Engaging Workers: A Total Worker Health Approach
EHS Essentials Conference, UCLA
May 20, 2015

LINDA DELP, PHD, MPH
Director, UCLA Labor Occupational Safety & Health Program (LOSH)
Adjunct Assoc. Professor, Community Health Sciences Dept.

SCOTT GOODELL
Program Coordinator, Environmental Training Program
SEIU-United Healthcare Workers West & Joint Employer Education Fund
Mission: To improve workplace health & safety conditions
What we do:
• Outreach & Awareness
• Education, Technical Assistance, Capacity-building
• Community-based Participatory Action Research
• Policy Initiatives

Principles:
• Worker Participation & Civic Engagement
• Social Justice Approach → Address Inequities/Health Disparities

Affiliated With:
• COEH (Ctr. For Occupational & Environmental Health) & IRLE (Inst. For Research On Labor & Employment)
A. Introductions

B. Overview of Total Worker Health
   - Relationship of work to health
   - Historic tensions

C. Integrating health protection & promotion
   - Criteria for effective programs

D. Environmental Training Program: Scott Goodell

E. Discussion
A. Introductions

NAME

ORGANIZATION

WHAT COMES TO MIND WHEN YOU HEAR “TOTAL WORKER HEALTH”?
Total Worker Health™ is a strategy:

- integrating occupational safety and health protection with health promotion
- to prevent worker injury and illness and
- to advance health and well-being.

- Launched in 2011
- 2012 Research compendium: [http://www.cdc.gov/niosh/docs/2012-146](http://www.cdc.gov/niosh/docs/2012-146)
- TWH in Action Newsletter
NIOSH Centers of Excellence: 2011

- Center for the Promotion of Health in the New England Workplace (CPH-NEW)
  - At the University of Massachusetts
  - At the University of Connecticut

- Harvard School of Public Health Center for Work, Health and Wellbeing

- Oregon Healthy WorkForce Center (ORhwc)

- University of Iowa Healthier Workforce Center for Excellence (HWCE)
FIGURE 1. Compilation of key words, characteristics, and factors of integrated worker health protection and promotion programs.
Factors affecting Workers’ Health and Health Equity: A Holistic Approach

**Working Conditions**
- Benefits: Wages/Benefits, Rewards/Satisfaction
- Hazards: Safety Hazards, Health Hazards
  - Chemicals
  - Biomechanical/Ergonomic
  - Physical
  - Biological
  - Psychosocial factors
  - Multiple exposures

**Health Care**
- Access to health care?
  - Sick leave, insurance, workers’ comp, etc.
- Exams to detect work-related problems?
- Treatment options?

**Lifestyle**
- Diet
- Exercise
- Smoking
- Alcohol

**Family, Community**
- Environmental exposures – community, home
- Life stressors – childcare, eldercare
- Biology
- Individual and Community Supports and Resources
B. Overview of Total Worker Health

RELATIONSHIP OF WORK TO HEALTH/SYNERGISM OF WORK & LIFESTYLE EXPOSURES

HISTORIC TENSIONS
How does work affect health?

Positive – Negative Effects

Direct – Indirect Effects

Photo Courtesy of Maggie Robbins
Work Can Promote & Support Health

- Income
- Health insurance
- Paid leave – sick, vacation, family
- Pension, retirement savings
- Job stability
- Social support, interaction and comradery
- Learning & growth
- Rewards, Satisfaction & Meaning
- Encourage health & wellness
- Support for family & community (family benefits, flexible hours)

Adapted from Maggie Robbins
Work Can Harm Health

- Workplace hazards
- Inadequate income & benefits
- Insecure job arrangement – contingent, temp
- Work hours – rigid, erratic, unsociable
- Poor management & organization
- Unmanageable production pressure
- Uncivil interpersonal relationships
- Aggression & violence
- Unhealthy worksite – inadequate meals, breaks, etc.
WHO Framework: Direct-Indirect Effects

Micro-theoretical framework of employment conditions and health inequalities

Employment Conditions
- Full employment
- Unemployment
- Precarious employment
- Informal employment
- Child labor
- Slavery and bonded labor

Working Conditions
- Exposures and risk factors:
  - Injuries
  - Physical and chemical hazards
  - Ergonomics
  - Psychosocial

Health Related Behaviors
- (Lifestyle/Medication)

Physiopathological Changes

Material Deprivation and Economic Inequalities

Psychosocial Factors

Health Systems

Social and Family Networks

Health Inequalities

From EMCONET WHO Employment Conditions & Health Inequalities: Final Report Benach J, Muntaner C, Santana V. p 32
Work + Lifestyle => Health Outcomes

