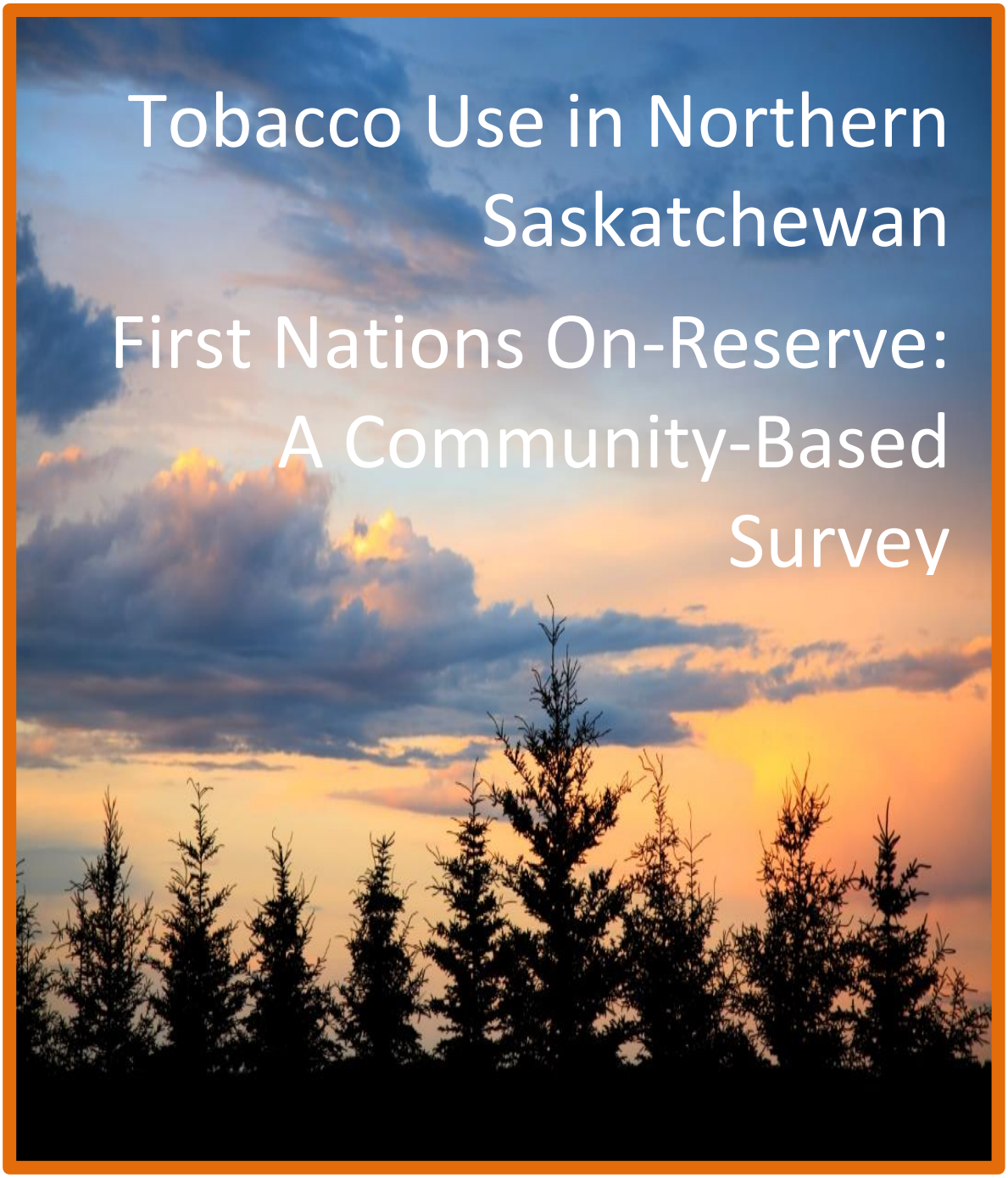
Tobacco Use in Northern Saskatchewan

First Nations On-Reserve: A Community-Based Survey



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www.nitha.com

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List of Acronyms

FTCS	Federal Tobacco Control Strategy
LLRIB	Lac La Ronge Indian Band
MLTC	Meadow Lake Tribal Council
NITHA	Northern Inter-Tribal Health Authority
NSBE	Northern Saskatchewan Breathe Easy
PAGC	Prince Albert Grand Council
PBCN	Peter Ballantyne Cree Nation
TB	Tuberculosis

About Northern Saskatchewan Breathe Easy

Northern Saskatchewan Breathe Easy (NSBE) is a commercial tobacco reduction initiative implemented by the Northern Inter-Tribal Health Authority (NITHA) and its Partners (Prince Albert Grand Council, Meadow Lake Tribal Council, Peter Ballantyne Cree Nation, and Lac La Ronge Indian Band). NSBE is implemented under the First Nations and Inuit Component of the Federal Tobacco Control Strategy (FTCS). Launched in 2014, the overall goal of NSBE is that northern Saskatchewan First Nations on-reserve communities will be free of commercial tobacco misuse while being respectful of the traditional use of tobacco. Implementation of NSBE project is guided by the six elements of FTCS namely: Protection, Reduced access, Prevention, Education, Cessation, and Data Collection and Evaluation.

Background

Commercial tobacco use, which includes smoking, e-cigarettes, and smokeless tobacco (chew, snuff, etc.), can have negative impacts for those who use them, and for those around them. The World Health Organization reports that lifestyle diseases (heart attack and stroke, cancer, chronic lung disease and diabetes) account for 63% of deaths worldwide and even more in developed countries - 88% in the UK and 87% in the US. Lifestyle diseases are causally linked to four behaviours: physical inactivity, unhealthy diet, tobacco use, and the harmful use of alcohol. While individuals have the right to information and education on how to maintain good health, "ultimately they bear the responsibility to take action"[1]. Many misconceptions about tobacco use abound, particularly in the youth population; there is a critical need to differentiate traditional and commercial tobacco use and, to de-normalize commercial tobacco misuse. While traditional tobacco is used for spiritual, cultural and ceremonial purposes, commercial tobacco is very harmful to health.

Cigarette smoking harms nearly every organ of the body and continues to be the leading cause of preventable diseases and premature death in Canada. Research has revealed that the adverse effect of second- and third-hand smoking is very significant. Cigarette smoking not only affects the primary user (smokers) but also those around them; non-smoking children, co-workers, spouses, friends and families of the smoker, and the general public, who breathe in other people's smoke, are adversely exposed to the carcinogens left in rooms, clothing and belongings of the smoker.

About this report

The NSBE survey was conducted between May 2015 and March 2016 among youth in Grades 6-12 and pre/post-natal women in northern First Nations on-reserve communities of NITHA as part of the six elements of FTCS – Data Collection and Evaluation. The purpose of the survey was to gain a better understanding of attitudes and behaviour related to commercial tobacco use. Of the 33 NITHA communities, 18 (54.5%) communities participated in the survey. School-aged youth who live on-reserve but attended school off-reserve were also sampled.

