

Shifting the Paradigm to Total Worker Health (TWH)

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April 4 2025

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Toronto Ontario



Characteristics of Health & Safe Workplace's

- According to World Health Organization (WHO), a workplace should possess several characteristics to be healthy, safe, and resilient.
 1. It should be an environment where workers can perform their tasks without falling victim to illness or injury due to their work.
 2. A workplace needs to provide workers the opportunity to improve their physical and mental health and, more generally, their overall well-being.
 3. A healthy, safe and resilient workplace should allow the worker to be protected when a catastrophic event occurs.

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

Work conditions determine risk for injury, illness and disability

Work decides our wages, which are often strong predictors of health

Work conditions determine our risks for and control over exposures to environmental toxins, chemical, biological and other hazards

Work provides access to most health-related benefits, including those for healthcare, workers compensation, income security, dental care, mental health services, and disability income

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

Work largely controls many elements of our daily life schedule, to include the time we have for sleep, physical activity, healthier nutrition practices, relationships and rest

Work decides our wages, which are often strong predictors of health

Work conditions determine our risks for and control over exposures to environmental toxins, chemical, biological and other hazards

Work provides access to, workers compensation, income security, dental care, mental health services, and disability income

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

Work enhances or diminishes our opportunities for meaningful, healthy relationships – both at work and beyond

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

Our employer's location influences the communities in which we live, which in turn influences many health risks, opportunities, family dynamics, educational options, taxation, and cost of living

Our work influence our commutes, time spent in private or public motor vehicles, which influences our risk of motor vehicle crashes, environmental exposure

Issues Relevant to Advancing Worker Well-being Through Total Worker Health

Control of Hazards and Exposures	Organization of Work
<ul style="list-style-type: none">• Chemicals• Physical Agents• Biological Agents• Psychosocial Factors• Human Factors• Risk Assessment and Risk Management	<ul style="list-style-type: none">• 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

Issues Relevant to Advancing Worker Well-being Through Total Worker Health

Built Environment Supports	Leadership
<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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

Issues Relevant to Advancing Worker Well-being Through Total Worker Health

Compensation and Benefits	Community Supports
<ul style="list-style-type: none">• 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• Chronic Disease Prevention and Disease Management• Career and Skills Development	<ul style="list-style-type: none">• Healthy Community Design• Safe, Healthy and Affordable Housing Options• Safe and Clean Environment (Air and Water Quality, Noise Levels, Tobacco-Free Policies)• Access to Affordable, Quality Healthcare and Well-Being Resources

Issues Relevant to Advancing Worker Well-being Through Total Worker Health

Changing Workforce Demographics	Policy Issues	New Employment Patterns
<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • 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 	<ul style="list-style-type: none"> • Contracting and Subcontracting • Precarious and Contingent Employment • Multi-Employer Worksites • Organizational Restructuring, Downsizing and Mergers • Financial and Job Security

Culture Change Trumps Behavior Change Any Day of the Week

It is unreasonable to expect people to change their behavior when the social, cultural and physical environments do not support change.



Total Worker Health (TWH)

- 2003 when National Institute for Occupational Safety and Health (NIOSH) developed the “NIOSH Steps to a Healthier US Workforce Initiative”.
- The TWH model focuses on how the Occupational Safety & Health System (OHS) can better understand the adverse health effects correlated to the workers’ exposure (physical and mental) to occupational and/or job-related risk factors.
- TWH also takes into account the individual health conditions/lifestyle risk factors that may be present.
- Assessing and mitigating all these risks is an essential step to improve the overall safety, health and well-being of workers.

