

WHAT IS TOTAL WORKER HEALTH FOR SMALL MANUFACTURING BUSINESSES?

LESSONS LEARNED FROM AN INTEGRATED
WORKPLACE SAFETY — SMOKING
CESSATION INTERVENTION STUDY

Lisa M Brosseau
University of Illinois at Chicago
School of Public Health

TAKE-HOME MESSAGE

The health of people at work is a function of multiple factors, including –

- Workplace conditions (chemical, physical, etc. hazards)
- Working or job conditions (psychosocial stressors)
- Employment conditions (pay, benefits, hours, opportunities for advancement)
- Life conditions (housing, transportation, family, etc.)

We should consider all of these factors – and their interactions – when proposing workplace safety or health promotion programs.

And keep in mind that employees do not have much or any control over most of these factors.

Our interventions should be multi-level – and never focused only on employees.



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Co-PI: Dr. Deborah Henrikus, Epidemiology – smoking cessation

Group-randomized trial - 45 small manufacturing companies (20-150 employees) in Twin Cities metro area (stratified by small < 50 & large > 50) [2010-2014]

- Immediate intervention (baseline, intervention, 1-yr followup) [22 companies]
- Delayed intervention (baseline, 1-year followup, intervention) [23 companies]

Prompted by:

- High smoking rates (~40%) among production employee
- Previous work showing that integrated (safety + health promotion) approach is more effective than health promotion alone*
- Small businesses are less likely to offer health promotion programs

* Sorensen et al. Journal of Public Health Policy 2003;24:5-24



STUDY DESIGN

Goal: Increase employee quit attempts by motivating employers to make workplace safety improvements in combination with policy, environmental and other changes that support a non-smoking workplace

Designed to be disseminable by a department of public health – using available resources & low-resource interventions

- Recruit from all eligible businesses in metropolitan Twin Cities counties – HR managers
- Baseline & follow-up surveys of all employees – research team conducted on-site
- Survey results to all businesses – randomized to intervention & delayed intervention



SURVEYS

Surveyed all employees in 45
businesses at baseline & followup

Baseline: 86% return rate (n=2534/2971)
Followup: 70% return rate (n=2556/3631)

Perceived safety risks

Safety improvements needed

Smoking and smokeless tobacco use
(self-report)

100 cigarettes / daily, some day, not at all

7-day point prevalence

Organizational variables

Safety climate

Job stress & strain

Co-worker support for quitting



INTERVENTION

Meetings with safety committee to discuss results and motivate improvement(s) in workplace safety

Presentation to managers and employees about smoking cessation

Free nicotine replacement products for smokers

Newsletter articles, fact sheets, etc. on smoking cessation to HR director

Small grants for safety improvements & break activities

Website with additional resources



RESULTS - SAFETY

Most companies made at least one safety improvement based on employee input

50% of companies used the safety grant (\$500)

Safety climate scores were significantly better in intervention vs. control sites



RESULTS - SMOKING

No difference in % smokers or quitters between intervention & control sites

Significantly more smokers tried smoking cessation aids (gum, lozenges, patches) in intervention (23%) vs. control sites (12%)



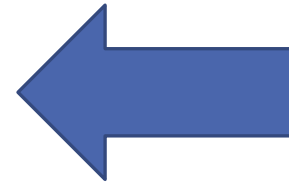
BASELINE SURVEY RESULTS

Smoking rates highest in

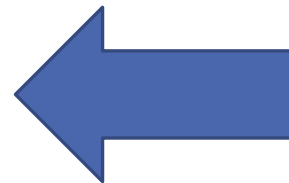
- Production workers (32%)
- Production managers (26%)
- Support staff (28%)
- Sales (20%)

Lowest rates in managers (11%) & R&D/engineers (14%)

Production workers, production managers & support staff reported highest levels of job stress



WHO SHOULD HAVE BEEN THE TARGET OF OUR INTERVENTION?



WHAT ELSE SHOULD WE HAVE TARGETED BESIDES WORKPLACE SAFETY?