[1] Webber, D., Guo, Z. and Mann,S. 2015. The responsibilities of the healthy: a 'Manifesto' for Self-care. Accessed: March 23, 2016. http://selfcarejournal.com/wp-content/uploads/2015/09/Webber-6.1.2-9.pdf

The results are summarized within the youth and pre/post-natal sections of this report. This report reflects the responses of 549 students in grades 6-12 and 30 pre/post-natal women who attended health clinics in NITHA communities during the time of survey. Some respondents did not answer all questions in the survey questionnaire hence the total number of respondents to a question is indicated as “N” in the title of each table and figure. In this report, current smokers refer to a combination of daily and occasional smokers. Estimates in figures and tables have been rounded to one decimal place while other numbers in the text have been rounded to the nearest whole number.

This report included a section on smoking and tuberculosis. Internal data from NITHA TB program were used to inform this section.

Highlights

Tobacco use among youth

- Overall, 67% of youth respondents in grades 6-12 had never tried smoking cigarettes.
- Nearly one in three (31%) respondents were current smokers. Of those, 14% were daily smokers and 16% were occasional smokers at the time they were survey.
- More females than males were current smokers (58% vs 42%).
- The average age of smoking initiation for both gender was 14 years for daily smokers and 13.2 years old for occasional smokers.
- Daily smokers smoked an average of 6 cigarettes per day.
- Among current non-smokers, nearly 1 in 10 (11%) reported using smokeless tobacco products.
- One in three (45%) of current smokers reported using e-cigarette and more than half (56%) of current non-smokers reported using e-cigarettes.
- Of the current smokers who respondents, nearly one in four (28%) were advised to quit smoking by a health care provider in the past 12 months.
- Majority (85%) of current smokers had made at least one attempt to quit smoking in the past 12 months.
- Two in three (68%) of daily smokers had a desire to quit within the next year. Of those, 56% intended to quit in the next 3-6 months.
- The most common reasons for wanting to quit smoking were being more aware of negative health effects from smoking and to save money.
- Two out of ten respondents (39%) reported being exposed to second hand smoke in their home.
- One in five current smoker (21%) cited cold turkey/will power alone as their most preferred strategy to quit smoking.
- Most common activities/program respondents would like to see implemented in their communities included quitting challenges, youth activities, educational posters, and smoke-free public place.

Tobacco use among pre/post-natal women

- 75% of pre/post-natal women respondents were current smokers. Of those, 36% smoked daily and 39% smoked occasionally. Respondents who were pregnant at the time of the survey were more likely to report being non-smokers.
- Among pre-natal respondents, one in three (27%) reported smoking daily, and over one third (39%) reported they never smoked cigarette.
- Four in five (81%) respondents reported wanting to quit smoking. Of those, 52% of respondents they wanted to quit within the next 3-6 months.
- The common reasons for wanting to quit smoking were to live a healthier lifestyle (81%), out of respect for loved ones (57%), desire for a healthier pregnancy (52%), and to save money (52%).

- The most common strategies for quitting smoking were by will power alone and assistance from family.
- The most common responses to the activities needed in the community to decrease smoking were smoke-free homes (70%), smoke-free public places (66%), and quitting challenges (63%).

Smoking and tuberculosis

- Between 2008 and 2015 17% of all active NITHA TB cases identified as smokers, with a range of 3% in 2008 to 39% in 2014.
- TB cases who identified as smokers were more likely to be smear positive.
- The 55-64 years old age group had the largest number of TB cases who smoke cigarette (29%).
- TB cases who smoke were more likely to have another risk factor present (alcohol consumption, drug use, diabetes, contact risk factor).

Section 1: Youth Survey Results

1.0 Demographics

Students in Grades 6-12 completed the youth survey. A total of 546 youth participated in this survey. Nearly 53% of youth respondents were between the ages of 10-14 years old (see Figure 1). The mean age of respondents were 14.9 years, with an age range of 10-28 years old. Less than 2% of respondents did not respond to the question about their age.

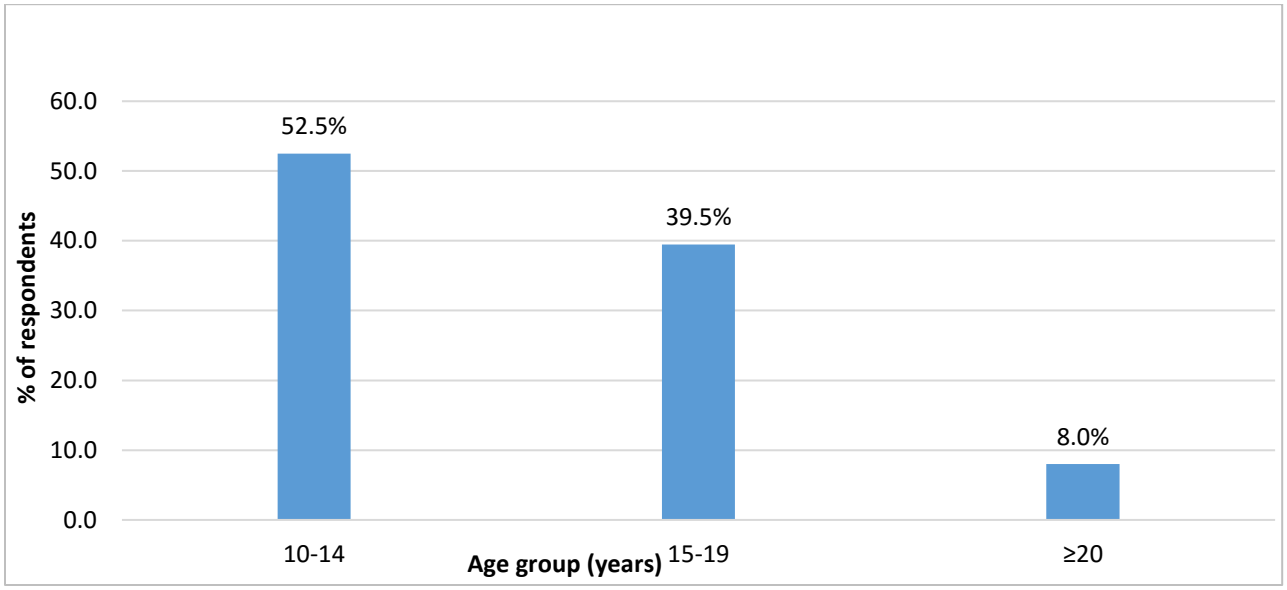


Figure 1: Age distribution of respondents (N=537)

Overall, there were more female than male respondents, 58% vs 43% (see Figure 2). Less than 1% of respondents did not indicate their gender identify.

