partners then work together, developing goals and activities to address these needs. Participation in NORA is broad, including stakeholders from universities, worker organizations, professional societies, and government agencies.

In 2006, NORA entered its second decade with a new sector-based structure to more effectively translate research into practice within workplaces. Together with its partners, NIOSH provides leadership for NORA and facilitates the work of the NORA Sector Councils, which develop and implement the national agenda. There are 10 sector programs which were configured from the North American Industry Classification System (Agriculture, Forestry and Fishing; Construction; Healthcare and Social Assistance; Manufacturing; Mining; Oil and Gas; Public Safety; Services; Wholesale and Retail Trade; Transportation, Warehousing and Utilities). TWH is one of 24 cross-sector programs, so named because they have the potential to impact each sector as defined by NIOSH. For more information about NORA see http://www.cdc.gov/niosh/NORA/ .

The National Total Worker Health™ Agenda

This is the first effort to create a NORA that is specific to TWH. The intention of this effort is to create an agenda that will galvanize researchers, occupational safety and health practitioners, health promotion and wellness professionals, workers, employers, labor organizations, health care providers, educators, policymakers and others to prevent worker injury and illness and to advance the safety, health, and well-being of the workforce. Success of this effort will be dependent on the participation of stakeholders with interests in TWH.

Stakeholders' Input

Stakeholder input in agenda development and partnership in achieving goals identified in the agenda are the hallmarks of the NORA process. By offering this proposed National TWH Agenda for stakeholder review and comment, NIOSH continues this tradition of leadership to assure safe and healthful working conditions for U.S. workers. Stakeholder input will be solicited through several methods, including conference town hall style meetings at the 1st International Symposium to Advance Total Worker Health™ http://www.eagleson.org/conferences/total-worker-health and a docket created to receive additional stakeholder input that will be announced in a Federal Register Notice.

Goals for the Nation

The proposed National TWH Agenda includes four strategic goals, grouped into the following domains: research, practice, policy, and capacity-building. Achievement of these strategic goals will move the Nation towards creation of work environments that support the overall safety, health, and well-being of workers through the integration of occupational safety and health protection and health promotion programs in the workplace. Each strategic goal is supported by one or more sub-goals that lead to the achievement of the strategic goal.

The proposed goals are based on the more evident needs in the emerging field of TWH. The intent is to jumpstart a national conversation and elicit input and comment from stakeholders to develop the most relevant TWH agenda. The goals are derived from a number of sources in the peer-reviewed, published literature (Cherniack et al. 2010, Hymel et al. 2011, Sorensen et al. 2011, NIOSH 2012, Schill and Chosewood 2013) and a recent TWH workshop convened by the Institute of Medicine and sponsored by NIOSH. Details about this workshop, *Total Worker Health™: Promising and Best Practices in the Integration of Occupational Safety and Health Protection with Health Promotion in the Workplace – A Workshop* (Institute of Medicine and National Institute for Occupational Safety and Health 2014), can be found at http://www.iom.edu/Activities/Environment/TotalWorkerHealth/2014-MAY-22.aspx .

The proposed National TWH Agenda encompasses four strategic goals to advance the integration of workplace health protection and health promotion activities to better safeguard the safety, health, and well-being of workers; support the overall workforce vitality; and foster national economic prosperity. The strategic goals are listed here:

1. Research: Advance and conduct etiologic, surveillance, and intervention research that builds the evidence base for effectively integrating health protection and health promotion activities in the workplace.
2. Practice: Increase the awareness and adoption of effective, integrated occupational safety and health protection and health promotion activities in the workplace.
3. Policy: Create guidance for policies that promote integration of occupational safety and health protection and health promotion activities in the workplace.
4. Capacity-Building: Build professional capacity to strengthen the TWH workforce and TWH field to support the development, growth, and maintenance of integrated occupational safety and health protection and health promotion activities in the workplace.

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Research

Strategic Goal 1. Advance and conduct etiologic, surveillance, and intervention research that builds the evidence base for effectively integrating health protection and health promotion activities in the workplace.

Etiologic/health effects research

- Investigate work and non-work contributions to worker safety and health conditions to better understand their sources and identify TWH interventions.

