



**Final Report**  
**April 1<sup>st</sup> 2010 - March 31<sup>st</sup> 2011**

TPA: Brock University

SFO Project: **LEAVE THE PACK BEHIND**  
Working Together to Achieve Smoke-free Campuses

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## LEAVE THE PACK BEHIND: EXECUTIVE SUMMARY

In Ontario, *half* of the young adult population pursues post-secondary education. This means 563,000 young adults, including 145,000 smokers,<sup>1</sup> are on campus under the care of about 600 campus health professionals. Leave The Pack Behind is available to **98%** of these students and health professionals.

**Taking a comprehensive approach, LTPB implements evidence-based, age-tailored tobacco control strategies to successfully reduce tobacco use and support healthy lifestyles on Ontario post-secondary campuses.**

LTPB's successful strategies include:

- (1) Training and support campus **health professionals** to provide smoking cessation counselling
- (2) Advocating for enhanced tobacco control **policies** on campus
- (3) Using peer-to-peer **student programming** that's responsive to post-secondary students' needs
- (4) Building **social norms** that support living a healthy, smoke-free life
- (5) Rigorously **evaluating** programming to ensure its effectiveness (i.e., both efficacy and reach)
- (6) Maintaining and strengthening linkages and **knowledge exchange** with SFO partners
- (7) Optimizing **cost-effectiveness** and quality of programming through central administration

### Specific techniques used by LTPB include:

- health professional intervention
- Smoke|Quit self-help cessation program
- wouldrather... contest
- peer-to-peer tobacco education
- peer-to-peer cessation support
- sustained social norms marketing
- interactive, multi-component website
- student referendums and surveys
- NRT provision to smokers trying to quit
- U Know U Want 2... *help a friend quit smoking*
- targeted education of stakeholders
- collaborations with on and off-campus organizations

### Highlights of LTPB's achievements<sup>2</sup> in 2010/2011 include:

- operated on 20 (of 20) universities and 21 (of 24) colleges with a total population of 563,426 young adult students – including approximately 144,732 young adult smokers
- supported 600 doctors and nurses to offer cessation counselling and distribute 3,883 free NRT samples and LTPB's age-tailored cessation resources to young adult patients
- had face-to-face contact with at least 39% of all students (i.e., at least 218,860 of all 563,426 students)
- provided cessation programs and services to 28% of all smokers (i.e., 40,197 of all 144,732 smokers)
- produced cessation among at least 8% of smokers who accessed LTPB programs and services (i.e., estimated at least 3,039 of 40,197)
- assisted youth to advocate for stronger tobacco control policies/procedures on 4 colleges and 6 universities (e.g., banning tobacco sales; improving enforcement; health plan coverage of NRT/pharmacotherapy)
- successfully integrated smoking cessation strategies into the context of healthy lifestyles
- maintained effective partnerships with SFO partners (including TCANs, SHL, RNAO) and engaged industry partners (Pfizer, and Johnson & Johnson) to support young adult access to NRT and cessation interventions.

<sup>1</sup> Estimated value; based on smoking prevalence of 22% for university students (Lawrance et al) and 33% for college students (Lawrance, in progress)

<sup>2</sup> Details of these achievements, including how values were calculated, are shown on the following pages



## Availability

As of September 30<sup>th</sup> 2010, LTPB is established on 41 Ontario post-secondary institutions across the province. This includes all 20 universities and almost all colleges (21 colleges). The total potential reach of LTPB is now just over 563,000 students. This represents approximately 144,732 smokers.<sup>3</sup> LTPB is also working on making and solidifying connections with the remaining colleges (representing 10,220 students attending: Cambrian, Northern & La Cité) in order to introduce our comprehensive programs and services on those campuses.<sup>4</sup>