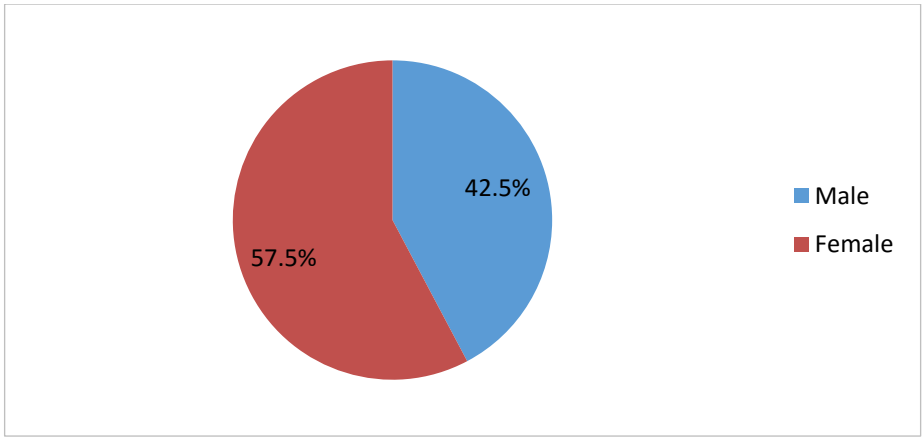


Figure 2: Gender distribution of respondents (N=544)

Respondents were asked about their current grade in school. Most (23%) of the respondents were in grade 6 while 8% were in grade 12 at the time of survey (see Figure 3).

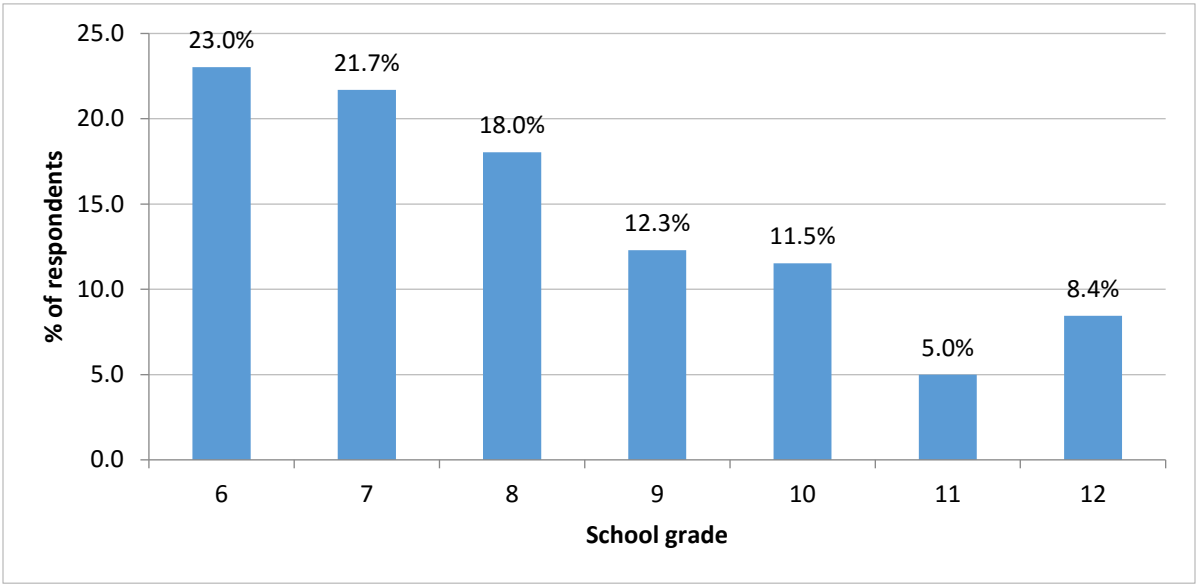


Figure 3: Current school grade level of respondent (N=521)

1.1 Environment

Second hand smoke is a major contributor to indoor air pollution and is associated with many diseases such as lung cancer, heart disease, asthma, bronchitis, middle-ear infections, pneumonia and other respiratory problems[2]. Exposure to second hand smoke is important for youth, as they are more susceptible to negative effects and often do not have control over whether they are exposed[2].

Respondents were asked if they lived in a smoke-free home. Most respondents (61%) indicated they were living in a smoke-free home while 39% of respondents reported they were exposed to second hand smoke in their home (see Figure 4). This is almost 8 times higher than the Canadian average in 2012, which was 4.7% of those aged 12 years and over being exposed to second hand smoke at home[3].

[2] Statistics Canada. 2015. Second-hand smoke. Accessed: July 1, 2016. http://www.statcan.gc.ca/pub/82-229-x/2009001/envir/shs-eng.htm

[3] Statistics Canada. 2015. Exposure to second-hand smoke at home, 2012. Accessed: July 1, 2016. http://www.statcan.gc.ca/pub/82-625-x/2013001/article/11836-eng.htm

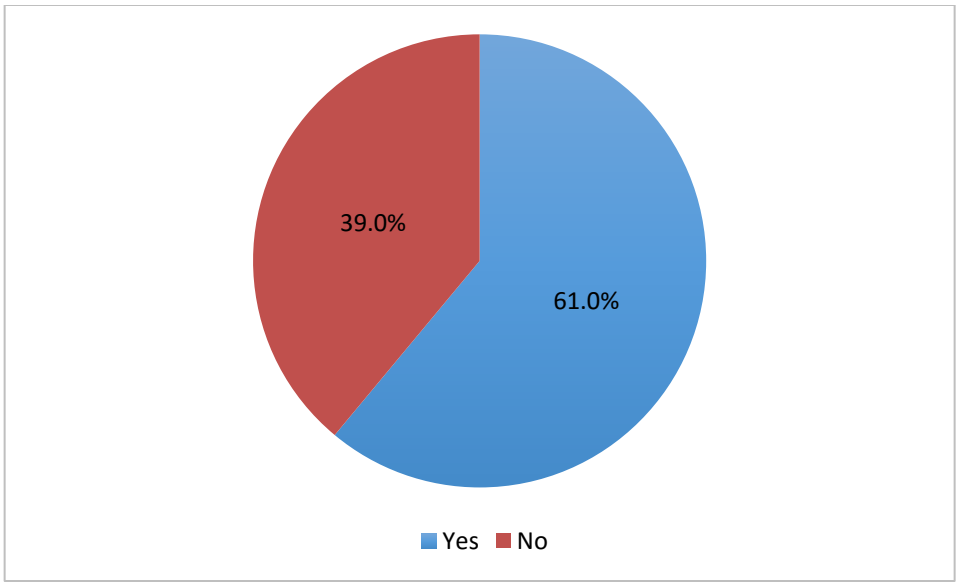


Figure 4: Proportion of respondents who live in a smoke-free home (N=516)

1.2 Smoking Behaviour

1.2.1 Current smoking behaviour

Figure 5 shows the present smoking behaviour of youth respondents. The survey results revealed that one in three (31%) respondents were current smokers while 67% had never smoked. Of those who reported smoking, 14% were daily smokers and 16% were occasional smokers. Less than 2% of respondents refuse to indicate whether or not they smoked. The current smoking prevalence among respondents (31%), is higher than the provincial rate. In Saskatchewan, 2.2% of those in grades 6-9 and 12.9% of those aged 15-19 years identified as current smokers[4].

