



# WellSpring

Sharing physical activity knowledge

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## Run to Quit:

### A national physical activity-based smoking cessation intervention

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#### Introduction

Smoking tobacco is one of the largest public health threats globally,<sup>1</sup> as it puts people at risk for many health conditions including cancer, heart disease, and lung disease.<sup>2</sup> Quitting smoking, also known as smoking cessation, is very difficult as the nicotine found in cigarettes is highly addictive. In fact, many people experience psychological and physical symptoms when they stop using it.<sup>1</sup>

Two potential strategies to help people quit smoking are group therapy and physical activity. The chances of quitting smoking were doubled in a group setting when compared to trying on your own.<sup>3</sup> Physical activity positively impacts overall health<sup>4</sup> and may reduce the harmful effects of smoking.<sup>5</sup> Also, a short bout of exercise can reduce cravings to smoke.<sup>6</sup> Combining both strategies, the *Run to Quit* program was formed. This edition of *WellSpring* provides an overview of the program, how it is being evaluated, the initial evaluation results, and future directions of program delivery.

#### Run to Quit: walk or run to a smoke-free life

The *Run to Quit* program in Canada is designed to target two health behaviours, smoking and physical activity, through group running or walking clinics. The program is for Canadian adults, 18 years of age or older, who currently smoke or are trying to quit within the last three months, and who have smoked at least 100 cigarettes in their lifetime.

*Run to Quit* involves a partnership between the Canadian Cancer Society, Running Room Canada, the University of British Columbia, and the Public Health Agency of Canada. The program provides both online do-it-yourself and in-person streams. For smoking cessation, the program uses strategies such as self-monitoring, imagery, and goal setting with use of resources such as smoking cessation helpline counselling support and the *One Step at a Time* booklet.<sup>7</sup> The physical activity part incorporates a progressive learn-to-run 5 km program from the Running Room, using walk/run intervals over 10 weeks. For the in-person clinics, the smoking cessation and running components of the program are combined in a group setting, so participants learn to run while receiving social support in their smoking cessation attempts.

#### S U M M A R Y

Smoking tobacco is a public health threat globally, and finding successful ways and programs to help people quit smoking is vital. *Run to Quit* is a national program that combines smoking cessation and physical activity to support adults on their journey to quit smoking.

This edition of *WellSpring* provides an overview of the program, how it is being evaluated, and the initial evaluation results.

Run to Quit in-person clinics are held at various Running Room stores across Canada, with a membership rate of \$70 per person. For the virtual training program, the cost is \$50, and membership is free for the do-it-yourself program. For 2018, there will be some subsidized spots available for the in-person and virtual programs. The next round of virtual clinics begin January 2018 and the in-person clinics will begin in spring 2018. For more information and to register in a future clinic, visit [www.runtoquit.com](http://www.runtoquit.com).

## Evaluation methods

The Population Physical Activity Lab at the University of British Columbia is coordinating the evaluation of the national Run to Quit program. In the first year, Spring 2016, the program ran in 21 Running Room locations across Canada. By Spring 2017, the program ran in 49 locations across Canada. In the upcoming third year (2018), the program is set to run clinics at 100 different locations, with the long-term goal of remaining a sustainable program delivered at Running Room stores.

A mixed-methods design is being used to evaluate the effectiveness of the program. For smoking cessation, participants complete questionnaires at Week 1 and Week 10, self-reporting on their smoking status. Participants also have their carbon monoxide levels tested using a device called a Smokerlyzer® at Week 1 and Week 10. When participants blow into the Smokerlyzer® device, a numbered reading of the level of carbon monoxide in their lungs is provided and can be compared to a smoking status scale.

Participants self-report their physical activity levels and running frequency at Weeks 1 and 10. Phone interviews are completed with coaches and participants at the end of the program, as well as at six months post-program with the participants. The participants are asked about their experience of the program, particularly about likes and dislikes of the program, as well as their current smoking and activity status.

## Does it work?

The results of the evaluation of the first year of the program (2016) are summarized here with full evaluation results published elsewhere.<sup>8</sup>

### Smoking status:

In the first year of the program, 90.8% of the participants who completed the in-person clinics reported reducing their smoking because of the program. Over 50% of the program completers did not smoke a cigarette within the last week of the program, as confirmed by a Smokerlyzer® device. The average carbon monoxide levels decreased significantly from program start to finish. Almost all of the participants would recommend the program to other people who are trying to quit smoking. Six months after program completion:

- 13.7% reported not smoking at all, not even a puff, in the past 6-months since the program's "quit week", and
- 19.6% of the total registrants have not smoked in the past week.



*Physical activity positively impacts overall health and may reduce the harmful effects of smoking. A short bout of exercise can reduce cravings to smoke.*

### Physical activity:

Overall physical activity of participants increased from program start to finish. Participants reported running significantly more from the start to the end of the program. Almost all of participants found the program to be helpful in assisting them with their smoking cessation and physical activity goals. Participants also enjoyed the health benefits of becoming more physically active. Further, many participants felt that the running component of the program was important and helpful in supporting their efforts to reduce or quit smoking.

### General feedback:

After completing the program, participants provided information on their experience to the researchers over the phone. The majority of participants identified group support as one of the largest strengths of the program, and they explained how impactful the Run to Quit coaches were in helping them achieve their goals in the program. Most people who successfully quit smoking identified using other resources such as quit aids (medication and nicotine replacement therapy). Participants also enjoyed the running aspect of the program.

Some barriers to completing the program and reaching goals were the lack of differentiation in running progression and not being able to access the Quit Smoking phone help-line. Most participants who did not finish the program identified logistical and personal reasons for not finishing.

After evaluating the first year of the program, the evaluation team made recommendations for changes to improve the program for 2017. The team is currently evaluating year two data and preparing for the 2018 virtual and in-person clinics.

### Conclusion

Run to Quit demonstrates the feasibility of a nationally implemented exercise-based smoking cessation intervention. Physical activity can aid in cessation and provide health benefits to smokers. This program provides an opportunity for practitioners seeking new ways to support clients to quit smoking and be more active.

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