## Impact on Cessation

- **at least 3,039 smokers** quit smoking using LTPB's evidence-based resources (Smoke|Quit booklets, wouldrather... contest and clinician-delivered interventions)
  - this represents **8%** of the 40,197 smokers who directly accessed LTPB services
    - 20,701 received Smoke|Quit booklets from student-team [quit rate: 11.4% at 3-month follow-up = 2,360 quitters]<sup>5</sup>
    - 2,036 received Smoke|Quit booklets and health professional advice [quit rate: at least 11.4% = 232 quitters]<sup>6</sup>
    - 1,535 entered LTPB's wouldrather... contest (Quit For Good, Keep The Count, Party Without The Smoke) [quit rate: ≈22% at 6-month follow-up = 338 quitters]<sup>7</sup>
    - 1,855 were referred to health professional [quit rate: at least 5.9% = 109 quitters]<sup>8</sup>
- **22,737 smokers** received the Smoke|Quit booklets! Focus testing of Smoke|Quit revealed that smokers would hold onto the resource, *even* if they were not ready to quit smoking
- **3,720** 2mg samples of Nicorette Gum, **21** samples of 21mg Nicorette patch and **142** samples of Nicorette Gum + Patch Combo Kit were handed out to smokers by clinicians in Campus Clinics.

## Estimated cost-savings

- An estimated **\$1,571,163.00** would be saved by assisting **3,039** young adults to quit smoking. This estimate is based on a total per capita cost of \$517.<sup>9</sup> This value has been adjusted for inflation, and includes some of the following costs: health care, productivity losses and prevention and research.

## Reach

- **47.3%** of 3,400 students intercepted in high traffic locations on 46 different campuses identified LTPB as a source of information around tobacco and/or support for quitting
  - **55.3%** of smokers (daily and non-daily) named LTPB as a source of support.
  - **53.6%** of students on campuses with LTPB student-teams knew about LTPB
  - **26.2%** of students on campuses without LTPB student-teams knew about LTPB
- **218,860** students were reached face-to-face by LTPB at **1,919** outreach events hosted by student teams
- **186,423** promotional items were disseminated to students and **20,885** promotional materials were displayed
- **8,624** "U Know U Want 2... Help A Friend Quit" resources were disseminated

<sup>3</sup> Based on a prevalence of 22% for university students and 33% for college students (Lawrance et al., *in progress*).

<sup>4</sup> In addition to the publicly funded Colleges offering programs in Applied Arts & Technology, there are 3 Colleges offering post-secondary programs in Agricultural Technologies and the Michener Institute which offers post-secondary programs for healthcare professionals (N=2,790).

<sup>5</sup> An earlier randomized controlled trial showed an 11.4% (intention-to-treat) quit rate at 3-month follow-up (Travis & Lawrance, 2009).

<sup>6</sup> 11.4% is a conservative quit rate given the likelihood that adding physician advice to the self-help intervention enhances its effectiveness.

<sup>7</sup> An earlier scientific investigation of the contest showed a 24% (intention-to-treat) quit rate for the *Quit For Good* contest deal, and 27% quit rate for the *Keep The Count* contest deal; 22% is used as an approximate quit rate for all contestants.

<sup>8</sup> Based on a quit rate of 5.9% for minimal physician intervention compared to control group. Silagy, C. & Stead, L.F. (2004). Physician advice for smoking cessation (Cochrane Review), in The Cochrane Library, Issue 1.

<sup>9</sup> Ontario Tobacco Research Unit. The burden of tobacco use in Ontario. Ontario Tobacco Research Unit [Update series]. Toronto, ON: Ontario Tobacco Research Unit, June 2006. Accessed May 6, 2011: [http://www.otru.org/pdf/updates/update\\_iune2006.pdf](http://www.otru.org/pdf/updates/update_iune2006.pdf)