[4] Reid, J., Hammond, D., Rynard, V., Burkhalter, R. 2015. Tobacco Use in Canada: Patterns and Trends, 2015 Edition. Waterloo, ON: Propel Centre for Population Health Impact, University of Waterloo. Accessed: July 1, 2016. http://www.tobaccoreport.ca/2015/TobaccoUseinCanada_2015_Accessible.pdf

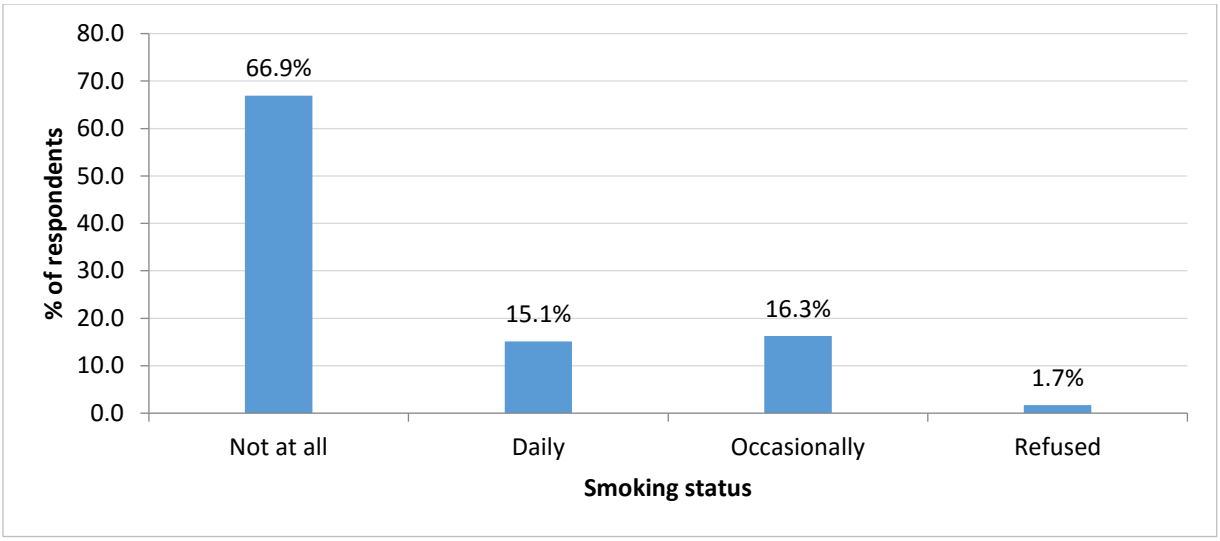


Figure 5: Smoking status of respondents (N=529)

There were more female daily smokers (61%) and occasional smokers (55%) compared to males (see Figure 6).

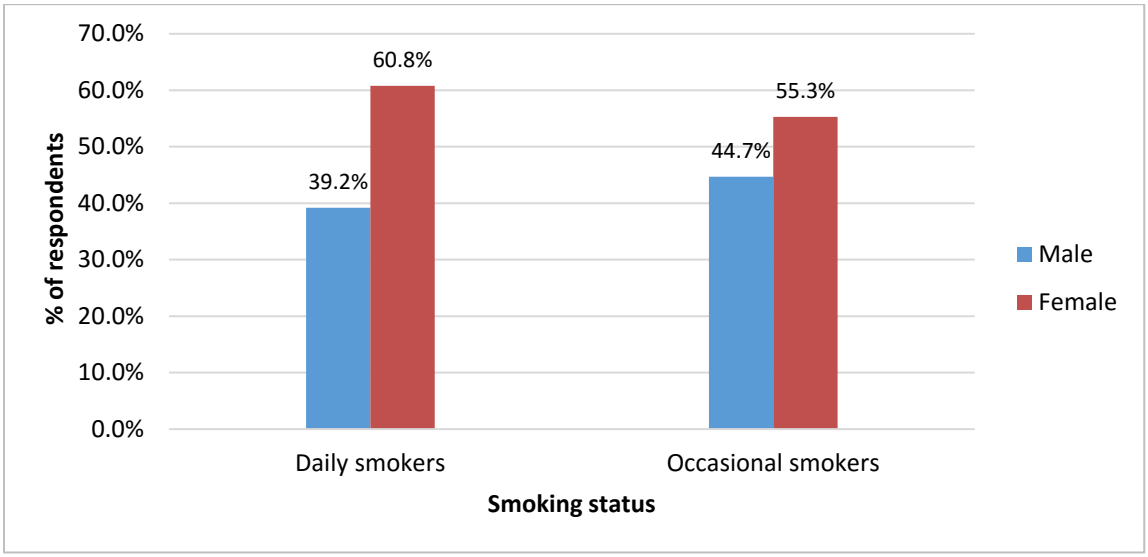


Figure 6: Gender distribution of daily smokers (N=79) and occasional smokers (N=85)

1.2.2 Smoking Initiation

Daily smokers and occasional smokers were asked at what age they started smoking. The average response was age 14 and 13.2 years respectively, with an age range of 5-20 years old (see Figure 7). However, it should be noted that more than 10% of current smokers did not answer this question. The average number of cigarettes smoked per day by both daily smokers and occasional smokers was 6

cigarettes. The national average of youth cigarette consumption by daily smokers was 10.5 cigarettes per day for grades 7-9 and 9.2 cigarettes per day for ages 15-19[5].

