



FINAL EVALUATION REPORT

Tobacco and Smoke Free Campus Policy: A Student-led Multiple-Component Evaluation

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Submitted to: Tobacco and Smoke-Free Campus Working Group

June 19, 2018

Suggested citation: Friesen J, Sandhu HS, Haalboom S. (2018). *Tobacco and Smoke Free Campus Policy: A Student-led Multi-component Evaluation*. Hamilton, ON. McMaster University.

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Abbreviations

*DBAC – David Braley Athletic Centre
DSA – Designated Smoking Area
HHS – Hamilton Health Sciences
TSF – Tobacco and Smoke-Free
NRT – Nicotine Replacement Therapy
LTPB – Leave The Pack Behind
MPH – Master of Public Health
MUMC – McMaster University Medical Centre
SHS – Second Hand Smoke*

A: Executive Summary

McMaster University is a Canadian post-secondary institution focused on promoting health on campus in accordance with the 2015 Okanagan Charter. In 2018, McMaster University implemented a Tobacco and Smoke-Free Campus policy becoming the first 100% tobacco and smoke-free campus in Ontario.

Project goals: (1) Describe the impact of the McMaster Tobacco and Smoke-Free Campus (TSF) policy within the first semester after implementation; and (2) Create recommendations based on existing literature and our contextual evaluation findings to contribute to the improved implementation experience for the staff, students, visitors and neighbours that make up the McMaster community.

Methods: Primary method of data collection was a cross-sectional survey conducted mostly online but also in-person with over 1602 respondents. To support these results, the evaluation team performed two litter audits, tracked utilization of reduction and cessation services, and analyzed compliance data from security services.

Results: Almost all survey respondents were aware of the policy (~93%) prior to coming across the survey. Respondents self-reported experiencing significantly less second-hand smoke on campus after the policy was implemented. Out of smokers, about half (52%) did not use tobacco or smoking products on university-owned property at all. There was an overall decrease in amount of litter from baseline to post-policy implementation and an increase in the delivery and use of reduction and cessation services. Compliance data showed an increasing trend of security-related responses over the first four months, which is consistent with the overall gradual introduction of the policy.

This evaluation report aims to guide further implementation of McMaster University's Tobacco and Smoke-Free Campus Policy and inform the resources available. For original data and fully explained results please see the reference publication from the Youth Engagement in Health Promotion journal.¹

Table 1: Key Impact Findings

Indicator	Pre-Implementation	Post-Implementation
# of People observed smoking in hot spots	43	0
# of Cigarette butts collected in hot spots	3426	2962
% of Survey respondents aware of policy	NA	93%
# of Self-reported frequent experience of SHS	895	436
# of Self-reported infrequent experience of SHS	519	919
Total # of utilizations of reduction or cessation support services	2	19
% of smokers who did not use tobacco while on university-owned property	NA	52%
% of Respondents who reported increased desire to quit, Reduced use and/or successful quit of smoking or tobacco product use	NA	23%
% of Respondents interested in quitting in next 6-12 months	NA	37%
% of Respondents aware of free support	NA	76%
# of campus smokers who were educated about the policy this semester	NA	271
% of Smokers interested in quitting 'cold turkey' or on their own	NA	23%
% of Smokers interested in using NRT	NA	18%
# of hits to Daily News website (#1 source of Info)	1138	1285

Conclusions:

- This project further reveals the complexities of implementing a 100% tobacco and smoke-free policy from the eyes of smokers in the McMaster community and non-smokers alike.
- Overall, the evaluation demonstrates a positive impact on the policy purpose outlined by the working group, most notably:
 - o Diminish exposure to smoke and tobacco and promote health and safety
 - o Support reduction and cessation of smoking and tobacco products through increased access to resources and support as well as through education
- The working group effectively responded to best practice literature around the introduction of the policy on campus including:
 - o Embracing the 100% tobacco and smoke-free rather than phasing in a more limited policy²
 - o Establishing a supportive committee inclusive of students, administration and staff with a dedicated chair person to take the lead on inquiries and communication who continues to be an asset to the implementation process as part of their on-going portfolio

- Publicising the policy effectively using the Breath Easy campaign³
 - Informing violators of the policy^{4,5}
- This report aims to further the success of the McMaster Tobacco and Smoke-Free Campus Working Group and the corresponding policy implementation
- Policies alone cannot change behaviours but can be used as a tool to keep the critical discussion about tobacco use going on campus – this is fueled by consistent education about the policy
- When education practices become routine, they need to be complimented with effective and consistent engagement strategies of which we discuss in detail, below. This is where McMaster has the opportunity to set new recommendations for best practice
- There are many opportunities for continued evaluation and responsive implementation moving forward

B: Assessment and Results

The Policy

The policy came into effect on January 1, 2018. It is important to note the TSF policy applies to all McMaster University-owned properties and campuses, however, our evaluation focused only on the central campus. The campus is self-contained and has boundaries with residential communities on the west, south, and east end, with the north boundary backing onto a nature conservation area, which is also a smoke-free property. Within the campus, there is also a teaching hospital that is managed by Hamilton Health Sciences and has their own Smoke-Free legislation, monitoring, enforcement and maintenance team.

The specific aims of McMaster University's TSF policy include: (a) confirming McMaster's commitment to a healthy and safe environment; (b) diminishing exposure to second-hand smoke; (c) supporting reduction and cessation; (d) acknowledging ceremonial use of tobacco; (e) increasing awareness about the impact of smoking on health; and (f) establishing responsibilities of roles regarding policy implementation.⁶ Along with the aims, there are four university departments responsible for supporting the policy: the Student Wellness Centre (for cessation support for students), Human Resources Services (for cessation support for faculty and staff), Facility Services (for signage, cleaning, and/or physical property matters), and Security Services (for enforcement).⁶

Multi-Method Evaluation Strategy

The specific evaluation plan was developed using a template from the Centre for Disease Control and Prevention.⁷

Survey

The cross-sectional survey was initially developed using a survey template⁸ to measure indicators from latest research on how to evaluate TSF policies. The evaluation team collaborated with the Equity and Inclusion office to modify and adapted the survey for the McMaster context, and added a qualitative question to help further understand people's experience of the TSF policy. We launched the survey in March 2018 for about 4 weeks. The data was collected and hosted by Campus Labs®. Respondents accessed the survey via direct email link, social media, or in-person invitations. Participants were given the chance to enter a draw to win one of 50 Amazon giftcards valued at \$10 each.