## Social Marketing Campaigns

- **31 peer teams** implemented social marketing campaigns throughout the school year (September – April).
- The proportion of students who recognized each campaign are as follows<sup>10</sup>:
  - 49% Wouldrather... contest (31)
  - 26% Tobacco use & exercise (i.e., QUITRUNCHILL) (27)
  - 31% Tobacco use & sexuality (25)
  - 21% Tobacco use, stress & feeling depressed (21)
  - 19% Tobacco use, marijuana & shisha (10)
  - 16% Tobacco use & healthy eating (10)
  - 9% The effects of tobacco on the environment (4)

The campaigns with the greatest reach (wouldrather, tobacco use & exercise and tobacco use & sexuality) were supported by LTPB with train-the-trainer modules. This demonstrates that providing evidence-based resources, suggested activities and program logic models to youth will enhance the reach of social marketing campaigns implemented through peer-to-peer programming

## Integrated Healthy Lifestyle Programming

- 19 campuses have set-up partnerships with Campus Recreation Services where LTPB materials are available to students using the fitness facilities. 8 campuses have set-up a two-way referral system between 'personal trainers' working in campus gyms and LTPB peer teams.
- 4 campuses have held training sessions with personal trainers to talk about LTPB and how to include Smoke|Quit self-help booklets into their work in the campus gyms. This is an example of how LTPB is attempting to build sustainable partnerships on campus that will create tobacco control advocates while increasing access to cessation supports in a variety of campus environments- not just in campus health clinics.

## College Programming

- To complement the cessation services offered in campus clinics, and to improve access to valuable cessation materials, **3 more peer-teams** were added to college campuses. Having a student team enabled these campuses to run broader social marketing campaigns and have interpersonal outreach.
- **7,691** of the 22,737 Smoke|Quit booklets disseminated went to college students (~ 877 quitters).  
**12%** of all college students who smoke received Smoke|Quit!
- LTPB Head Office supported campuses running clinic-only programming by coordinating the dissemination of LTPB materials and posters through residence, bookstores, athletic departments and student governments.

## Web and Social Media Applications

- At least 27,015 visitors accessed [www.LeaveThePackBehind.org](http://www.LeaveThePackBehind.org), 140,277 page views (average 4 pages per visit).
- QUITRUNCHILL.org received 23,640 page views, with 910 logins to the site. 325 users including 209 smokers.
- 22 student-teams created campus-specific LTPB groups on Facebook, with 1,003 'fans'
- 2 student-teams created Twitter accounts, with 48 followers
- 1 Flickr account and 1 blog account

<sup>10</sup> Students were only asked if they recognized the social marketing campaigns that were specific to their campus. The number in the bracket represents the actual number of campaigns that run.



## Stronger Campus Tobacco Policies

- Policy work in 2010-11 began with a letter written by LTPB to all post-secondary campus presidents calling on them to update their campus smoking policies. The letter included a detailed rationale for a stronger policy, information about provincial legislation, and most importantly, an outline of sample clauses necessary in any updated policies. (result: one president responded; impact is undetermined at other campuses)

### *Enforcement*

- In September 2010, Niagara **College** implemented a very strict enforcement policy. Any student smoking outside of the DSAs will be ticketed (\$50 first offense, \$100 second). If they do not pay within 5 days, they will be locked out of their online student services. They are also reducing their DSAs from five to two. This year, the LTPB team focused on educating smokers about locations of the DSAs to help students avoid tickets.
- The student team at **Georgian College** met with Physical Resources and Campus Security to discuss reducing the number of designated smoking areas and the issue of fines. Security currently enforces the policy four days per week, fining smokers \$50.00 if they smoke outside the four DSAs.