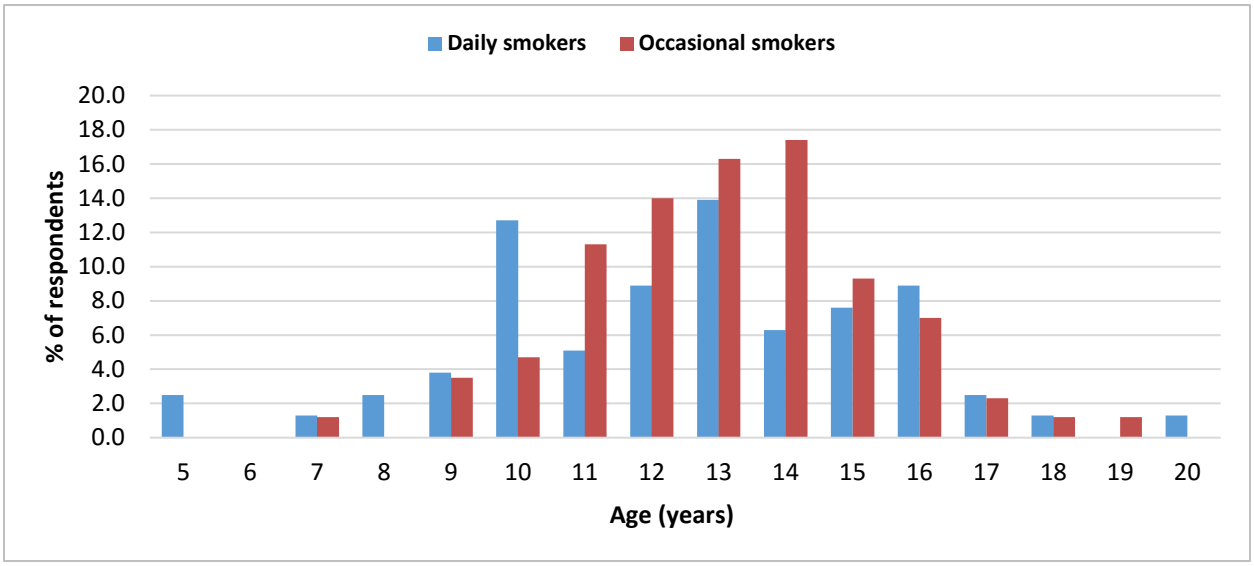


Figure 7: Age of smoking initiation by daily (N=63) and occasional smokers (N=77)

1.2.3 Smokeless Tobacco

Smokeless tobacco includes forms of chewing tobacco (chew, oral, spit, snug, dipping, dissolvable). Although often marketed as alternatives to smoking, smokeless tobacco still has many health risks. Its use has been linked to cancers of the mouth, esophagus and pancreatic cancer, as well as high blood pressure, heart attack, stroke, and complications with pregnancy[4].

Among daily smokers, 65% reported using smokeless tobacco either daily or occasionally while 35% reported not using it (see Figure 8). About half of occasional smokers reported using smokeless tobacco products occasionally.

[5] American Cancer Society. 2015. Health Risks of Smokeless Tobacco. Accessed June 30, 2016: http://www.cancer.org/cancer/cancercauses/tobaccocancer/smokeless-tobacco

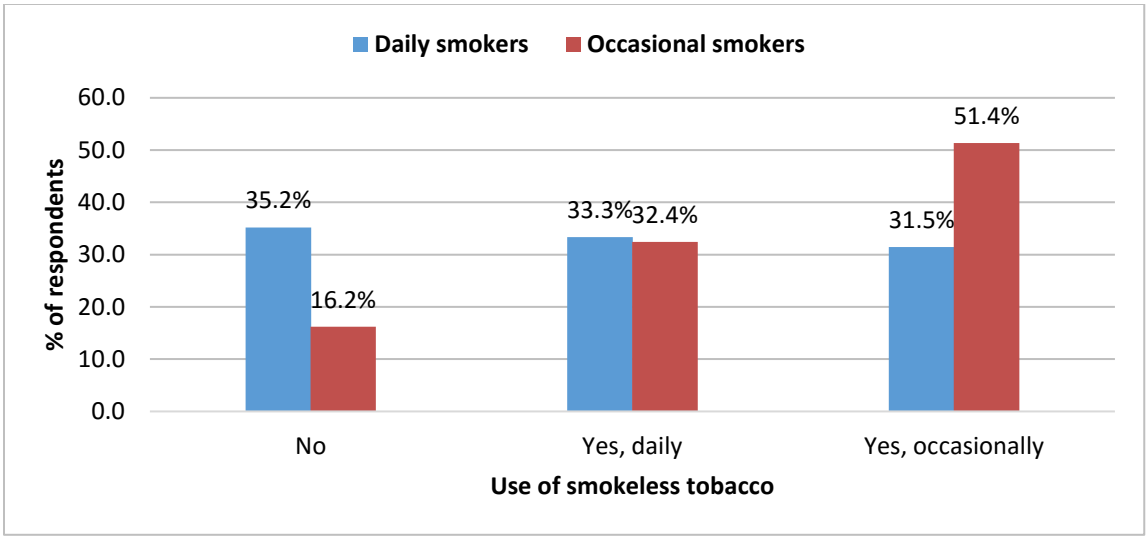


Figure 8: Percentage of current daily smokers (N=54) and occasional smokers (N=37) who used smokeless tobacco product*

The survey also observed that a small proportion of current non-smokers used smokeless tobacco. Overall, 11% of current non-smokers reported using smokeless tobacco products. Of the current non-smokers who responded to this question, 17% used smokeless tobacco daily while 31% reported using it occasionally (see Figure 9). This is higher than the national rates, 8% of Canadians (15 years and older), 6% of youth (15–19 years old) and 10% of young adults (20–24) reported ever using smokeless tobacco[6].

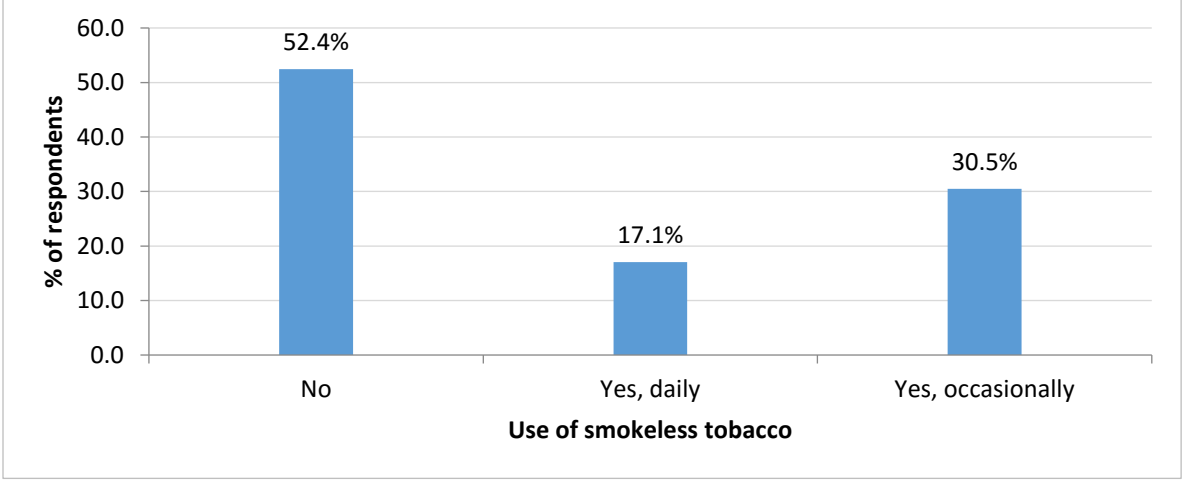


Figure 9: Percentage of current non-smokers who used smokeless tobacco products (N=82)**

[6] Canadian Cancer Society. 2016. *Canadian tobacco statistics*. Accessed: July 5, 2016. http://www.cancer.ca/en/cancer-information/cancer-101/what-is-a-risk-factor/tobacco/canadian-tobacco-statistics/#ixzz4DYD1OOCf

**More than 10% of current smokers did not provide valid answers to this question hence survey results on smokeless tobacco should be interpreted with caution

1.2.4 Electronic cigarette

Another alternative to cigarettes is the electronic, or e-cigarettes. E-cigarettes are battery-powered devices that heat nicotine, flavoring and other chemicals until it becomes a vapor. The user then inhales this vapor. E-cigarettes have become especially popular with young people[7]. While e-cigarettes reduce nicotine exposure per puff compared to conventional cigarettes, there are still associated risks[7].