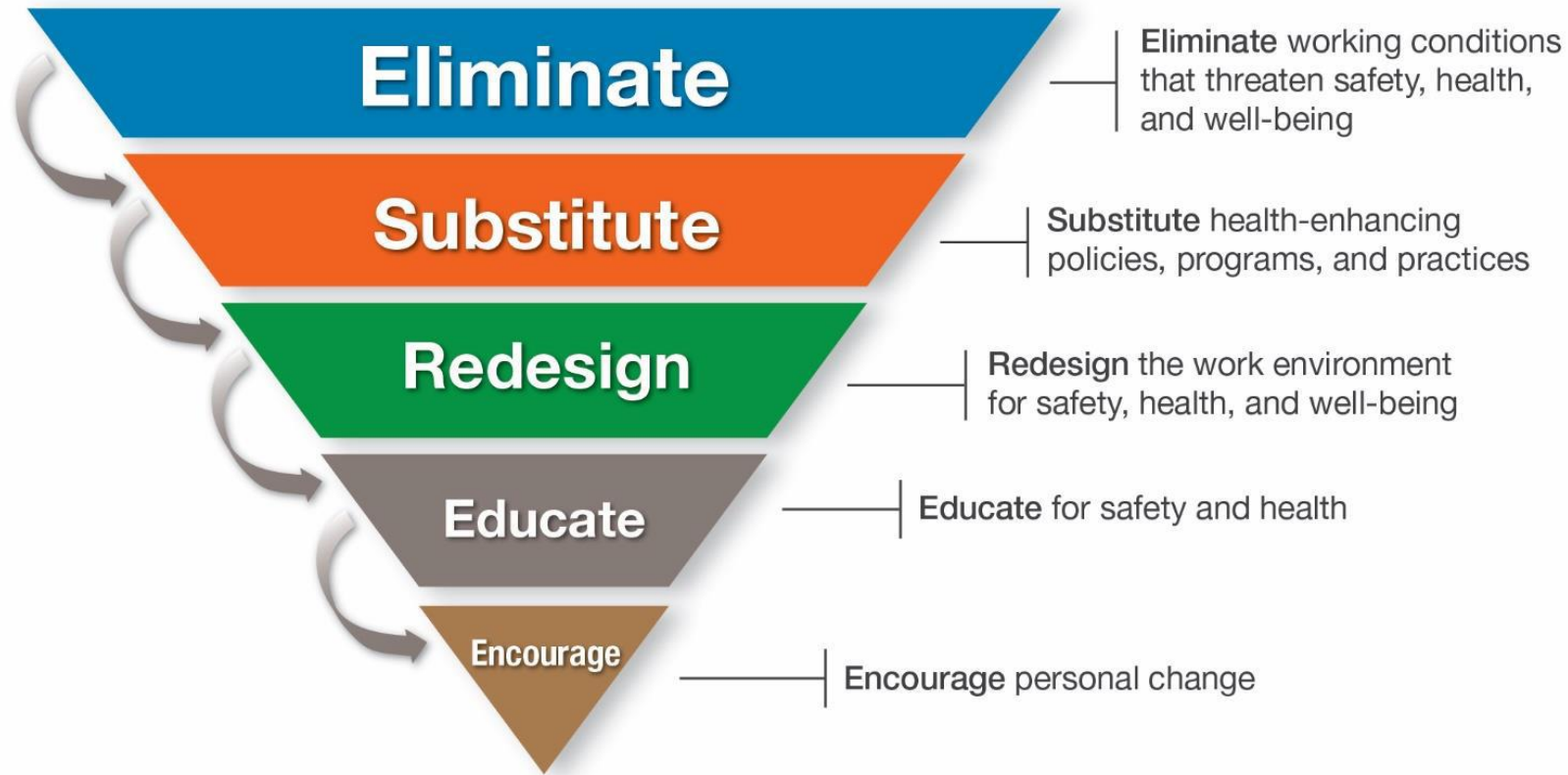


Total Worker Health (TWH) : Summary

- Builds on efforts to keep workers safe
- Workplace Enforcement is still an important component
- Takes a systems approach, broadening worker safety and health efforts
- Comprehensive focus on higher quality work, better-designed work
- Views organization of work as a strong exposure/opportunity
- Participatory, worker-centered (Joint Health & Safety Committees, Health & Safety Reps)
- Focuses on evidence-based research
- Provides holistic solutions for workers and employers
- Examines how the work organization and work itself can holistically influence worker safety, health, and well-being



Hierarchy of Controls Applied to NIOSH *Total Worker Health*[®]



Suggested Citation: NIOSH [2016]. Fundamentals of total worker health approaches: essential elements for advancing worker safety, health, and well-being. By Lee MP, Hudson H, Richards R, Chang CC, Chosewood LC, Schill AL, on behalf of the NIOSH Office for Total Worker Health. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. DHHS (NIOSH) Publication No. 2017-112.



What a TWH Approach Is Not

- Aware that some may be reluctant and apprehensive about moving to a TWH prevention model for construction workplaces.
- Acknowledge that some workplaces may attempt to use the TWH as a guise to apply behaviour-based safety practices.
- TWH Does not blame the worker.
- Behaviour-based safety (BBS) is a failed and discredited/ineffective way of dealing with workplace hazards.
- BBS blames the worker and completely ignores the workplace hazards, environment, and practices that led to injuries (physical and mental) and deaths.