Litter Audit

The audit helped determine changes in amount of smoking product litter as a measure of compliance. Volunteers collected and counted cigarette butts in various identified hotspots on campus for approximately one hour. Volunteers also noted the number of individuals observed smoking or vaping in the hotspots. The six hotspots were identified by Facility Services as locations on campus where smoking litter was more prevalent. For one week prior to each litter audit, Facility Services staff avoided cleaning up cigarette butts in the hotspot areas, so that the litter collected would be representative of one week of discarded cigarettes. The first litter audit was done in December 2017 prior to policy implementation and the second was completed in March 2018, three months post-implementation. A third audit is planned for December 2018.

Reduction and Cessation Services Tracking

McMaster University community members have access to a variety of reduction and cessation resources. Data for students was provided by Leave The Pack Behind, which tracks uptake of health professional counselling provided by the Student Wellness Centre and access to an eight week supply of nicotine replacement therapy (NRT). In addition, Human Resources Services coordinates smoking cessation workshops to be offered to employees and members of the McMaster University community. The number of participants attending workshops since the policy was announced in September 2017 has been collected as part of the evaluation.

Compliance

Security Services shared their tracking data to assess compliance. Number of interactions between security officers and those using tobacco or smoking on campus was recorded, as well as number of individuals engaged, information cards handed out, and files reported. The tracking system was developed by Hamilton Public Health Services and was introduced during officer training in advance of policy implementation.

Results Overview

The survey platform collected a total of 1602 responses. About half (52%) of the respondents were staff or faculty probably due to the fact that this was the only university affiliation that we were able to directly email the survey to. Students (undergraduate and graduate) comprised 43% of the respondents and about 5% were campus visitors, neighbours or volunteers.

The vast majority of respondents were aware of the TSF policy prior to coming across the survey (93%). The top two information sources were the McMaster Daily News article and by word of mouth. Email, Breathe Easy campaign posters, and social media were also a common source of information about the policy.

Figure 1: How often survey respondents were exposed to SHS while on campus pre and post-policy implementation

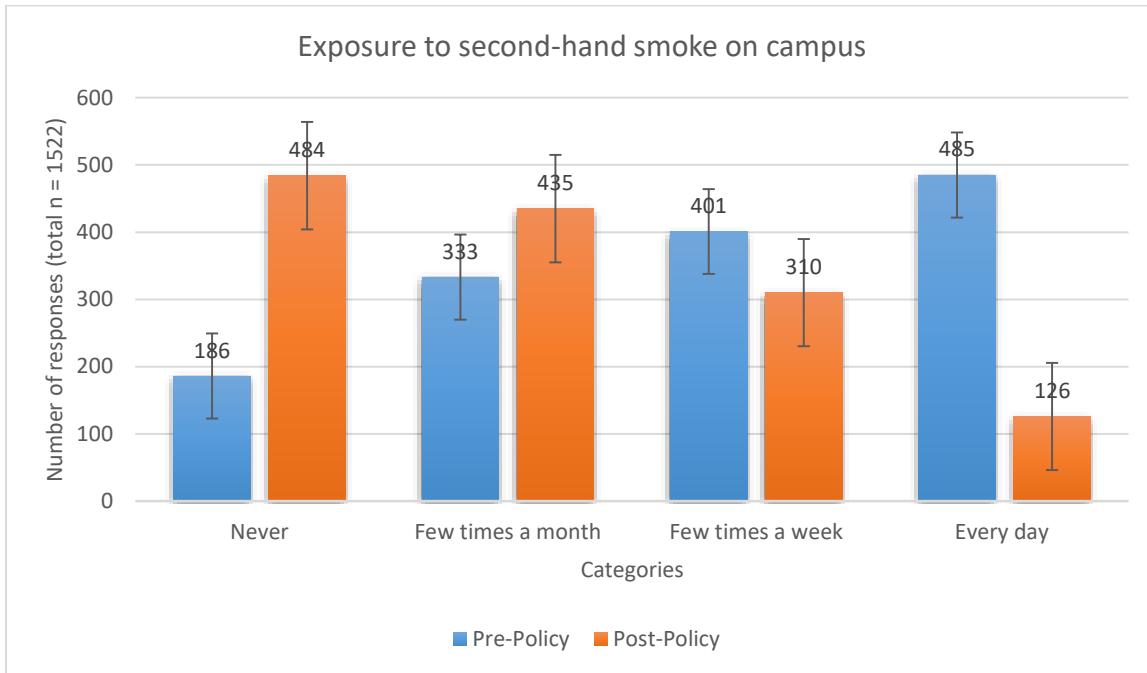


Figure 1 demonstrates that the frequent experiences of SHS decreased and the infrequent experiences of SHS showed an increase. There is a statistically significant difference between median response for pre-versus post-policy as seen through a Wilcoxon Rank Signs Test ($Z = -22.668, p < 0.0001$).

