



## Evaluation of Workplace Cessation Demonstration Projects- Manufacturing Organizations

### Introduction



In 2012-13 and 2013-14, the Ontario Ministry of Health and Long-Term Care (MOHLTC) provided one-time funding to 11 public health units (representing 19 health unit partners) in Ontario for demonstration projects to implement smoking cessation interventions in workplaces. The projects aimed to reduce present levels of smoking in industry sectors with high prevalence of smoking, such as construction, mining, manufacturing, and hospitality and service.

The Ontario Tobacco Research Unit (OTRU) evaluated the demonstration projects in collaboration with Tobacco Control Area Networks (TCANs) and health units, workplace leaders and partner agencies (Smokers' Helpline, Smoking Treatment for Ontario Patients (STOP), and the Program Training and Consultation Centre (PTCC)).

This newsletter focuses on evaluation findings relevant to the manufacturing sector. Findings have been drawn from:

- Baseline and six month follow-up surveys with intervention participants
- Qualitative interviews and focus groups with employees, program participants, workplace leaders and public health practitioners.

### Key Findings for Manufacturing Demonstration Projects

#### Workplace Participation

Nine health units worked with a total of 19 manufacturing companies across Ontario. The majority of companies (n=15) were medium-sized businesses (100-499 employees), and the remaining four were large businesses (+500). Many of the workplaces had long-term, older employees and most public health practitioners and workplace leaders described the workplaces as “communities” or “families.” This positively influenced workplace decisions to participate in the project because of concerns about the effect of chronic disease among their aging workforces.



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Other reasons why workplaces participated in the demonstration projects included:

- To help establish a health and wellness culture
- To improve productivity and positively impact internally administered benefits
- To address requests from employees for cessation support by providing free nicotine replacement therapy (NRT) and counselling at minimal cost to the workplace
- To build the case for offering similar support at their other worksites
- To support employees as the workplace transitions towards a smoke-free grounds policy

In addition, workplaces responded positively to public health practitioners leading the cessation program because most workplaces had limited time and capacity to implement such programs themselves.

## Program Characteristics

Although the ways in which the cessation projects were incorporated into manufacturing workplaces varied widely, common intervention components included:

### Pharmacotherapy and Counselling

Generally, 10 weeks of NRT were available to employees in participating workplaces. NRT was provided in the form of the patch, and five projects offered additional forms of NRT, such as inhalers, lozenges and gum. One project also offered free quit smoking medications, such as Zyban<sup>®</sup> and Champix<sup>®</sup> to employees.

Most workplaces offered either group workshops (i.e., lunch and learn sessions) (9) or individual counseling (7) to employees who were interested in quitting smoking. Only one workplace offered group counseling and one offered both individual and group counseling. In one project, employees could call a local tobacco hotline to access NRT if they were unable to attend a workshop. In-person counseling sessions allowed practitioners to dispense NRT to participants over a 10 week period. However, participants who attended group workshops or called a tobacco hotline generally received all of their NRT at one time.



Some projects also trained workplace staff in Human Resources and Occupational Health and Safety in Brief Intervention Cessation Counseling (BICC) to provide support when public health practitioners were not available onsite. Smokers' Helpline was also available to all participants in the demonstration projects.

### Contests and Challenges

Four health units offered a challenge or contest with a significant financial incentive or prize over the course of their demonstration projects with manufacturing organizations.



## Social Support

About half of the projects included nonsmokers in the intervention through education, quit buddy programs, and contests. Some projects also provided cessation support to family members of employees.

## Program Development and Implementation

Public health practitioners often leveraged organizational and community assets including workplace staff resources and an existing culture of workplace wellness, benefits coverage and community cessation resources to offer cessation support to employees.

## Workplace Staff Resources

Gaining buy in and support from Human Resources, Occupational Health and Safety, Emergency Medical Teams and/or Corporate Communications was important to developing and promoting the cessation program within a workplace. One project also trained employees as Wellness Coordinators and another formed an employee Workplace Tobacco Use Committee. Workplaces able to provide resources and dedicated staff demonstrated higher levels of commitment for the cessation program to their employees, which facilitated implementation (e.g., employee participation).

## Workplace Wellness Culture



Having an existing organizational health and wellness culture facilitated the integration and implementation of the smoking cessation program within workplaces. This included management who were enthusiastic about the concept of smoking cessation as a way to improve employee health and who were willing to dedicate resources to the program. However, some workplaces were able to leverage the cessation program to improve the health and wellness culture in their workplace. For example, one workplace leader noted:

*...it's a management buy-in thing. We have to really sell them upstairs so that they understand possible impacts. Like I said earlier, we don't usually [have] a lot of outside companies coming in even though it's the public health unit; we don't usually do a lot of that and this was a good opportunity for us to start somewhere and hopefully build on that. Workplace leader*



## Benefits Coverage for Smoking Cessation

Most manufacturing companies provided some benefits coverage for one or more types of cessation support (e.g., NRT, medication and/or counseling). Coverage amounts varied and there was typically a lifetime maximum. Therefore, the cessation demonstration projects were seen as an opportunity to provide NRT support for employees who did not have access to benefits or had exhausted their coverage limit. In a few instances, public health worked with employers to improve their existing employee benefits coverage for cessation.

## Community Cessation Resources

Some public health practitioners also promoted cessation resources in the local community at locations where the STOP Program was being delivered in Family Health Teams or Community Health Centres. This provided options for employees who preferred not to participate in the workplace setting. Some public health units were also able to build on and adapt their own branded smoking cessation clinics and/or chronic disease prevention programs to the workplace setting.