### *Progress on new policies*

- The health professional and student team at **Sault College** met with campus health officials and the Board of Governors to modernize the current smoking policy. As of September 11, 2010, the campus is smoke-free with the exception of five designated smoking areas.
- At the **University of Toronto-St. George**, the LTPB student team and health professional drafted a proposed smoking policy modelled on the City of Toronto's policy. They have met with Occupational Health & Safety members and are scheduled to meet again to discuss implementing a more stringent policy. LTPB was also involved in a survey that was designed to gauge support for smoke-free policies among residents living in student family housing
- Students at **Lakehead University** and **University of Toronto at Scarborough** were successful in having cigarette disposal systems moved away from high traffic doorways.
- At **Ryerson University**, a committee of students, health professionals and administrators drafted a new smoking policy. New policy posters were created for a policy campaign and were promoted in November.
- The **York University** student team drafted a letter to the student government to discuss the DSAs, the 9 meter rule and enforcement of the policy from bylaw officers.
- Students at **Algonquin College** met with Board of Governors and Student Association to discuss stronger smoke-free policies in the next year. The student team received support from various departments for a new policy.

### *Sale of tobacco on campus*

- At **The University of Western Ontario**, the LTPB student team worked diligently with the Student Union to remove the sale of tobacco from the campus convenience store in the Spring 2010, as agreed upon in an earlier referendum.

### *Health Plan Coverage of NRT and Pharmacotherapy Products*

- Currently, six campuses provide some assistance in covering over-the-counter NRT products, and eleven campuses cover Zyban/ Champix. Several campuses investigated the process to advocate for improved coverage of NRT and pharmacotherapy products.



## Capacity Building and Sustainability

- 600+ health professionals offered smoking cessation counselling and LTPB's age-tailored smoking cessation booklets to patients. 11 health professionals completed LTPB's accredited Continuing Medical Education: *Campus-Based Brief Tobacco Intervention*
- **303** students from 33 campuses were extensively trained as tobacco control advocates and participated on LTPB student-teams (123 paid, 17 work-study, and 163 volunteers).
- **Over \$29,000** in donations were received to support the *wouldrather...contest*, including \$2000 donated by Pfizer Pharmaceuticals and approximately \$6,000 in tuition credits.
- **Expansion to Campus Pharmacies.** Currently, four pharmacies on campuses (**McMaster University, University of Waterloo, University of Windsor, and York University**) are providing the Smoke | Quit booklets to all students who purchase NRT or are prescribed a pharmacotherapy product.
- **Expansion to Campus Dental Offices.** Currently, there are 3 campuses (**University of Waterloo, University of Windsor and York University**) with a dental office that provide students with Smoke|Quit booklets to students who have been identified as smokers.
- **Expansion to Campus Housing Offices.** Currently, 15 campuses with LTPB student teams and two campuses without student teams are disseminating LTPB's smoke-free housing flyer. In addition, 14 student teams have LTPB posters in the housing office, and five have a section in their housing guide about establishing smoke-free homes.

## Knowledge Translation

- Travis H, Lawrance K, & Lawler S (Apr, 2010). Evaluation results of the 2010 wouldrather contest. Webinar presentation to the Young Adult Community of Practice. Ontario.
- Kirkwood, A., Lawrance, K. & Wade, T. (2011). Patterns and Correlates of Tobacco Use among Young Adults at College and University in Ontario. Poster presented at 2011 Society for Research on Nicotine and Tobacco Annual Meeting, Toronto, Ontario, Feb 16-19.
- Travis, H., Lawrance, K. & Lawler, S. (2011). The Tobacco Intervention Practices of Post-secondary Nurses in Ontario. Poster presented at 2011 Society for Research on Nicotine and Tobacco Annual Meeting, Toronto, Ontario, Feb 16-19.
- Kirkwood, A., Travis, H. & Lawrance, K. (2011). LTPB Report: Use of hookah among Ontario post-secondary students. St. Catharines, ON: Leave The Pack Behind. Presentation to faculty and students of Community Health Sciences, Brock University, St. Catharines, Ontario, Feb 28, 2011.
- Travis, H., Lawler, S. & Lawrance, K. (2011). Leave The Pack Behind: Engaging student nurses in smoking cessation. Presentation to the Registered Nurses Association of Ontario 'Student Smoking Cessation Champions Workshop.' Toronto, Ontario, March 5.
- Lawler, S. & Lawrance, K. (2011). Leave The Pack Behind: Innovation in tobacco control practices and research with young adults and campus clinicians. Presentation to Nursing Faculty at Binghamton University. Binghamton, NY. March 28.
- Horner, V. & Lawrance, K. (2011). Recruitment of Young Adult Smokers into a Campus-based Quit and Win Contest. Poster presented to faculty and students of Community Health Sciences, Brock University, St. Catharines, Ontario, April 8, 2011.
- Lawrance, K. (2011). QuitRunChill: An innovative intervention for young adults promoting smoking cessation through an online run program and stress reduction. Presentation to the Social Marketing Working Group.