Figure 2: How often self-identified tobacco users or smokers leave University-owned property to use tobacco products since January 1, 2018

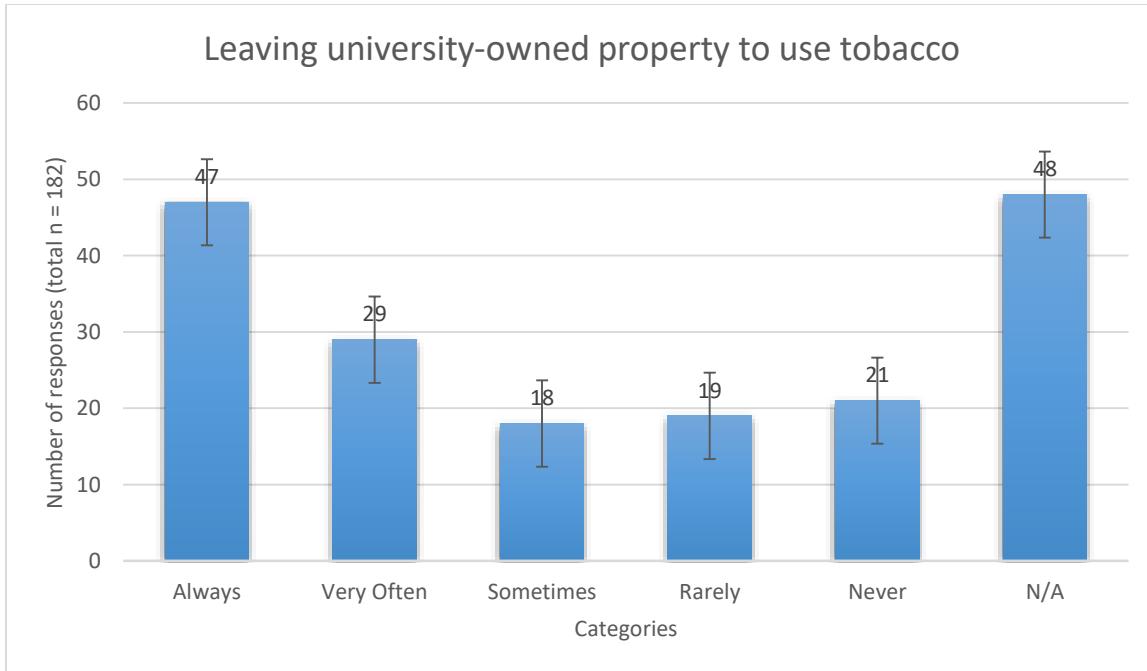


Figure 2 shows that over 50% of smokers either always leave university property to use tobacco products, or do not use these products at all while on university grounds.

Table 1: What effect did the TSF policy have on your tobacco product or smoking use? (respondents could choose multiple options)

Effect of policy on Tobacco use /Smoking	Definition (Respondents could select more than one)	Percent and # of Responses
Positive	Reduced the amount I smoke, Increased my desire to quit, Helped me successfully quit	23.08% (48)
Negative	Increased the amount I smoke, Decreased my desire to quit	18.13% (33)
No effect/Other	Has not helped me successfully quit smoking, has had no effect, other	82.41% (150)

Table 1 compiles the data on the effect the policy has had on tobacco product or smoking use. Human behaviour is very complex especially when it comes to addictive substances so we know that any reduction or cessation that comes because of the policy is significant.¹ So far it has helped 25 people reduce their use, made 18 people want to quit more and helped at least 5 people successfully quit. About 37% of self-identified smokers or tobacco product users indicated that they interested in quitting within the next 6-12 months and 76% were aware of where they could go to receive free resources and support.

The survey respondents were also asked if they had anything they wanted to share with the evaluation team or any additional experiences or questions about the TSF policy. Over 600 people left comments which were extracted from that data and assigned over 1300 codes to help describe the experience of the policy. Codes for comments were divided into three major categories: Positive, Negative and Observations/Suggestions.

Table 2: Community Survey – Qualitative Data Summary

Cluster Category	Main Sub-cluster Code(s)	Description of comments	Count (n)	% Codes
Positive	Encouragement	Any kind of positive statement including benefits to health, environment or culture	132	10%

Negative	Policy has no effect, Smokers Quality of Life, Other products, Previously Unseen, Enforcement	Enforcement, unchanged or increased visibility of smokers, policy negatively impacting tobacco users or smokers (staff, students)	403	30%
Observations/ Suggestions	Entry points, SHS, DSA, Questions, Litter, Education, RBG/Neighbours, Resources	Increased visibility of smokers/litter at entry points, or more public SHS, calls/questions about DSA, calls for education or more resources/signs. Top two reports of people smoking were in parking lots at hospital grounds	836	60%

Overall, about 10% of comments were positive including phrases such as “I appreciate the comprehensive and supportive approach the University is taking to help the McMaster University community, and in particular those of us who need to quit.” Other phrases included, “Thank you” and “Great Work”, as well as reasons for support for the policy such as health, well-being and environmental concerns. About 30% of the comments were coded negative and nested under 5 sub-clusters. The most common (10%) was, “the policy has no effect,” with a typical response being, “Lots of people still smoke on campus...I have not noticed any change since the policy was implemented.” The final cluster was about observations/suggestions of which the most common sub-cluster was questions or comments about enforcement (11%). These qualitative responses helped fill in the gaps of knowledge that each aspect of the evaluation left us with and largely shaped our final recommendations, especially around enforcement.