Overall, one in three (45%) of current smokers reported using e-cigarette (N=60). Of daily smokers, 39% reported using e-cigarettes daily or occasionally and 61% reported not using them (see Figure 10). Among occasional smokers, 26% reported using e-cigarettes daily.

More than half (56%) of current non-smokers reported using e-cigarettes. Among current non-smoker who responded (N=80), 33% reported using them daily and 25% reported using them occasionally.

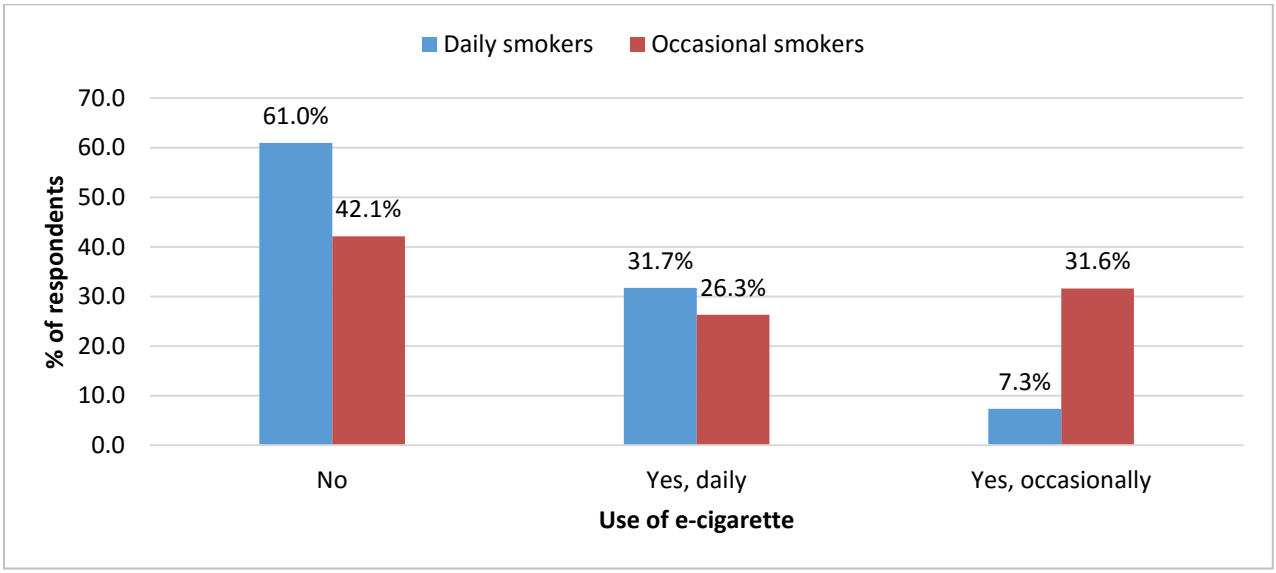


Figure 10: Current use of e-cigarettes by daily (N=41) and occasional smokers (N=19)***

1.3 Cessation

All attempts to quit smoking have some benefit, and the younger a person is when they quit the more health benefits they gain. Current smokers were asked about their intentions to quit and quitting behaviours.

[7] Smith, L., Brar, K., Srinivasan, K., Enja, M & Lippmann, S. 2016. E-cigarettes: How "safe" are they? *The Journal of Family Practice*. 65(6). Pp380-385

*** More than 10% of current non-smokers did not provide valid answers to this question hence survey results on smokeless tobacco should be interpreted with caution

1.3.1 Quit advice by health care provider

Respondents were asked whether a health care provider advised them to quit within the last 12 months. Of the current smokers who respondents, only 28% indicated they discussed smoking behaviour with health care provider in the past 12 months (see Figure 11). Nearly 70 per cent were not advised by health care provider to quit smoking.

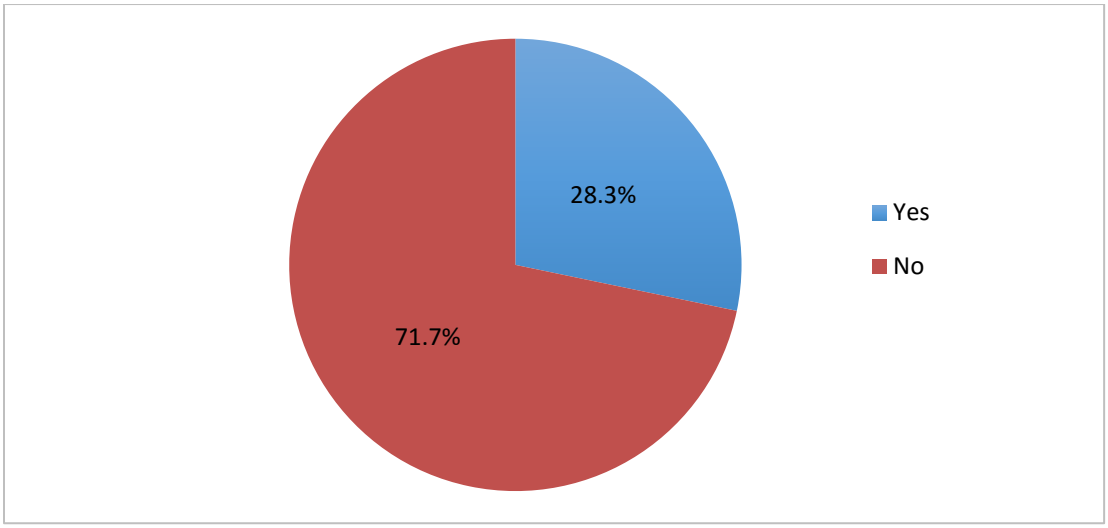


Figure 11: Percentage of current smokers who were advised to quit smoking by health care provider in the past 12 months (N=138)

1.3.2 Quit Attempts

The youth were asked about their attempts to quit smoking behaviour within the last 12 months. Overall, majority (85%) of current smokers (daily and occasional) had made at least one attempt in the past 12 months, and one in five (20%) had attempted 5 or more times (see Figure 12). More than 10% of current smokers did not provide valid response to this question.