Surveillance research

- Improve surveillance systems to expand study of risks to worker safety, health, and well-being by incorporating more information on:
    - work-related exposures in public health surveys and other surveillance systems; and
    - non-work conditions and exposures in occupational safety and health hazard surveys and other surveillance systems.
- Expand current surveillance systems or develop new ones to track the adoption and reach of TWH interventions over time.
- Develop measures to guide integrated interventions in organizations, such as Health Risk Appraisals, that reliably capture both work-related and non-work exposures that pose safety and health risks.

Intervention research

- Investigate the merits of integrated interventions relative to comprehensive but parallel worksite health promotion (WHP) *and* occupational safety and health (OSH) protection interventions, and to unilateral WHP *or* OSH interventions.
- Address a broad range of outcomes to include:
    - subclinical (e.g., biomarkers), health status (morbidity and mortality), and health-related quality of life indicators of illness, injury, and well-being to better understand the efficacy and effectiveness of integrated intervention strategies; and
    - measures of organizational effectiveness (e.g., turnover, presenteeism, and other performance indicators) and economic indicators to better understand the cost-effectiveness of TWH programs and help establish the business case[2] for integrated prevention strategies.
- Give further attention to the theoretical underpinnings of TWH intervention studies to better understand why and under what circumstances TWH interventions can be effective.

[2] NIOSH considers the "business case for prevention" to be an economic evaluation from the employer's perspective that demonstrates improvements in productivity, profitability, or sustainability through the implementation of policies, practices, or technologies that prevent worker injury and illness. Economic evaluations identify, measure, value, and compare the costs and benefits of different preventive interventions.
Economic evaluations provide information for effective resource allocation among competing needs. For employers, economic evaluations help to identify investments in preventing worker injury and illness that provide the greatest benefit for the least cost. Correctly identifying how employers' "bottom line" is impacted by their current and potential alternative activities, including worker injury and illness prevention activities, is at the core of successful businesses.

- Investigate organizational policies and practices that support or detract from the adoption, development, effectiveness, efficacy, and sustainability of integrated occupational safety and health protection and health promotion programs.
- Investigate the broader integration of:
    - workplace prevention activities (i.e., benefit programs and policies, Employee Assistance Programs) together with occupational safety and health and health promotion activities; and
    - community and public health prevention activities together with workplace prevention activities.
- Design TWH interventions to target workers at high-risk for exposure to both work-related and non-work hazards.
- Design TWH interventions for especially prevalent and costly conditions (e.g., mental health outcomes) that result from joint exposure to work-related and non-work hazards.

Practice

Strategic Goal 2. Increase the awareness and adoption of effective, integrated occupational safety and health protection and health promotion activities in the workplace.

- Increase adoption of TWH best practices developed based on research evidence and scientifically-derived consensus statements.
- Establish partnerships with corporate, labor, government, professional, and academic organizations to foster the uptake of TWH practices in the workplace.
- Increase awareness among workers, employers, professional associations, labor unions and other stakeholders of TWH practices and their benefits in order to promote adoption of TWH approaches.
    - Increase translation and dissemination of TWH research information and practice models.
    - Develop an internet-based open source system for disseminating TWH best practices recommendations, tool kits, mobile apps, and model programs.
    - Organize national and regional conferences, distance-learning events, and other web-based educational offerings on TWH.
    - Conduct a national survey to assess the adoption of TWH practices to target dissemination and promotion activities.

Policy

Strategic Goal 3. Create guidance for policies that promote integration of occupational safety and health protection and health promotion activities in the workplace.

- Develop policy guidance on TWH best practices.
- Establish mechanisms to promote corporate TWH responsibility and sustainability.
- Offer direction on TWH approaches specifically for high-risk worksites and small- and medium-sized companies.
- Explore strategies for the transfer of integrated OSH prevention activities to the general health care delivery system.

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Capacity-Building

Strategic Goal 4. Build professional capacity to strengthen the TWH workforce and TWH field to support the development, growth, and maintenance of integrated occupational safety and health protection and health promotion activities in the workplace.

- Identify training needs and develop core competencies and guidance for certificates, degree programs, and continuing education fostering integration of occupational safety and health protection with health promotion.
- Identify existing educational programs and curricula that support TWH concepts and training, and the best ways that federal programs and granting agencies can support these educational activities.
- Promote events and foster partnerships among TWH, OSH, public health, health promotion, and other stakeholders from multi-disciplinary sectors to strengthen the TWH field.
- Explore the benefits of creating a professional organization for TWH professionals.

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Appendix A

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