## SFO Partnerships

- **RNAO Best Practice Guidelines (BPG) Program (Integrating Smoking Cessation in Daily Nursing Practice)**
  - LTPB disseminates the RNAO's best practice guidelines to campus nurses in our Campus-based Brief Tobacco Intervention training workshops.
  - LTPB is working with RNAO to develop linkages with Faculty of Nursing Departments to facilitate student nursing placements with the LTPB program.
  - Nursing Faculty Education Guide: Tobacco Use and Associated Health Risks – The LTPB Manager and staff have taken a lead role with the production of this resource and its dissemination to nursing faculty. LTPB is preparing campus health professionals to act as preceptors for student clinical placements with the LTPB program.
  - LTPB was on the steering committee and presented at an RNAO Champions' Workshop for student nurses.
- **Smokers Helpline**
  - This year, LTPB worked with Smokers Helpline in establishing the Fax-Referral Program in campus clinics.
  - LTPB promoted Smokers Helpline services through the distribution of CCS resources at outreach events, in clinic packages given out by health professionals and on the [LeaveThePackBehind.org](http://LeaveThePackBehind.org) website.
- **Driven To Quit**
  - LTPB disseminated D2Q flyers on 31 campuses, and emailed 1,500+ wouldrather contestants encouraging them to also enter the D2Q challenge.
- **Youth Advocacy Training Institute (YATI)**
  - LTPB worked with YATI to recruit and sustain youth engagement in health promotion in Ontario by disseminating LTPB recruitment postcards at their workshops and at the post-secondary recruitment fair in Toronto in September 2010.
- **TEACH**
  - LTPB also promoted TEACH training sessions to health professionals working in campus health clinics.
- **TCANS**
  - LTPB has partnered with the NE-TCAN to increase access to cessation materials and supports to students attending schools in Northern Ontario.

## SFO Committee Participation

- **Social Marketing Working Group**
  - Both the Principal Investigator and co-Director of LTPB are members of the Social Marketing Working Group at MHPS, attending weekly teleconference meetings, and occasional face-to-face meetings. They have made various presentations to this group during the past year.
- **PTCC/OTRU Young Adult Tobacco Use Reduction - Community of Practice**
  - LTPB Co-Directors and an Assistant Manager are members and participate regularly in this CoP.
  - LTPB also presented the results of three studies: 1) a study of contraband use among young adult students to this group 2) the evaluation results of the wouldrather contest.
- **Youth Task Group**
  - LTPB was an active member of this Task Group, presenting results of contraband research and supporting the Action Week 2010 campaign on smoke-free movies by collecting **3000+** postcards supporting legislation to ban smoking in movies targeted for youth under 18.

## LTPB in other countries or provinces

- **New Brunswick:** The LTPB Manager has acted as a consultant to the New Brunswick Lung Association for their project on reaching young adults who work in bars and restaurants. Two representatives from this project and a campus-based project attended the August LTPB training in Burlington. LTPB resources were used for this project that was implemented in three Atlantic Provinces. The New Brunswick Lung Association supported a pilot project to implement the LTPB program January – April 2011 at St. Andrew's College.