When compared to 2012-2013 National Youth Smoking Survey results, two-thirds (68%) of current smokers aged 15-19 years old had made a quit attempt while 25.6% made 4 or more attempts to quit smoking[4]. Comparisons should be made with caution, as the ages in the national survey are higher than the average age of NSBE survey.

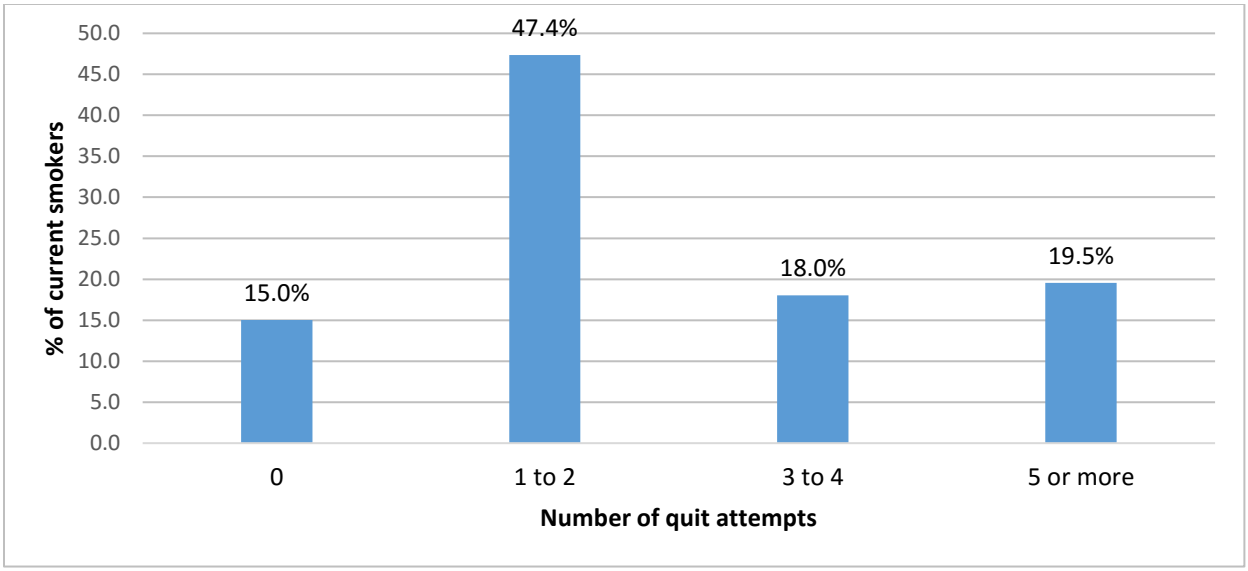


Figure 12: Number of quit attempts made within the last 12 months by current smokers (N=133)

Of daily smokers, over half (51%) had made at 1-2 attempts to quit and 11% did not make any attempt to quit. Over 44% of occasional smokers made 1-2 attempts to quit smoking within the last 12 months (see Figure 13).

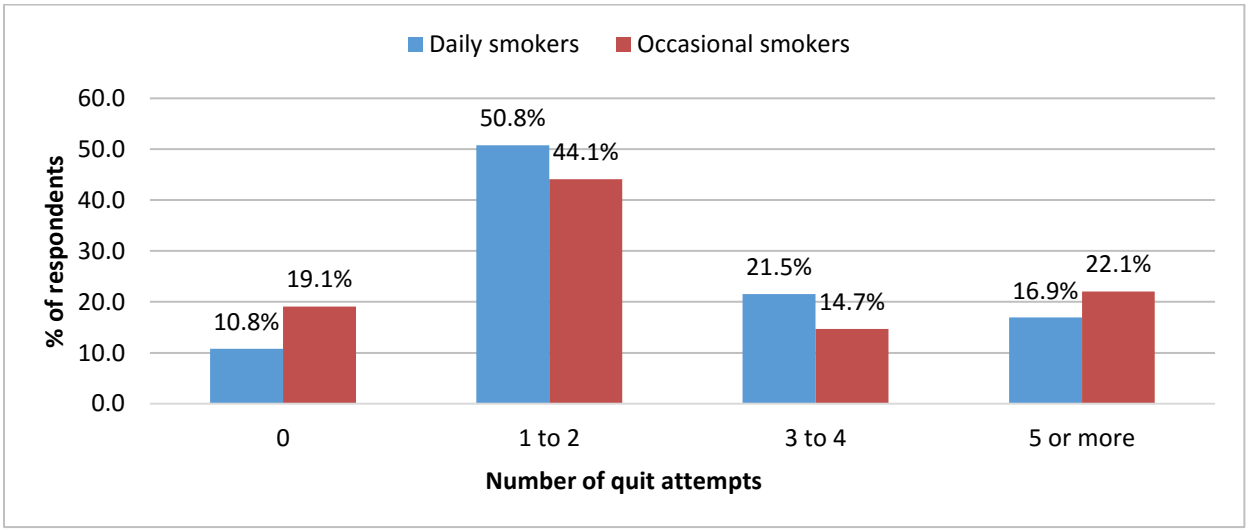


Figure 13: Number of attempts made to quit smoking within the last 12 months by daily smokers (N=65) and occasional smokers (N=68)

1.3.3 Desire to quit smoking

All current smokers were asked about their desire to quit smoking, and when they would like to do so.

Majority (79%) of current smokers reported they would like to quit smoking (see Figure 14). Of those, more than half (55%) were considering quitting in the next 3-6 months. One in five (21%) did not have any desire to quit smoking. More than 10% of current smokers did not respond to this question.

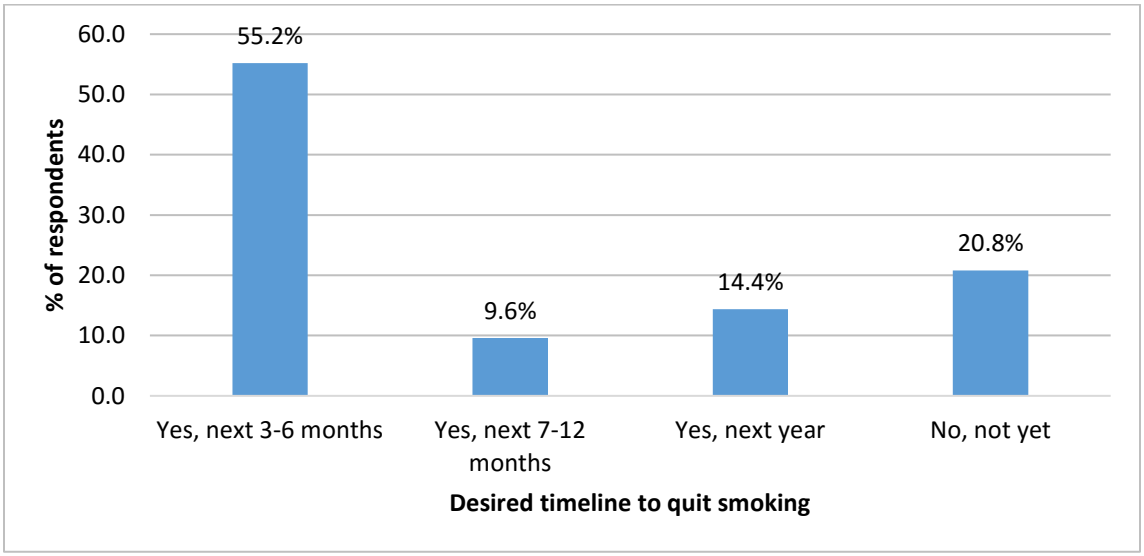


Figure 14: Percentage of current smokers who desire to quit smoking (N=125)