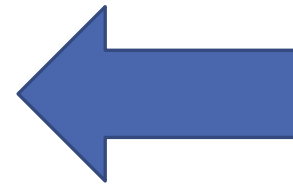


BASELINE SURVEY RESULTS

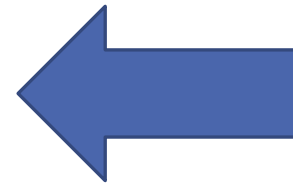
Production workers least likely to say that co-workers support their smoking cessation efforts

Lowest safety climate scores among production employees and support staff

Employees were able to identify important safety problems at their worksite



HOW COULD WE HAVE DESIGNED THE INTERVENTION TO CHANGE THIS?



WHAT ELSE SHOULD WE HAVE DONE TO MOTIVATE SAFETY IMPROVEMENTS?



RESEARCH CHALLENGES

Scheduling intervention activities

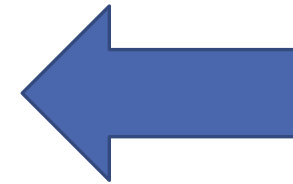
- No time available during the workday (2 short breaks & unpaid lunch)

Production managers not supportive

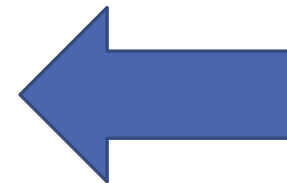
- No time off for surveys or interventions

Not everyone participates

- Some companies had temporary workers, who were not considered employees



HOW ELSE MIGHT WE
HAVE STRUCTURED THE
INTERVENTION?



SHOULD WE HAVE
INCLUDED THESE
WORKERS?



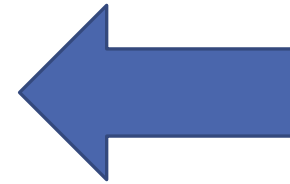
RESEARCH CHALLENGES

Working with Human Resource managers

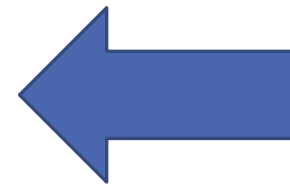
- Lots of turnover, very busy, some were non-responsive

Safety Committees

- 17% of companies didn't have a safety committee & never put one into place



HOW DOES THIS
IMPACT THE
INTERVENTION?



HOW ELSE DO WE
MOTIVATE SAFETY
IMPROVEMENTS?



WHAT WOULD I DO DIFFERENTLY NOW?

DIFFERENT PERSPECTIVE ON TOTAL WORKER HEALTH

“Total Worker Health” isn’t workplace safety + health promotion, but what is it?

Is smoking really only a personal health behavior or does the work & workplace play a role?

Do high levels of workplace stress & job strain contribute to smoking or make it more difficult to quit smoking?

Are there other psychosocial stressors – hours worked, breaks, co-worker support, supervisor support – that might play a role?

A single safety change is not enough to demonstrate commitment to employee health. What else could we have done?



WHAT WOULD I DO DIFFERENTLY NOW?

SCREEN BUSINESSES MORE CAREFULLY FOR READINESS

Safety committees – availability, commitment, preparation, willingness, awareness, make-up

Management commitment – all levels including production

Human resources commitment – time, knowledge, skills

Employee involvement – breaks, time off, participation in decision-making



WHAT WOULD I DO DIFFERENTLY NOW?

CONSIDER THE ROLE OF PRODUCTION MANAGERS

Maybe the first “target” of intervention should have been the production managers?

Production managers might have been good intervention partners?

BETTER UNDERSTAND THE IMPACT OF WORK & STRESS ON SMOKING

Consider interventions that motivate changes in workplace, working and employment conditions



WHAT WOULD I DO DIFFERENTLY NOW?