Table 3: Results from pre and post policy litter audit for hot spots on campus

Hotspot Location	Pre-policy (Dec-17)		Percent Change
	Number of Cigarette Butts Collected	Number of Cigarette Butts Collected	
1. North Residences	297	410	+ 38%
2. University Hall	288	191	- 34%
3. The Phoenix Bar	331	350	+ 6%
4. Hospital	983	950	- 3%
5. Student Centre	600	63	- 90%
6. M. K. Residence	927	998	+ 8%
Total	3426	2962	- 14%

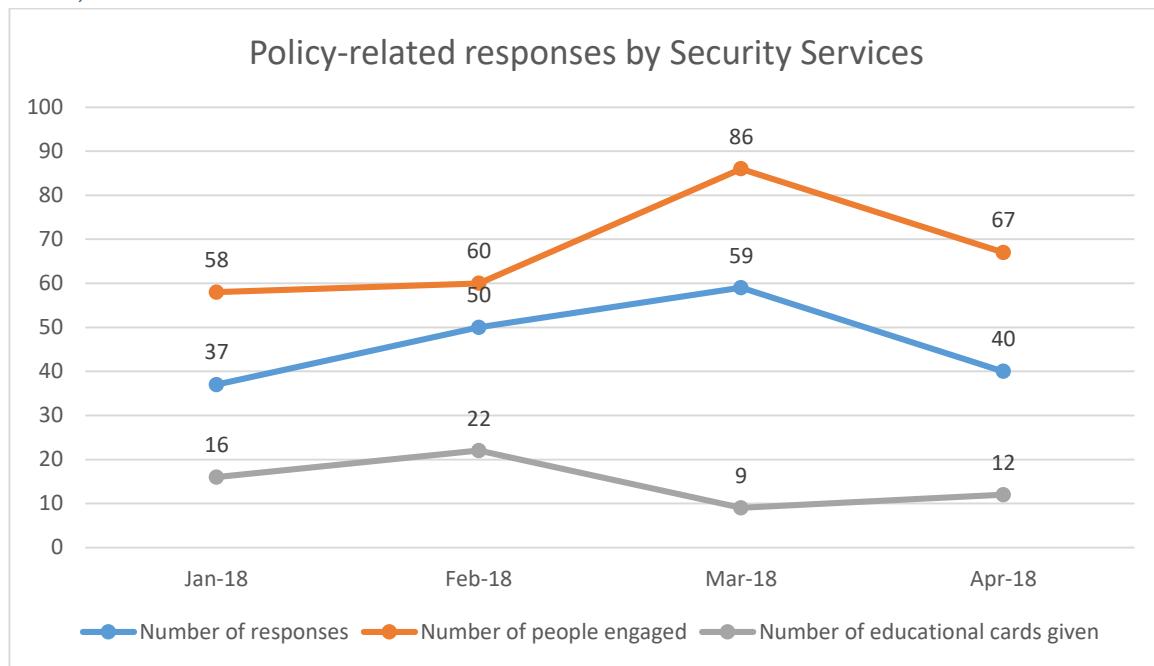
During the pre-policy litter audit in December 2017, volunteers picked up a total of 3,426 cigarette butts across all six hotspot locations. During the post-policy audit in March 2018, volunteers picked up a total of 2,962 cigarette butts, representing an overall decrease of 14%. However, there was variability between hotspot locations. We found that the locations closer to the edge of campus had almost no change or in some cases even a slight increase in cigarette litter whereas those on central campus experienced the largest decrease in litter. This data left us with more questions that we attempted to answer with additional outreach to stakeholders to better understand how this unanticipated increase in litter towards the entrances and exits of campus could be overcome.¹ In addition to the litter pick-up, volunteers also noted how many people they saw smoking or vaping in their designated hot spot. Pre-policy they witnessed 43 individuals smoking and post-policy implementation they did not see anyone smoking on campus in those hot spots at lunchtime. A map of the hotspots and results is attached in the appendix.

Table 4: Use of Reduction/Cessation Resources

Intervention	Location	Number of young adults accessing intervention	
		Fall 2017 PRE POLICY	Winter 2018 POST POLICY
Patch/gum from health professional OR Quit Kit from Health Professional OR NRT online or in-person	McMaster	20	30
	Provincial mean	26	30

Table 4 describes the uptake in tracked reduction or cessation resources for students in the McMaster community as tracked by Leave The Pack Behind. These include online or in-person requests for the interventions. This past semester brought the McMaster community up to the Provincial Mean, which McMaster historically had been trailing behind. The tracking of staff reduction and cessation resources turned out to be more difficult than anticipated by the evaluation team as overall numbers for uptake of resources are low. A promising practice has been the increase in employees and McMaster University community members reached through cessation support workshops. Eight workshops have been held between September 2017 and February 2018 to support those who want to quit, with 36 participants total. This included STOP workshops offered jointly through the Centre for Addiction and Mental Health and public health units, workshops provided by Homewood Health, and workshops organized by the Human Resources Services.

Figure 3: Number of responses, number of people engaged and number of educational cards handed out by Security Services



We also mapped the location of responses to show that, fitting with the litter audit data, the most number of encounters were on the central areas of campus rather than those areas that are closer to the perimeter. This is also consistent with the litter audit data showing that smokers are moving toward the edge of campus but not necessarily leaving university-owned property to smoke or dispose of their cigarette butts.

C: Discussion and Recommendations

Strengths

The McMaster TSF policy working group engaged students early in the evaluation process and gave them full leadership over the design, data-collection and presentation of results. This was an excellent learning opportunity for the team of MPH students. Because the MPH program at McMaster is only in its third year, there are numerous future opportunities for students to lead evaluation efforts on campus.

The collaborations across campus was also extremely beneficial to the evaluation team. Everyone was helpful in developing evaluation tools, presenting the data and forming appropriate recommendations. Lastly, there has been an overwhelming amount of interest in other institutions accessing information of the policy, implementation considerations as well as the evaluation. McMaster is known as an expert in their leadership of a 100% tobacco and smoke-free campus policy.

Challenges

There are many challenges in the effective enforcement of a TSF policy. Firstly, McMaster University shares a boundary with the McMaster University Medical Centre (hospital), thus, enforcement of the smoke-free policy is shared between McMaster University Security Services, and the hospital security

staff. This may lead to confusion regarding jurisdiction of policy enforcement. This is an issue as the highest amount of tobacco-related litter was found in the area between the hospital and campus. This underscores the importance of a community engaged approach to each stage of policy development, implementation and evaluation.