- **Cancer**
  - Asbestos + smoking: Lung cancer
  - Work chemicals + Prolonged hormone exposure: Breast cancer

- **Cardiovascular Disease**
  - Work organization (long hours/shiftwork), Stress + Obesity, Diet, Lack of Exercise

- **Mental Health**
  - Job strain + work-life demands

- **Musculoskeletal Injuries/Disorders**
  - Sitting, heavy lifting, repetitive work + Obesity, lack of exercise

- **Injuries** (e.g. Taxi drivers)
  - Job stress/schedule + self-reported health status/chronic disease; vicious cycle
Asbestos & Smoking: Risk of Lung Cancer

- Asbestos exposure: 5X risk of lung cancer
- Smoking: 10X risk of lung cancer
- What about exposure to both asbestos and cigarette smoke?
UCLA Research: Work & Lifestyle

- Taxi Drivers


- Office Workers

Middle-aged male immigrants

- Median age: 47
- Immigrants: 87%

9.5 years driving (median)

Median hours work/day: 12

6 days/week

Median $8.39/hr after paying gas, maintenance, fees (lease, permit)
“Driving Poor Study:
Stress, Health Findings (2006)

- No taxi company provided health insurance

- Job stress Levels
  - 23% Severe (cope/miserable)
  - 29% Extremely severe
  - Work/time pressure
  - Interferes w/ personal life
  - Racial slurs
  - No recognition for work
  - Unable to use skills

- 21-49% medically diagnosed health problems
  - Back, shoulder, leg pain
  - High blood pressure
  - Weight gain/obesity

Blasi and Leavitt, 2006
Health status, stress $\rightarrow$ work-related injuries

- **Examined relative risk of work-related injury**
  - 45 injuries/309 drivers – 30 collisions, 12 baggage handling

- **Risk factors**
  - Demographics
  - Work schedule
  - Health status, stress level

- **Significant association** with decreased risk of work injury:
  - Good health
  - Combined good health – low stress (62% decreased risk; $P=0.03$)

- **Implications** – comprehensive approach to:
  - Stress reduction, health promotion
  - Changes in stressful working conditions
  - Policy – paid sick leave (and health care access)
UCLA Research: Office Workers*

- 83% female
- 42.25% above 50 years
- 64% overweight or obese
- Average of 7.6 years in current position

**Job Classification:**
- Majority (65%): Clerk Typist (39.5%) or Sr. Clerk Typist (26.3%)

**Work schedule:**
- 77% spend 80% or more time per day on computer.
- 60% of them work 9/80 schedule; 28% work 5/40 schedule.

* N=2,310 workers
For each of the body parts highlighted in the body map, answer the following questions:

1. Have you at any time during the last 12 months had trouble (such as ache, pain, discomfort, numbness)?

2. During the last 12 months have you been prevented from carrying out normal activities (e.g. job, housework, hobbies) because of this trouble?

3. During the last 12 months have you seen a physician for this condition?

4. During the last 7 days have you had trouble in the body part highlighted?
Percent of respondents with self-reported discomfort and with MSDs* by body region (n=2310)

- Neck & Shoulder: 85.2% self-reported pain, 37.2% MSDs*
- Upper extremity: 75.1% self-reported pain, 21.7% MSDs*
- Lower extremity: 57.2% self-reported pain, 18.0% MSDs*
- Back: 81.2% self-reported pain, 34.3% MSDs*

MSDs* Cases are defined as workers who reported musculoskeletal pain and sought treatment from a health care practitioner in the past 12 months.
Summary of Results

- Over 90% had experienced musculoskeletal discomfort in at least one region of body

- 40% sought medical treatment for discomfort. Of those:
  - 43% missed work
  - 38% filed workers comp claim; 79% received benefit

- Neck/shoulder MSDs linked to computer use (% of day)

- MSDs in all areas of body linked to workstation adjustability

- Age, gender, BMI linked to increase in MSDs
Labor-Management Education Program

- Joint AFSCME 3090 – L.A. City – UCLA/LOSH Education program

- Goals:
  - Educate computer users: ID MSD symptoms & risk factors, adjust workstations
  - ID H&S problems needing correction
  - Recruit/train Peer Health Advisors
The Historic OHS-WHP Divide

Occupational Health & Safety (OHS)
Workplace health promotion (WHP)
Approaches to improving health at work

Health Protection (OHS)
• Protect workers from injury and illness
• Through safety training, PPE, work organization, etc.