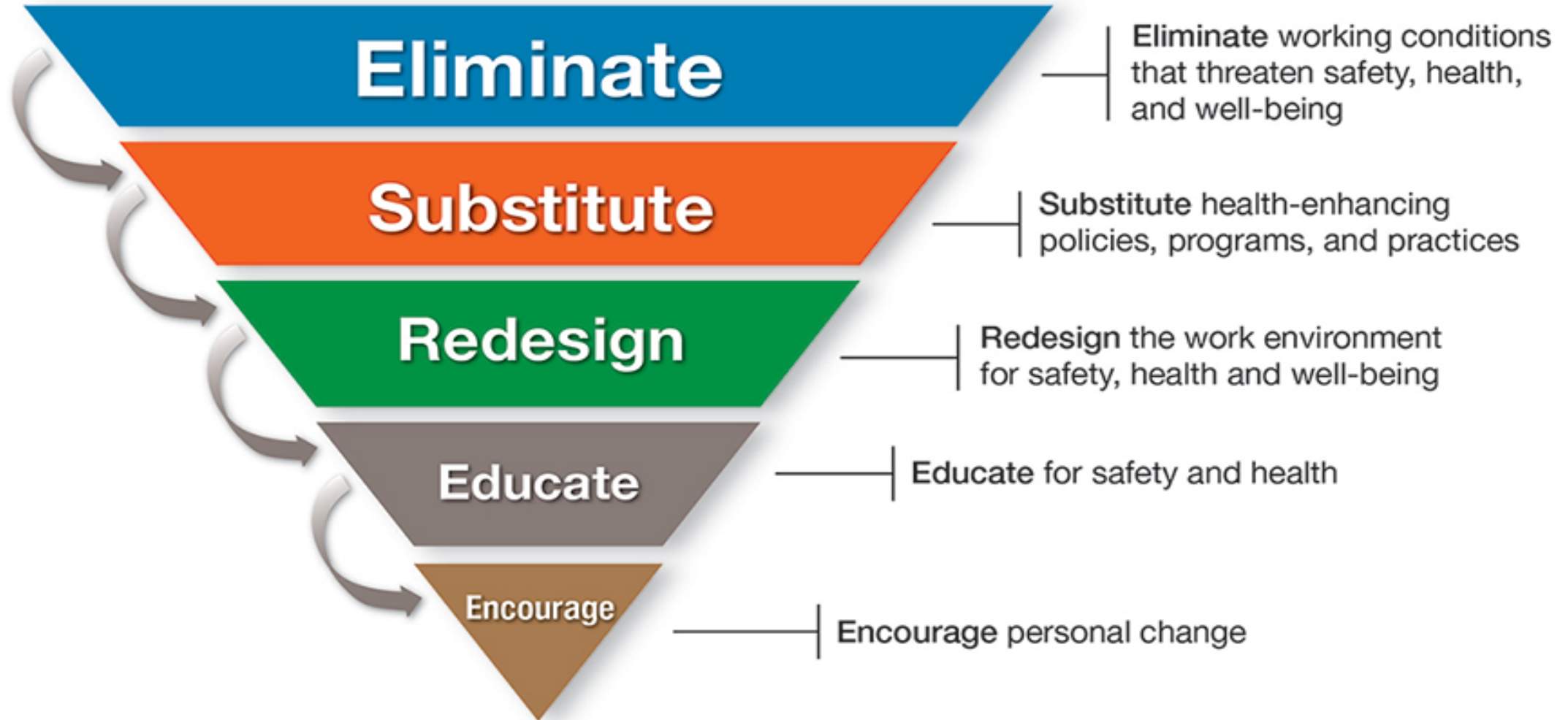
CONSIDER THE ROLE OF CO-WORKERS

Co-worker support may play an important role in smoking cessation. How can we positively impact this?

ENCOURAGE COMPANY TO ALLOW PARTICIPATION OF ALL EMPLOYEES

Temporary, contract and contingent workers have the right to be involved in workplace safety and health promotion programs. How do we send this message to employers and HR managers?

TOTAL WORKER HEALTH HIERARCHY OF CONTROLS



A TWH PROGRAM FOR SMOKING CESSATION

- Encourage organizational and management policies that give production managers and workers more flexibility and control over their work and schedules, as well as opportunities to identify and eliminate root causes of stress
- Involve production supervisors and employees in designing and implementing changes in workplace, working and employment conditions
- Include all workers – including those in contingent positions
- Recognize the important “gatekeeper” role played by production supervisors – include them as both targets and partners
- Include co-workers and enhance their social support role

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UIC Center for Healthy Work

We contribute to changes in local, state and national programs, policies and laws that promote jobs with healthier working conditions and that provide more people with fair employment and decent work.

Mission:

Turn unhealthy work into healthy work

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Photos courtesy of Earl Dotter