Using A Total Worker Health Approach to Address Climate’s Impact on Workers

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Overview

Center for Health, Work & Environment
Colorado School of Public Health

• Who are we?
• What do we do?
• What is our approach?
• What are the opportunities for collaborating as part of this consortium on climate x health?
The Center for Health, Work and Environment advances its mission of improving the health, safety and wellbeing of workers through public health practice, research, education and partnerships.
Training
Occupation and Environmental Medicine
Industrial Hygiene
Occupational Health Psychology
Occupational Safety and Ergonomics
Health Physics
Continuing Education
Pilot Research Projects

New: Graduate Certificate in Total Worker Health

Public Health Professionals
MPH, MS, DrPH, PhD
Fukushima, Japan March 2011
As a world leader in Total Worker Health, we address population health where it can have the greatest potential impact:

- Small enterprises
- Vulnerable, “precarious” workers
- Workers in high hazard industries
- Workers and potential to benefit families
- International farmworkers
Occupational Injury Research

Protect What You've Worked So Hard to Create

Health Risk Management Study
Large scale, longitudinal, worker health surveillance & research
Total Worker Health Research and Practice
Esta clínica médica está al servicio de los colaboradores de BANASA
Why Consider the Total Picture of Worker Health and Safety?

Burden of Disease, Injuries, and Risk Factors among Banana Workers (N=879)

Burden of Disease, Injuries, and Risk Factors among Sugarcane Workers (N=401)
Bring Wellness to Work.

Organizations that foster health and safety at work have healthier, happier employees - and healthier bottom lines, too. It’s more than good business. It’s good business strategy.

WHAT’S WORKSITE WELLNESS?

Hannah Ogden, rabble + rouser

A wellness at work success story »
Total Worker Health®

What is Total Worker Health?
Keeping workers safe is the foundation upon which a TWH approach is built. Total Worker Health integrates health protection efforts with a broad spectrum of opportunities interventions to improve worker health and well-being.

More >

Research Program
The NIOSH Office for Total Worker Health supports research activities, both intramural and extramural, that effectively integrate workplace interventions that protect workers' safety and health with activities that advance their overall well-being.

More >

Publications and Reports
The research supporting a Total Worker Health approach is still emerging, but strengthens every year. This page includes two collections of publications tailored to the diverse needs of our stakeholders.

More >

Tools: Let's Get Started!
This page serves as a guide for practitioners for creating or expanding organizational cultures of safety, health and well-being.

More >

http://www.cdc.gov/niosh/twh
SHIFT TO A MORE HOLISTIC APPROACH TO WORKER HEALTH, SAFETY, & WELLBEING
# 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>
<td></td>
</tr>
<tr>
<td>Police officers, firefighters, security guards</td>
<td>40.7%</td>
</tr>
<tr>
<td>Social workers, clergy, counselors</td>
<td>35.6</td>
</tr>
<tr>
<td>Home health aides, massage therapists</td>
<td>34.8</td>
</tr>
<tr>
<td>Architects, engineers</td>
<td>34.1</td>
</tr>
<tr>
<td>Bus drivers, truckers, crane operators, garbage collectors</td>
<td>32.8</td>
</tr>
<tr>
<td><strong>LOWEST</strong></td>
<td></td>
</tr>
<tr>
<td>Janitors, maids, landscapers</td>
<td>23.5%</td>
</tr>
<tr>
<td>Cooks, bartenders, food servers</td>
<td>23.1</td>
</tr>
<tr>
<td>Physicians, dentists, EMTs, nurses</td>
<td>22.0</td>
</tr>
<tr>
<td>Artists, actors, athletes, reporters</td>
<td>20.1</td>
</tr>
<tr>
<td>Economists, scientists, psychologists</td>
<td>14.2</td>
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<tr>
<td><strong>Average U.S. worker: 27.7%</strong></td>
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</tbody>
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Note: Obesity defined as body mass index of 30 or above

Source: American Journal of Preventive Medicine’s 2014 report based on 2010 data
Top Concerns for Employee Well-Being

- High Stress Levels: 42%
- Psychological Well-Being: 13%
- Weight Management: 13%
- Alcohol or other drug habits: 11%
- Smoking habits: 11%
- Don't Know/Unsure: 9%

Pie chart showing the distribution of concerns.
Integrated Systems Approaches to improving worker health, safety, and wellbeing

Safewell 2012
Systematic approach to designing interventions

- Elimination
- Substitution
- Engineering
- Administrative/Policy
- Personal Protective Equipment
- Education
Evaluating the Public Health Impact of Health Promotion Interventions: The RE-AIM Framework

Although the field of health promotion has made substantial progress, our advances are limited by the evaluation methods used. We have the potential to assess the population-based impact of our programs. However, with few exceptions, evaluations have restricted their focus to 1 or 2 of 5 “dimensions of quality” we believe to be important.

There is a great need for research methods that are designed to evaluate the public health significance of interventions. The representativeness of participants is an important issue for outcomes research. The representativeness of settings—clinics, worksites, or communities for public health interventions is equally important. Many evaluations, such as the otherwise well-designed Community Intervention Trial for Smoking Cessation, explicitly restrict selection of participants to the most motivated, organized, and prepared to change. This results in expert, highly trained participants who are almost certainly more amenable to change than the general population.
Systematic approach to evaluation: RE-AIM

- **REACH**
- **EFFICACY**
- **ADOPTION**
- **IMPLEMENTATION**
- **MAINTENANCE**
Required: partnerships

Occupational Safety and Health Experts
Business and labor
Public Health Disciplines
Medical Professionals
Exposure Sciences
Social Sciences
Intervention Sciences
Communications and Dissemination Sciences

Notes from the Field—Guatemala
Opportunities to collaborate

- Research/Clinical research sites in U.S., Guatemala, elsewhere
- Expertise in conducting surveillance
- Expertise in conducting intervention r2p
- Experience in complex settings
- Data looking for data
- Biological Specimens

- Access to Cohorts of workers
  - Banana workers
  - Palm oil workers
  - Sugar cane workers

- Climate-Sensitive Worker Illnesses and Injuries
  - Kidney disease
  - Work-related injuries
  - Infectious disease
  - Stress and behavioral health
  - Others
Opportunities

Understand each others’ approaches and standards
  We know different things

Find common language, points of intersection, and hypotheses to test

Evaluate, alter the environment and the health of workers
  Share tools
  Share approaches

Promote a new discipline that embraces public health, climate, and medicine
Thank you