Secondly, nighttime compliance is difficult to maintain when rates of non-compliance in smoke-free areas are reported to be higher.⁹ Furthermore, the changing seasons and variable weather may also be a factor in explaining the increasing trend of policy-related security response from January to April, this will be an unchanging reality in our climate.¹⁰

Recommendations

We framed the recommendations in the context of the original policy aims and provided suggestions and/or confirmed champions of each recommendation to help ensure this work continues and guides implementation for a more streamline 100% tobacco and smoke-free community experience.

1. Community Engagement and Education

a) Continue to meet as a committee and continually reach out to new and interested stakeholders

Champion: Tobacco and Smoke Free Committee Leaders

- This includes student government candidates, HHS hospital staff, security and all other emerging voices, policies and programs
- Continue to use responsive education to the concerns and questions that are brought forward, don't be afraid to use humor

b) Increase Receptacle Locations

Champion: Facilities Services & Evaluation Team

- Review current receptacle locations and thoughtfully increase the amount of them in coordination with litter audit results
- Keep an internal updated list of receptacle locations and continue to audit cigarette litter as part of ongoing evaluation
- Consider mobile reminder signs and or receptacles eg, construction crews, exam time, special events etc.

c) Consider a unified Reporting System for community members to report on-campus smoking or littering for follow up

Champion: Working Group

- Promote existing reporting systems or consider unifying them to one number/email/website or cell phone app to ensure people have a way of 'peer enforcement'¹¹
- Collaborate with wellness staff at HHS for as many of these recommendations as possible to create a streamlined 100% tobacco and smoke free environment

2. Education and Reduction/Cessation Supports

a) Increase Education and Reduction/Cessation Supports Available:

Champion: Student Wellness Centre, McMaster Human Resources, HHS Wellness Staff

- Increase accessibility of existing reduction/cessation resources through an annual "Intervention Week" this would include special events, contests, litter audits, etc. The first week of December is when the litter audit is recommended to be repeated

- Set specific targets for NRT/Quit Kits in the Student Wellness Centre clinic and aim to meet or exceed them each semester as well as targets for workshop participation
 - Work to expand the Student Wellness Centre's reach to graduate students in wellness education activities
 - Work with other partners and stakeholders about best practices as well as promising innovative methods of reduction/cessation also featured during the "Intervention Week" proposed in December such as hypnotherapy or acupuncture
 - Make use of new electronic signs in September of each year to make sure new staff/students/visitors are aware of the policy
- b) Consider a harm reduction approach to the policy for cessation and reduction
- Champion: Leave the Pack Behind + Hamilton Public Health Services
- Adopt best practices to incorporate a harm reduction education approach to how to reduce use in times of stress or when using other substances
 - Consider hiring an MPH student to develop training modules or fun/interactive education tools such as the one found here (about alcohol harms)¹²:
<http://plato.algonquincollege.com/umbrellaproject/rainydaze/#/alcohol>
 - Respond to changing legislation about medical marijuana and continue to educate about harm reduction strategies for other substances
- c) Translate this Knowledge
- Champion: Leave the Pack Behind & Hamilton Public Health Services
- Consider ways of distributing this information systematically to interested parties who have reached out for guidance to save time and resources and to set the stage for McMaster's leading example with this policy work

3. Continue Evaluation Efforts

- a) Litter Audit
- Champion: Hamilton Public Health Services & Student Wellness Centre
- During proposed "Intervention Week" first week of December, gather volunteers to go out and pick up cigarette butts in identified hot spots to further determine impact of policy 1 year post implementation. (See Appendix – Evaluation Tools II)
- b) Track Compliance Data
- Champion: Security Services – Glenn DeCaire & Working Group
- Continue to track the compliance data using Appendix – Evaluation Tools III
 - Compile annual report of escalated offenders of the policy and any follow up
 - Continue to utilize "Breath Easy" palm cards to ensure that reduction/cessation resources are given at the same time as education about the policy – share these with MUMC security
- c) Track Reduction/Cessation Resource Uptake
- Champion: Student Wellness Centre – Cathy Jager & Human Resources – Deb Garland
- Continue to track use of any student resources through LTPB and the Student Wellness Centre and set targets for distribution
 - Continue to offer group programming or other innovative reduction/cessation resources
- d) Be open to further evaluation
- Take advantage of MPH Practicum Students to further understanding of barriers to compliance of the policy. Consider focus groups for each university affiliation and partner with HHS staff at MUMC etc.

- Continue to collaborate with other groups on efforts to incorporate education and acknowledgement of the use of scared or traditional tobacco on campus
- Continue to take action on evaluation results as they are made available

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E. Appendix

Evaluation Tools

I. Survey

It's official!

McMaster University became Ontario's 1st 100% Tobacco and Smoke-Free Campus Policy on January 1st, 2018. You have been invited by a student-led evaluation team to complete this anonymous 3-minute survey that will help to evaluate the implementation of the Tobacco and Smoke-Free Campus Policy which supports McMaster University's commitment to improving the overall health and well-being of our community. The results of this survey will help inform the further education of the policy and its corresponding support services. At the end of the survey you will have the opportunity to enter a draw for a chance to win 1 of 50 \$10 gift cards to Amazon.ca. This survey is anonymous, and your email will not be associated with your survey response or used for any other purpose.

Your input and time is greatly appreciated. You can email (smokefree@mcmaster.ca) for further inquiries.

1.

a) Before coming across this survey, were you aware that McMaster University has a policy that prohibits tobacco consumption and smoking on University-owned property?

i. Yes

ii. No

b) If Yes, How did you **first hear** about McMaster University's 100% Tobacco and Smoke Free Campus Policy?

i. McMaster Daily News article/website

ii. Email

iii. Word of Mouth

iv. Social Media

v. 'Breathe Easy' handout

vi. Poster/Campus Screens

vii. Outdoor signage

viii. On Campus Event

ix. Campus Security Staff

x. Local News (The Spectator, CHCH, Local Radio etc.)

xi. Other - please specify: _____

c) If Yes, **After first hearing** about the tobacco and smoke-free campus policy, did you receive additional information from any of the following (check all that apply)?