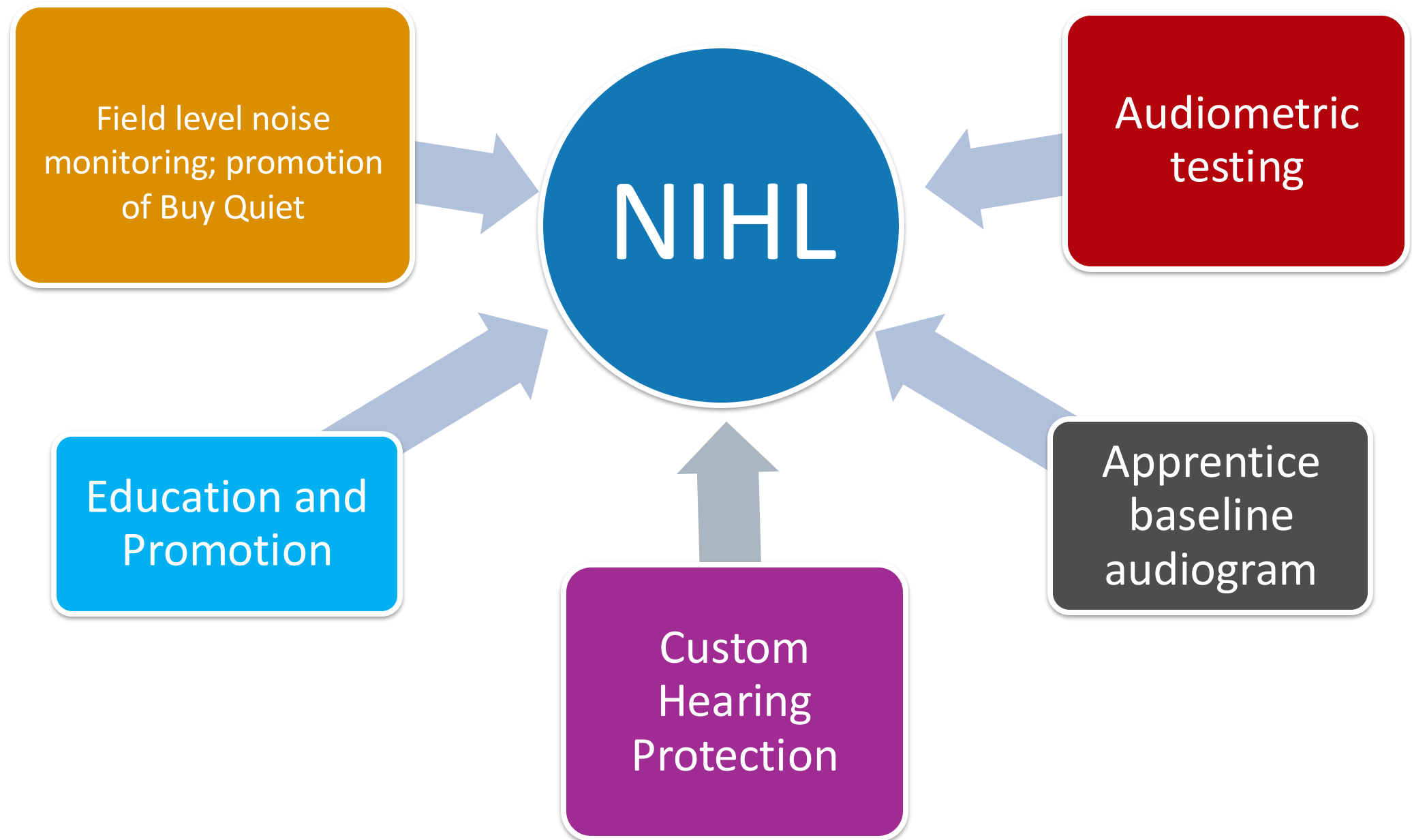
What a TWH Approach Is Not

- Not consistent with workplace policies that discriminate against or penalize workers for their individual health conditions or create disincentives for improving health
- Not a wellness/health promotion program that has been implemented without simultaneously providing safe and healthful working conditions.
- The **TWH** model does not and will not in any way lessen the importance and need for rigorous regulatory workplace enforcement.



Example's of TWH Integrated Approach

1. Boilermakers Noise Induced Hearing Loss (NIHL) Program
2. Lung Health & Welding Fumes



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Boilermakers has joined with HearingLife Canada to help you protect your hearing!