Health Promotion (WHP)
• Activities to improve workers’ personal health
• Such as health risk assessments, wellness programs etc.

“By placing boundaries around these activities, their overall effectiveness has been limited”
(ACOEM, JOEM 2011)
OHS and WHP

- OSH Movement: ‘60-70s
- OSHAct: 1970: employer responsible for workplace H&S
- Skepticism towards focus on lifestyle change

- 1979 Surgeon General’s Report: Health Promotion and Disease Prevention
- Refocus from medical interventions to public health
- Strategies to modify unhealthy behavior

Tensions in both between behavior changes and environmental change strategies
The Worksite & Health Promotion

- Traditional worksite health promotion programs are effective but limited
  - Focus on changing health behaviors and building social support
    - Examples: weight watchers, smoking cessation
  - Newer programs make institutional changes
    - Example: healthy foods in vending machines, exercise facilities
- Not available in most workplaces
- Do not address the underlying organization of work that contributes to health nor workplace hazards
C. Integrating OHS and WHP Programs

CRITERIA FOR EFFECTIVE PROGRAMS

UCLA LOSH
The integration of Health Protection and Health promotion involves the:

- comprehensive development and implementation of organizational programs, policies and practices that ...
- minimize and/or eliminate workplace physical, biological, and psychosocial hazards and risks,
- promote healthy behaviors, and
- provide resources for maintaining and optimizing a safe, healthy and productive workforce ....

....both on and off the job.

http://www.cdc.gov/niosh/TWH/totalhealth.html
Smoking: successful integrated wellness program (Sorensen et al., 2004)

- **Workplace**: 15 mid-large size manufacturing plants
- **Blue collar workers are more likely to be smokers***
  - 34% blue collar workers
  - 20% white collar workers
- **Program**: Randomly assigned to have a smoking cessation program alone or a program combined with reducing workplace contaminants

* (Barbeau et al., 2004)
Smoking quit rate higher for hourly workers if occupational hazard control program + wellness program (15 Massachusetts worksites)

**FIGURE 2.** WellWorks-2 results: Adjusted 6-month quit rates at final by intervention and job type (cohort of smokers at baseline: n = 880) [Sorensen et al., 2002b].

Blue-collar workers given time-off for participation in both programs. Greater credibility for HP/OSH combined intervention?

Participatory Workplace Programs

- Empower workers to create programs and make decisions in the workplace

- Participation can increase decision authority and decrease job stress

- Case study in nursing home: Workers decide how to create safe lifting program and how to provide healthier food in the cafeteria
Integrate OHS and WHP: Survey/Focus Groups
- Physical & Psychosocial: MSD pain, Assaults
- BMI, smoking, chronic disease, exercise

Participatory/empowering/iterative
- Health Design teams – ID goals, ongoing structure
- HSE – Health Self-Efficacy

Multi-systems approach
- Individual tasks (lifting equipment)
- Work schedules, staffing, supervision & support

Preliminary Outcomes: Program Goals
- Short-term: Access to healthy food; Active rest breaks – facilitate exercise
- Longer-term: 1) Teamwork, Communication, Supervision, 2) MSD/back injuries, More Effective Safe Patient Handling Programs

COE: New England, Punnett el al
Addressing work organization & work-life causes of stress

- Long hours, shiftwork, staffing, job control, ergonomics, safety, childcare, sick leave
- Hotel housekeepers: daily room quota (UNITE-HERE)
- Nurses: voluntary O/T, minimum staffing levels
- Teachers: staffing, class size (CTU)

Slaughter J. Labor Notes, January 2013.
Criteria for Integrating Wellness Programs

- Address needs of all employees – not just white-collar
- Include working conditions in health risk appraisals
- Focus on benefits to employees – not involving coercion
  - Gym, healthier food at work, smoking cessation classes, group walks
- Labor role in all aspects of wellness program
  - Labor-management committees (Canada)

Criteria for Integrated Programs

- Collaborative process of identifying and addressing worker concerns
  - Accurate reporting – all hazards, injuries, illness without disincentives or fear of reprisal
  - Respect for privacy – health conditions

- Draw on workers’ knowledge of work processes and health & safety concerns

- Focus on collective problems and solutions
  - Tools: Body and Hazard mapping
D. Environmental Training Program

A Frontline Worker Engagement Approach to Greening Healthcare

Scott Goodell
E. Discussion

WHAT ARE BARRIERS & SOLUTIONS TO ENGAGING FRONTLINE WORKERS?

WHAT PROGRAMS WOULD YOU LIKE TO IMPLEMENT?