## Selected Indicators *for* Leave The Pack Behind April 1<sup>st</sup> 2010 - March 31<sup>st</sup> 2011

<u>Accessibility and Reach</u>	<u>2009-10</u>	<u>2010-11</u>	<u>Comments</u>
universities with LTPB	19	<b>20</b>	100% of Ontario's 20 universities
colleges with LTPB	22	<b>21</b>	87.5% of Ontario's 24 colleges 91.1% of all Ontario post-secondary institutions
F-T students attending schools with LTPB (estimated number of smokers in this population)	544,443 (140,374)	<b>563,426</b> <b>(144,732)</b>	98.2% of all Ontario post-secondary students
students reached face-to-face	129,294	<b>218,860</b>	39% of the 563,426 students at schools with LTPB

<u>Cessation Activities</u>			
smokers who accessed any of LTPB's cessation programs and services	22,153	<b>40,197</b>	28% of the 144,732 smokers at schools with LTPB
smokers using Smoke Quit self-help program	15,142	<b>22,737</b>	(shown to have a 11.4% success rate)
smokers receiving health professional support	2,499	<b>2,036</b>	
smokers using e-Smoke Quit (web) program	708	<b>159</b>	
smokers using QUITRUNCHILL (web) program	NA	<b>209</b>	
smokers who quit with LTPB support	2,345	3,039	8% of the 40,197 smokers who accessed LTPB

<u>Policy (Protection) Activities</u>			
schools improving enforcement of tobacco policy	6	<b>4</b>	Georgian, Lakehead, Niagara, & Scarborough
schools improving tobacco policy	3	<b>6</b>	Algonquin, Ryerson, Sault, UofT, Western, & York
schools improving cessation supports e.g., NRT	2	<b>1</b>	Western

<u>Education/ Awareness Activities</u>			
face-to-face outreach events	1,479	<b>1,919</b>	
pieces of educational materials displayed	22,583	<b>20,885</b>	
promotional items disseminated	174,454	<b>186,423</b>	
# of page views to LTPB website	50,978	<b>140,277</b>	

<u>Francophone Reach</u>			
pieces of <i>French</i> educational materials displayed	468	<b>390</b>	
promotional <i>French</i> items disseminated	1,225	<b>2,479</b>	
smokers using Arrête Fumer self-help program	266	<b>276</b>	7% of the 3,736 smokers at French schools
students reached face-to-face	975	<b>4,810</b>	30% of the 16,183 students at French schools

### **ArrêteCoursRelaxe** [QUITRUNCHILL]

Thanks to the additional funding received for translation, LTPB can now promote and offer ArrêteCoursRelaxe **entirely in French**.

[www.ArreteCoursRelaxe.org](http://www.ArreteCoursRelaxe.org) is a highly-interactive, online intervention that combines self-help programming with weekly updates and email messages to help young adult francophone smokers get active, reduce stress and quit smoking. Two feature posters, as well as postcards, pamphlets and table tents promoting ArrêteCoursRelaxe are available in French.



### 3-year Perspective on LTPB Accomplishments

	2010-11	2009-10	2008-09
<b>Accessibility</b>			
Institutions with LTPB	41	41	41
Number of peer teams	31	29	26
<b>Cessation Activities</b>			
Smokers who access LTPB services	40,197	22,153	13,322
Smokers using Smoke Quit	22,737	15,142	9,438
Smokers receiving health professional support*	2,036	2,499	2,164
Smokers who quit with LTPB support	3,039	2,345	1,457
<b>Education/Awareness Activities</b>			
Outreach events	1,919	1,479	1,239
Face-to-face	218,860	129,294	88,734
Items disseminated	186,423	174,454	127,889
Items displayed**	20,885	22,538	14,000
Referrals to clinic*	1,855	1,915	1,497
CO tests	11,251	9,838	7,904

\* A decrease from previous years is possibly due to irregular reporting by student data collectors. \*\* A decrease in the items displayed across campuses is possibly due to increasing campus regulations on the number/size of posters that can be displayed.