## Engaging Employees in Cessation Support

Overall, 377 manufacturing sector employees enrolled in the workplace cessation demonstration projects. A majority of participants were male (67%) and the average age was 45 years old (range: 19-71 years). Almost all participants (99%) were daily smokers and smoked an average of 20 cigarettes per day.

The following factors influenced manufacturing employee recruitment and engagement in cessation activities offered through the demonstration projects:

### Easy and Convenient Access

Ensuring that support was convenient for employees to access in the workplace was an important aspect of the program for manufacturing employees. This included offering support in different workplace locations and at appropriate times to allow employees to participate before or after their shift rotations. Some workplaces also offered release time to employees so they could participate during their shift. Administering the program through a third party provider, such as public health, also alleviated concerns about privacy issues.



### Free NRT

The availability of free NRT patches was an important motivator for employees to participate in the quit smoking programs. Some practitioners noted that offering a variety of NRT options (gum, lozenge, and inhaler) further improved recruitment.



## Communication Strategies

Having a well-coordinated communication strategy using multiple channels of communication was important for raising awareness about the program. Word of mouth was also considered an important strategy, especially as programs matured. In addition, promotional materials, such as gum (regular and nicotine) and quit kits helped to generate employee interest.

## Contests and Challenges

Contests and challenges were used to promote the program and encourage participation. The type of contest or challenge varied significantly among projects, and included month long quit and win contests with significant financial incentives or prizes, a quit story contest, smaller incentives for enrolling in the program and Healthy Lifestyle contests open to all staff.

## Workplace Climate



Public health practitioners felt that employees are more likely to participate in a secure employment environment because they perceive the program to be more sustainable. The program could also help to build trust by demonstrating to employees that the workplace cared. However, situations of low morale related to job instability (lay-offs, reduced employee benefits, trust issues) were noted by some practitioners as a challenge to making a quit attempt:

*... when their staff were coming here to talk to us they were quite vocal just about the instability of their job made it even harder [to want to try and quit].* Public health practitioner

## Being Ready to Quit and Personal Motivators

Readiness and motivation to quit smoking positively influenced employee participation in cessation programs. Themes from employee interviews related to readiness and motivation to quit included: family (quitting to spend more quality time with children, grandchildren or spouse), stage of life (quitting to be healthy in retirement), and general health (quitting to improve declining health).

*I really had no choice. I was in trouble smoking wise. My little granddaughters asked me to play a game and I just sit on the couch right. By the time I got done my shifts at work it took me the two, three days to recover and I really was suffering at work because I couldn't do my job.* Program participant



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## Impacts on Smoking Behaviour

The demonstration projects had a positive impact on the smoking behaviour of manufacturing participants. Among manufacturing participants who completed a 6-month follow-up survey (N=186):

- 33% (61/186) had not smoked in the past 7 days
- 29% (54/186) had not smoked in the past 30 days
- 17% (32/186) had not smoked in the past 6 months

Among respondents who were still smoking at 6-month follow-up (N=125):

- Average number of cigarettes smoked per day was significantly reduced from 20 cigarettes at intake to 13 at follow-up
- 79% (99/125) had made a quit attempt, which was significantly higher than at intake (29%)
- 33 days was the average number of days respondents went continuously without smoking

Additional positive impacts of the demonstration project were:

- Perceived reduction in smoke-breaks (some participants not taking breaks at all)
- Conversations about workplace smoke-free policies in some organizations
- Improved relationships with family members (partners, children, grandchildren)
- Perceived improvements in overall health and physical capacity
- Motivation to eat healthier



## What Helped Quitting

Qualitative data from surveys, interviews and focus groups provided insight into what helped participants to meet their tobacco related goals. Key facilitators included:

- Psychosocial support from health professionals, partners and family, and co-workers and managers
- Access to NRT
- Break time activities

*Night shift break times were hard to fill, because I don't want to sit and eat every break. I signed up for the gym upstairs and work out a little bit. One break room is at the other end of the plant, with couches, television, vending machines and a coffee machine. It gave me somewhere to go at 3 in the morning instead of going to the smoking area. The cafeteria is close to the entrance, so if I go that way, I consider going out for a cigarette. Program participant*



## What Hindered Quitting

Follow-up survey participants identified several challenges to quitting, including stress, other people smoking, cravings, drinking alcohol and weight gain. Qualitative interviews and focus groups with participants supported these findings and provided further insights related to work environment:

*...We are really busy and our work environment is stressful. The more-for-less: we have so much more to do and have less people. You hear people say they smoke more, don't eat well and get home just in time to have a drink.*

*I think the workplace is what makes me smoke more....it's who you socialize with. That's got a big part of it. You get to know the people that smoke and those people that don't smoke and these are the people you find out what you have in common with, with smoking being the first thing.*

*I work twelve hour shifts and if it was a slow, boring night, I would smoke an entire pack in one shift.*

## Summary

Evaluation of the workplace-based cessation demonstration projects in manufacturing organizations found that availability of free NRT and health practitioner support are important for promoting the adoption of cessation services and encouraging quit attempts. Consistent availability and accessibility of cessation support are also important for employee participation, especially within a shift structure. Tailoring health promotion messages to life stage (e.g., retirement) and emphasizing the positive aspects of quitting (e.g., improved physical ability, and relationships with partners and grandchildren) might encourage uptake among an older workforce.

It is important to work with employers to ensure structures are in place to overcome barriers to quitting in manufacturing environments. Consideration should be given to the following when developing workplace cessation projects in the manufacturing sector:

- Level of buy-in by organization and senior management
- Workplace climate (i.e., stress, morale, employee trust in management)
- Availability of occupational health, safety and/or wellness resources and services
- Communication resources available for program promotion
- Ability for employees to participate in cessation interventions during shifts
- Activities to replace smoke-breaks



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