

## Worksite Smoking Cessation Programs: A Potential for National Impact

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**Abstract:** Data from three pilot studies of small worksite smoking cessation programs demonstrate that programs which appeal to all smokers in an organization, not just those who have stated an interest in achieving cessation, will attract a high per cent of smokers and assist an unusually high per cent of them to achieve and maintain abstinence. (*Am J Public Health* 1983; 73:1395-1396.)

### Introduction

One out of three adult Americans still smokes,<sup>1</sup> and it is becoming increasingly clear that media campaigns plus clinics for self-selected smokers will not control the problem. What is required are mechanisms to attract into programs the large number of smokers who know they should stop but have not done so, and to make it possible for a substantial portion of them to succeed. Cessation programs offered in work settings that include financial incentives and systematically mobilize social support for non-smoking have that potential. Three pilot studies of such programs were conducted to assess that potential.

### Program

#### Recruitment

All smokers in the organization are urged via posters and word of mouth to attend an introductory meeting where a film is shown which dramatically conveys the dangers of chronic cigarette smoking. The details of the forthcoming cessation program, including the use of financial incentives are explained and distributed in writing. Everyone present is invited to participate in the program and to encourage other smokers not in attendance to enroll.

#### Duration

The program begins approximately one or two weeks later and lasts seven months. The first month is spent helping participants reduce their smoking as painlessly as possible. On the first day of the second month all participants must stop smoking (if they have not already done so) and refrain from smoking for six months.

### Monetary Incentives

**No-smoking contests**—Participants are assigned to teams; for the sake of illustration, assume they are composed of five members. The employer places \$75 on deposit for each team member and each team member places \$25 on deposit to support his/her pledge not to smoke. If a team member smokes, one-half (\$50) of that person's money is deducted from his/her personal account and divided equally among the other teams where no smoking has occurred. The \$50 is also deducted from the offending person's team account of \$500, thus producing a new balance of \$450 for that team. At the end of the program, each team member claims the amount of money in their personal account. In addition, the team with the best non-smoking record earns a \$250 bonus supplied by the employer to be divided equally among the team members.

**Lottery**—A \$20 award is made at each meeting by lottery. All participants who have been abstinent since the previous meeting are eligible for the draw.

**Contracts**—Participants must agree to have copies of a contract stipulating their pledge not to smoke for the six-month program duration mailed to family and friends.

Participants must also sign a legally binding agreement which authorizes the smoking program staff to determine if a program rule has been broken, and to communicate with any person known to the participant.\*

### Group Meetings

Meetings of one hour duration are held weekly during months 1-3, every other week during months 4-5, and every third week during months 6-7, approximately 20 meetings over the 7-month period. All meetings are held at the work site and involve at least a portion of scheduled work time.\*\*

During the first month, procedures to reduce smoking rates are discussed. During months 2-3 participants view a film or hear a speaker from local cancer, heart, or lung associations on various aspects of smoking. During months 4-7, discussions focus on the benefits of a generally healthy life-style. Perhaps the most important function of the group meetings over the entire seven months is that they are the occasion for an exchange of social support among the participants, augmenting the informal but crucial support participants provide each other during the work day.

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\* Smoking program staff routinely communicate with family and friends of the participants by phone and mail to confirm that smoking abstinence has been maintained.

\*\* Further details available on request to author.

TABLE 1—Summary Results of Three Pilot Studies

	Per Cent of Smokers at Worksite Enrolled in Program	Per Cent of Participants Abstinent after 6 Months	Net Reduction in Worksite Smokers as Result of Program
Experiment I	70	91	65
Experiment II	47	80	37
Experiment III	54	85	46

Experiment I was conducted in the headquarters office of a local banking institution. The participants were a mix of clerks, tellers, and middle-management personnel.

Experiment II was conducted at a professional organization that provides a variety of services to hospitals throughout the State of Michigan. About one-third of the participants were secretaries and the remaining two-thirds were professional staff who often were on the road visiting affiliated hospitals.

Experiment III was conducted at a manufacturing company that supplies items to the automotive industry. The company decided that the program would only be made available to office personnel and factory foremen; thus, the participants consisted of approximately three-fourths office personnel and one-fourth factory foremen.

### Results

Table 1 depicts the three key measures for each of the three pilot studies.

### Discussion

The response of management to a proposal that scheduled work time be devoted to smoking cessation meetings is often initially equivocal. In those instances, management must be made aware of the financial advantage to the organization that accrues with smoking cessation. One analysis<sup>\*\*\*</sup> has shown that the cost per year to an organization for each smoker on the payroll approximates \$5,600. That figure was arrived at by including incremental absenteeism, excess medical care, premature mortality and disability, excess fire and industrial accident risks, incremental lost time due to the smoking ritual, incremental property damage and physical depreciation on equipment, furniture and fixtures, excess maintenance requirements, and the costs of involuntary smoking by workers who must breathe the smoke of their smoking co-workers. A much more conservative estimate<sup>2</sup> contends that potential company savings approach \$345 per year for each smoker who quits. While the cost per smoker of offering the program could conceivably reach the minimum benefit estimate when incentives, lost work time, and miscellaneous expenses are included,

\*\*\* Weis W: Before you hire smokers. An address given at the Annual Meeting of FANS (Fresh Air for Nonsmokers), Seattle, 1981.

those are one-time costs while the savings to the company accrue each year the smoker remains abstinent. Thus, if the true per year cost to the employer of a smoking employee is somewhere between \$345 and \$5,600, management can be persuaded that offering a cessation program is clearly in the best interests of the organization.

The major limitation of our findings to date concerns the size of the organizations involved and the absence of blue-collar participants. The largest of the three organizations had 100 full-time employees, and the smallest (due to the eligibility constraints stipulated by the management) had only 40. Thus, the absolute number of smokers involved was small. What some might consider a second limitation is that no saliva tests were conducted to validate verbal reports of smoking status. They were deemed unnecessary since smoking at the workplace was virtually impossible, and family and friends of each participant were contacted regularly to corroborate verbal reports about smoking status away from work. Furthermore, a questionnaire completed and returned anonymously by each participant after the program had terminated requested information about any non-reported smoking incidents during the program; those incidents were negligible.

If worksite smoking cessation programs are to be implemented on a large scale, they must be simple enough to be administered by indigenous worksite personnel with minimal professional assistance. The program described here may be unnecessarily complex. There is some evidence that financial incentives alone offered by employers can have a significant impact on the smoking rate in their organization.<sup>3-5</sup> Most important, worksite cessation programs must involve both labor and management in their planning and implementation so that both have a sense of ownership. The planning phase also provides a forum to discuss whether or not management may be offering a smoking program in lieu of correcting existing inhalant hazards at the worksite.

### REFERENCES

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## Canadian Public Health Association 75th Annual Meeting

"Kaleidoscope" is the theme of the 75th annual conference of the Canadian Public Health Association, to be held June 25-28, 1984 in Calgary, Alberta. Topics to be covered include public health, public policy and future planning.

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