- i. McMaster Daily News article/website
- ii. Email
- iii. Colleagues
- iv. Social Media
- v. 'Breathe Easy' handout
- vi. Poster/Campus Screens
- vii. Outdoor signage
- viii. On Campus Event
- ix. Campus Security Staff
- x. Local News (The Spectator, CHCH, Local Radio etc.)
- xi. Other - please specify: _____

Exposure:

2. "Secondhand smoke" is smoke or aerosol from someone else's cigarette, cigar, pipe, or e-cigarette that you breathe.
- a) Reflecting on **before the Policy was implemented on January 1, 2018**, in an average week, how often would you say you were exposed to secondhand smoke while on University-owned property?
- i. Multiple times a day
 - ii. Every day
 - iii. A few times a week
 - iv. A few times a month
 - v. Less than a few times a month
 - vi. Never
 - vii. I do not recall/I do not know
- b) Reflecting on **after the Policy was implemented on January 1, 2018**, in an average week, how often would you say you are exposed to secondhand smoke while on University-owned property?
- i. Multiple times a day
 - ii. Every day
 - iii. A few times a week
 - iv. A few times a month
 - v. Less than a few times a month
 - vi. Never

vii. I do not recall/I do not know

Product Use:

3. In the **past 30 days**, have you used commercial tobacco or an alternative tobacco/nicotine product (defined as: cigarettes, cigarillos, cigars, pipes, chewing tobacco, snuff, snus, hookah, vape, and/or heat-not-burn)?

Please note: this survey is not asking about the use of sacred or traditional tobacco

- i. Yes
- ii. No

If Yes, please answer the following. If no, skip to question 7.

4. Since the policy was implemented on January 1st, 2018, how often do you leave University-owned property to use those products?

- i. Always – I leave University-owned property **every time** I smoke or use tobacco products
- ii. Very Often – I leave University-owned property **almost every time** I smoke or use tobacco products
- iii. Some of the time - I leave University-owned property **occasionally** when I smoke or use tobacco
- iv. Rarely – I **do not usually** leave University-owned property when I smoke or use tobacco products
- v. Never – I **never** leave University-owned property when I smoke or use tobacco products
- vi. Does Not Apply – I do not use these products while I am on University-owned property.

5. Which best describes how the Tobacco and Smoke-Free Campus Policy affected your product use (check all that apply):

- i. Reduced how much I smoke or use tobacco products
- ii. Increased the amount I smoke or use tobacco products
- iii. Reduced my desire to quit smoking or use tobacco products
- iv. Increased my desire to quit smoking or use tobacco products
- v. Helped me to successfully quit smoking or use tobacco products
- vi. Has not helped me to successfully quit smoking or use tobacco products
- vii. Other: _____
- ix. No effect

6.

a) Are you interested in quitting or reducing tobacco or smoking products in the next 6-12 months?

i. Yes

ii. No

b) Are you aware of where you can go to receive support with free products and services?

i. Yes

ii. No

c) What methods would you be interested in trying? (Check all that apply)

i. Counseling (Check all that apply):

- Group
- One-on-one counseling
- Phone counseling

ii. Self-Help Resources (Check all that apply):

- Books
- Smoker's Helpline
- Pamphlets
- Smartphone App
- Daily E-mail

iii. Appointment to speak with a health professional (e.g., doctor, pharmacist, etc)

iv. Smoking Cessation Prescription Medications (Champix or Zyban)

v. Programs and Social Supports (Check all that apply):

- Joining a contest or challenge
- Program that incorporated exercise/fitness
- 12 step program
- Smoker's Helpline

vi. Nicotine replacement therapies (e.g., the patch, gum, lozenge or inhaler)

vii. Stopping on my own - "cold turkey" method

viii. Alternative Methods (Check all that apply):

- Hypnosis
- Meditations
- Acupuncture

ix. Other: _____

x. None, I am not interested in quitting.

7. Do you have any additional comments/suggestions? This is a space for any observations around the policy implementation including stories or testimonials or questions.

i. Yes (please explain)

ii. No

Basic Information:

8. University Affiliation (primary):

- i. Undergraduate Student
- ii. Graduate Student
- iii. Staff
- iv. Faculty
- v. Campus visitor
- vi. Volunteer
- vii. Other (Please specify): _____

9. What is your age:

- i. Less than 18
- ii. 18-29 years old
- iii. 30-49 years old
- iv. 50-69 years old
- v. 70 years or older
- vi. Prefer not to say

10. Which McMaster University Campus do you primarily use?

- i. Central Campus (1280 Main St W)
- ii. Ron Joyce Centre
- iii. One James North
- iv. David Braley Health Sciences Centre
- v. Niagara Regional Campus
- vi. Waterloo Regional Campus
- vii. Other: _____

new page

Thank you for your input!

There are many free programs and supports available for those interested in quitting or reducing use. For further information, individuals are encouraged to visit the Tobacco and Smoke-Free Campus website to learn more about the free supports available on campus or in the community.

If you are interested in learning more about the Policy please visit <https://dailynews.mcmaster.ca/smoke-free-campus/>

To enter the draw for a chance to win 1 of 50 \$10 gift cards for Amazon.ca, click here

II. Litter Audit Instructions/Observation Form

Total duration ~2 hours

Prior to meeting:

- Gather volunteers at meeting point and sign waivers if appropriate, let volunteers know to dress appropriately for weather.
- Gather materials (multiple pairs of protective/latex gloves, Ziploc bags, paper bags, permanent markers, clipboards, pens, and the data collection form)

During audit:

- In teams of two, travel to “hotspot” locations and start picking up visible cigarette butts while keeping count and place them in Ziploc bags.
- Note the start and end time, aim to conduct the audit for 60 minutes.
- Observe any receptacles in the area, or any smokers, and continue keeping track of data on the collection form.