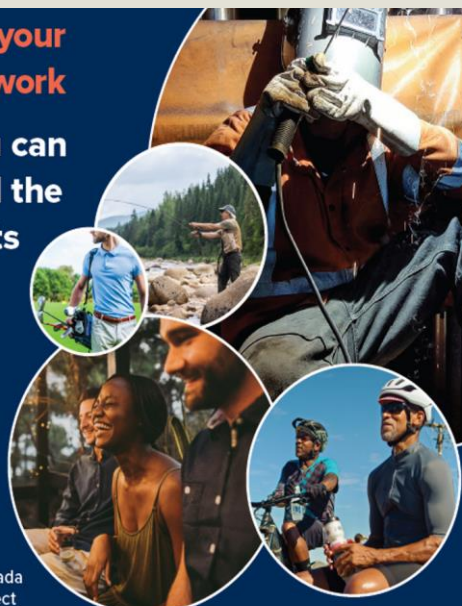
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MARKETING AND PROMOTION

LUNG HEALTH - WELDING FUMES

- Research partnership between the University of Alberta, NSERC and IBB.
- Metals in exhaled breath condensate as a biomarker of welding fume exposure.





Biomonitoring and Metabolomics Integration for Assessing Welding Fume Exposure in Professional Welders

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What partners can assist in moving to a TWH Model

- Moving to a TWH model will involve various partners to move this agenda forward.
- This will involve cooperation from employers, unions, and government.
- Currently in Ontario we have a robust health and safety system that can help us move to a TWH.
- This is not about creating new organizations its more about utilizing existing skills and services.
- Sadly, many workplace and unions are not aware of the organizations that make up our health and safety network.

Health & Safety Training

The province delivers health and safety training and services through six Health and Safety Organizations (HSAs).

Of these six organizations, **four are Safe Work Associations:**

1. Workplace Safety & Prevention Services (WSPS)
2. **Infrastructure Health & Safety Association (IHSA)**
3. Workplace Safety North (WSN)
4. Public Services Health & Safety Association (PSHSA).
5. The other two HSAs are the Occupational Health Clinics for Ontario Workers Inc. (OHCOW) and Workers Health & Safety Centre (WHSC).

Other partners in OHS system

Research Centres

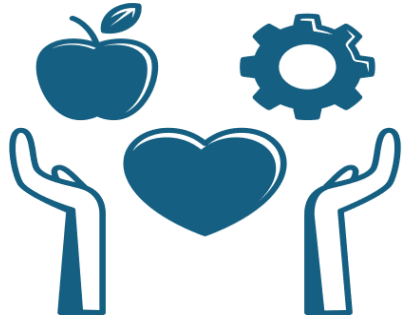
There six research centre partners that are vital to the occupational health and safety system:

1. Institute for Work & Health (IWH)
 2. Occupational Cancer Research Centre (OCRC)
 3. Centre for Research Expertise in Occupational Disease (CREOD)
 4. Centre for Research Expertise for the Prevention of Musculoskeletal Disorders (CRE-MSD)
 5. Centre for Research in Occupational Safety and Health (CROSH)
 6. EPID@Work Research Institute (Enhancing the Prevention of Injury & Disability at Work)
- Sadly, most workplaces do not utilize their services or even know they exist.
 - Moreover, when it comes to the HAS's (non-labour run organizations excluded) they do not adequately work with each other and in many ways compete.

Changing the narrative: “A Holistic Approach to Construction Safety”

- It has become increasingly clear that workers personal lives affect the ability to perform at work.
- Consequently, there needs to be a shift in mindset about how construction workplaces and unions approach health and safety.
- Traditional safety programs focus on eliminating hazards and preventing injury, a move to a TVWH would recognize and address other factors including:
 - Workload;
 - Stress levels;
 - Co-worker interactions;
 - General health; and
 - Wellbeing that all negatively impact worker safety.





Changing the narrative: “A holistic approach to safety”

The TWH model is a move to improve and expand traditional workplace prevention regimes beyond the physical hazards.

TWH model applies a holistic and integrated approach to occupational safety.

Currently, the Boilermakers across Canada have utilized the TWH in designing and reformulating their various occupational health programs with tremendous success.

The TWH allows for employer, union, and worker collaboration.

More importantly TWH allows for the integration between prevention and protection measures against risks at work and the promotion of health and wellbeing.