Post audit:

- Return the litter and data collection form to the coordinator.
- Coordinator will tally the final counts and keep track of how much litter was found from each specific hotspot location.

For volunteers:

Data Collection Form (for each hotspot location)

Hotspot location: _____

# Volunteers	# Minutes spent picking up smoking litter	# Cigarette butts and tobacco product litter collected (tally)	# People observed smoking (incl. vaping) in hotspot location	# Ash trays / cigarette butt receptacles	# Garbage cans

TOTAL					

For coordinator:

Hotspot location	# Volunteers	# Minutes spent picking up smoking litter	# Cigarette butts and tobacco product litter collected	# People observed smoking (incl. vaping)	# Ash trays / cigarette butt receptacles	# Garbage cans
<i>Hotspot 1</i> <ul style="list-style-type: none"> - Commons Building breezeway (covered walkway) - Area between Commons Building and Brandon Hall - Rear of Whidden Hall (west side, bordering RBG) 						
<i>Hotspot 2</i> <ul style="list-style-type: none"> - University Hall main entrance - Refectory receiving (east side, between Refectory and Biology Greenhouse) 						
<i>Hotspot 3</i> <ul style="list-style-type: none"> - Rear of Life Sciences (east side) - Rear of HSC (walkway between HSC, Life Sciences and MDCL) 						

<i>Hotspot 4</i> - MUSC receiving (east side) - DeGroote School of Business (south side) - Walkway between MUSC and Mills Memorial Library						
<i>Hotspot 5</i> - Mary Keyes building perimeter (main entrance off College Crt and main entrance off Scholars Rd)						
TOTAL						

III. Compliance Tracking Sheet

Sample Tracking Sheet (collected and tracked for each month):

Date	Time	Location/Building Code	Type (vape/smoke/cannabis)	# of people engaged	Education card handed (y/n)	Officer(s)

Results

Full survey results available upon request to smokefree@mcmaster.ca

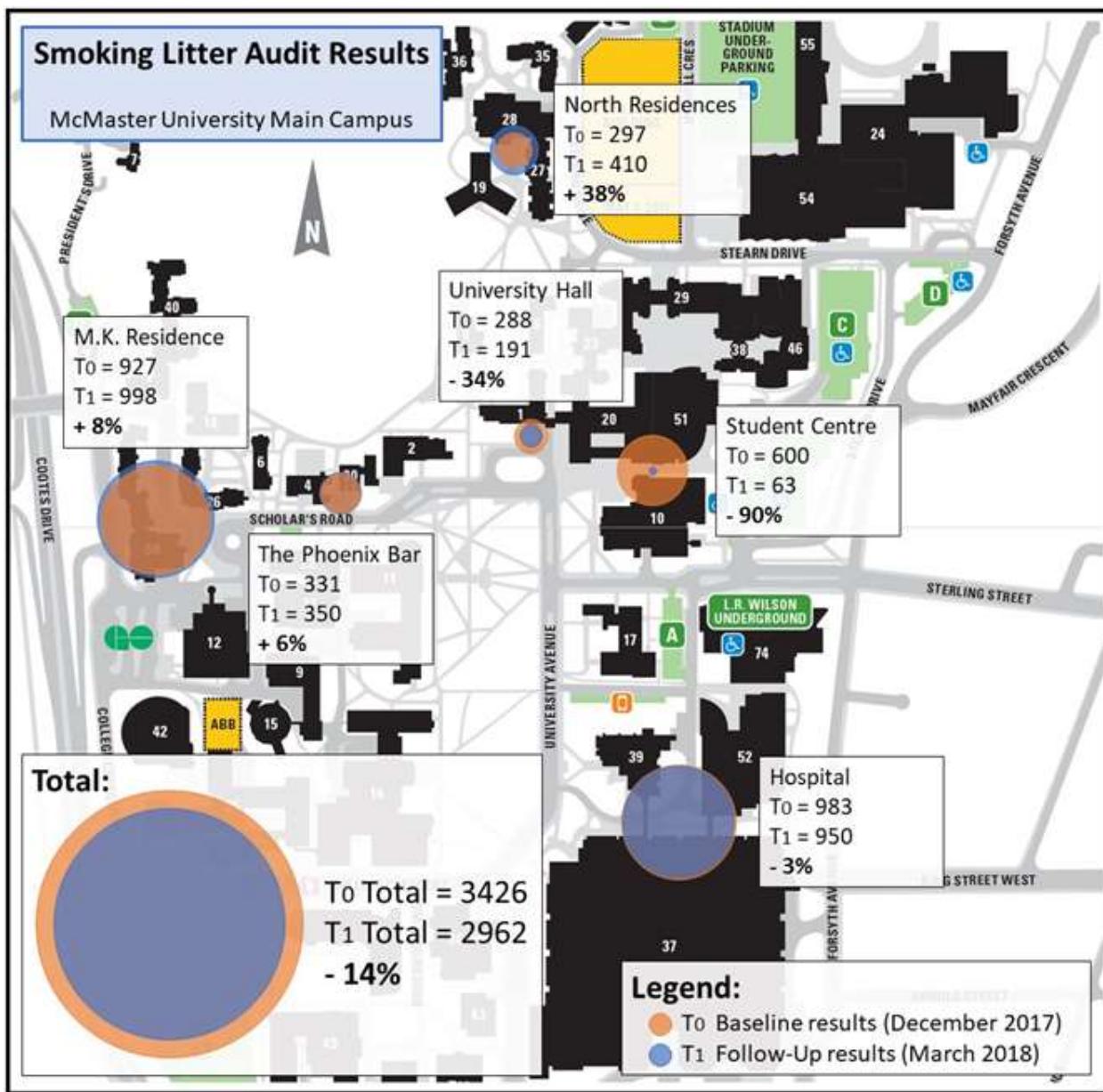
Qualitative Data – Code Book

Cluster Category	Sub-cluster Code	Description of responses	Count (n)	% Codes
Positive	Encouragement	Any kind of positive statement including benefits to health, environment or culture	132	10%

Negative	Policy has no effect	Response notes no difference in experiencing smokers or second-hand smoke with policy implementation	137	10%
	Smokers' quality of life	Comments around smoker's rights, mental health, shame, inclusivity	95	7%
	Criticism	General negative criticism involving the policy	76	6%
	Other Products	Any mention of vaping including and how vaping is not/should not be considered smoking	51	4%
	Previously Unseen	Respondents noticing an increased visibility of smokers whereas previous to policy they had remained hidden/spread out	44	3%
Observations/suggestions	Enforcement	Suggestions for how to ensure compliance	146	11%
	Entry Points	Any mention of increased visibility of smokers on the edge of campus as you walk/drive/approach McMaster University	119	9%
	Second-Hand Smoke	Any mention of second-hand smoke (eg. an increase or decrease in exposure to second-hand smoke)	97	7%
	Designated Smoking Area	Suggestions for designated smoking areas – either suggesting specific location or simply that they should exist.	76	6%
	Questions	Asking questions or making suggestions for frequently asked questions or knowledge translation of this survey data	65	5%
	Litter/Receptacles	Any suggestion of receptacles	62	5%
	Education	Suggestions for where/when/how to advertise or educate about the policy	53	4%
	Staff	Comments on how staff were seen smoking on campus	47	3%
	Signage	Any mention of a sign or that more signage is needed	41	3%

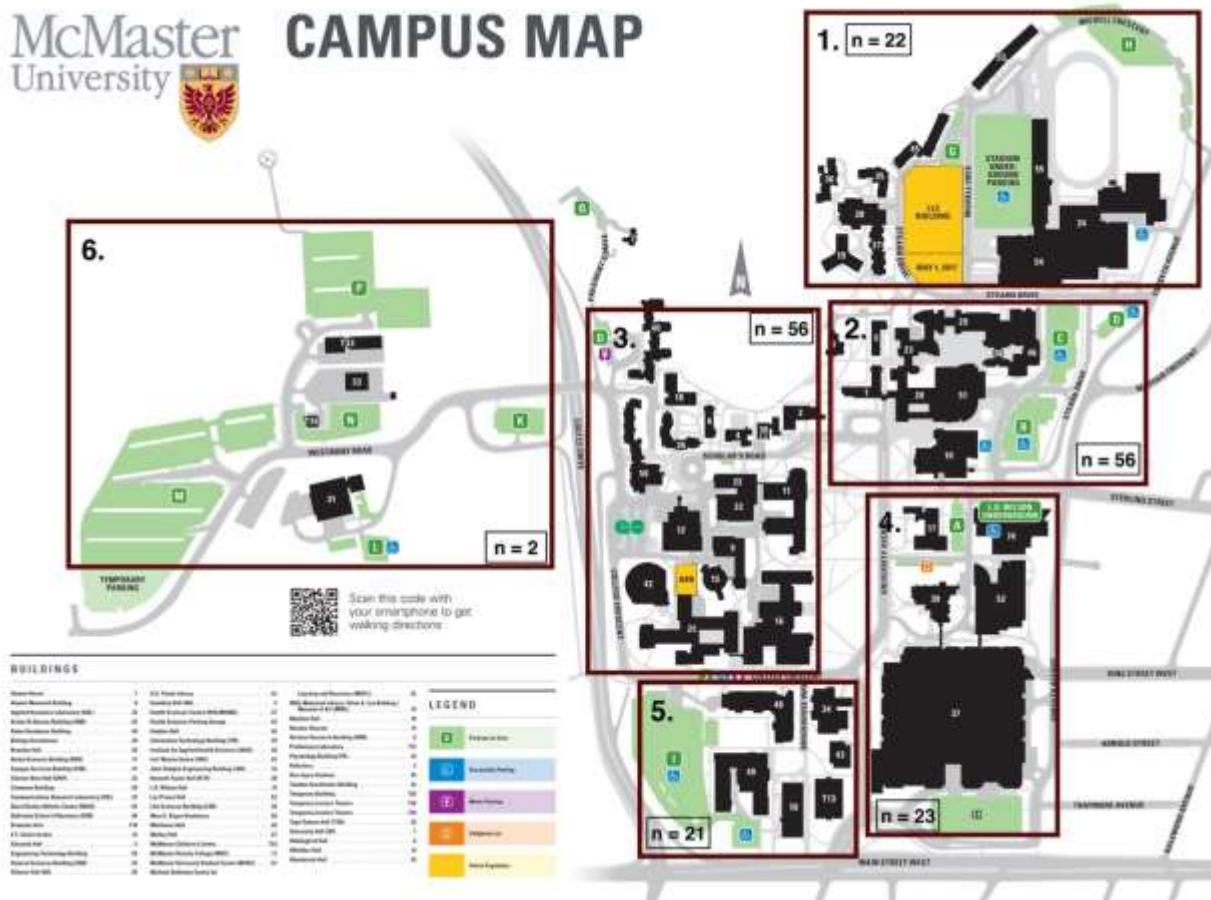
	RBG/ Neighbours	Any mention of nature conservation area and/or surrounding neighbours/neighbourhoods	34	3%
	Hospital	Comments specific to hospital grounds	28	2%
	Reduction/ Cessation Resources	Comments on how this policy has helped respondent reduce or quit smoking, or asking for more resources	25	2%
	Students	Observations or any specific mention of students including behaviour, attitudes and smoking habits	23	2%
	Parking Lot	Mention of increased use in parking lots/vehicles	20	2%
Total			1371	100%

Litter Audit Map



This map of central campus shows the locations of identified hot-spots for the litter audit both pre-policy implementation and post-implementation.

Compliance Map



This map shows the total number of policy-related responses by Campus Security in the corner of each red box. This is for data collected from January – April 2018.