Majority (68%) of daily smokers reported they wanted to quit within the next year. Of those, 56% desired to quit in the next 3-6 months and 12% wanted to quit within 7-12 months.

Of occasional smokers, more than half desire to quit within the next 3-6 months while one in three (27%) do not want to quit yet.

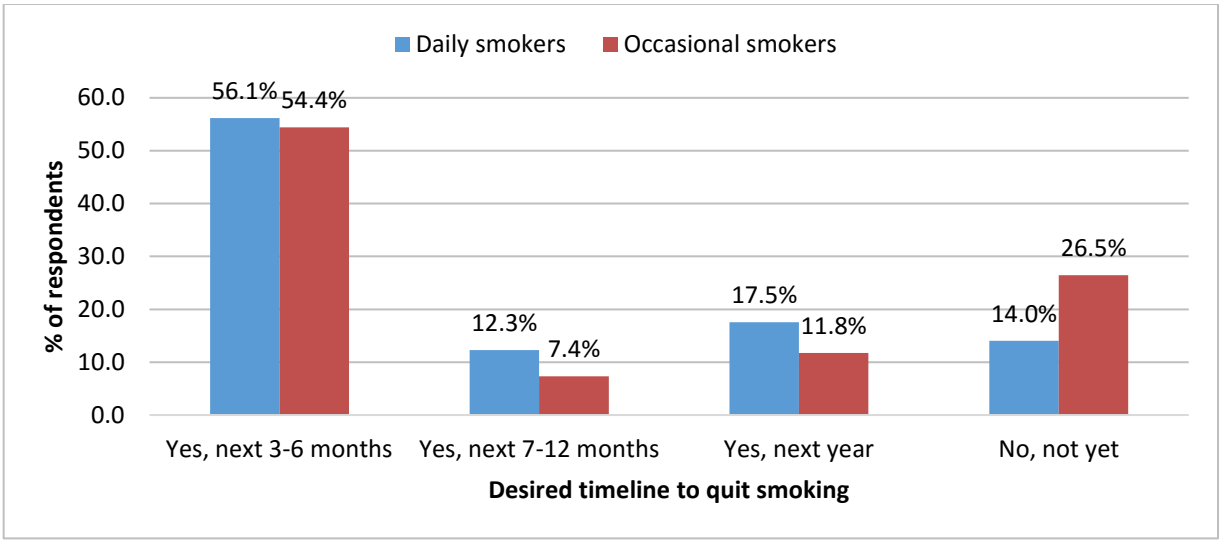


Figure 15: Percentage of daily smokers (N=57) and occasional smokers (N68) who desire to quit smoking

1.3.4 Reasons for quitting smoking

Current smokers were asked about their main reasons for wanting to quit smoking. The most common reasons cited by both daily and occasional smokers for wanting to quit smoking were greater awareness and education about the effects of cigarettes on health (30% and 31% respectively) (see Table 1). The second most common reason for both daily smokers and occasional smokers to want to quit smoking was to save money (24% and 17% respectively).

Table 1: Reasons why daily smokers (N=73) and occasional smokers (N=86) desire to quit smoking

Reasons for wanting to quit	Daily smokers	Occasional smokers
	%	%
Respect for cultural significance of tobacco	8.2	7.0
Greater awareness/education about the effects of cigarettes on health	30.1	31.4
Chose a healthier lifestyle	17.8	7.0
To have a healthy pregnancy	2.7	4.7
Health conditions	5.5	12.8
To save money	27.4	17.4
Health Providers Advice	12.3	5.8
Peer pressure	16.4	5.8
Respect for loved ones	8.2	10.5
Others	27.4	16.3

When asked about the preferred method they would use to quit smoking, daily and occasional smokers indicated that cold turkey/will power alone was their preferred method (23% and 22% respectfully). The second most common method for daily smokers was Zyban (bupropion) (10%). For occasional smokers, the second most common method cited was spiritual help (see Table 2).

Table 2: Preferred methods of quitting smoking by daily (N=79) and occasional (N=86) smokers

Method	Daily smokers	Occasional smokers
	%	%
Cold turkey/ will power alone	22.8	21.9
Other prescription medications	7.6	5.5
With assistance from family	2.5	2.7
Traditional methods	0.0	0.0
Nicotine replacement gum	0.0	0.0
Help for Healthcare Provider	0.0	0.0
Nicotine replacement patch	1.3	0.0
Help from spirituality	3.8	11.0
Champix	0.0	4.1
Zyban (Bupropion)	10.1	2.7
Others	60.8	47.9

Respondents were asked about what activities they would like to see in their communities with regards to smoking cessation, education, prevention and protection. Responses varied by current smoking status. The most common response for daily and occasional smokers was that they would like to see quitting challenges, 49% and 51% respectively (See Table 3). The second most common response for daily and occasional smokers was that they would like to see youth activities (44% and 40% respectively).

Non-smokers would like to see posters in their communities (47%). The second and third most common responses for non-smokers were smoke-free public places (25%) and youth activities (23%).

Table 3: Suggested community-level activities for smoking education, prevention and protection

Activities/program	Daily smokers N=79	Occasional smokers N=86	Non-smokers N=354
	%	%	%
Posters	36.7	39.5	46.9
Information pamphlets	8.9	8.1	8.9
Information sessions	16.5	9.3	6.6
Smoke-free public places	19.0	33.7	25.1
Counselling	12.7	14.0	8
Community awareness campaigns	17.7	18.6	8.3
Quitting challenges	49.4	51.2	17.1
Youth activities	44.3	39.5	23.1
Smoke-free homes	20.3	18.6	20
Smoking policies enforced	11.4	19.8	7.4
Established tobacco store policies to prevent sales to minors	8.9	12.8	4.6
Other	2.5	4.7	3.1
Unknown	10.1	11.6	8.9

Section 2: Pre/Post-natal Survey Results

2.0 Demographics

In total, 30 pre- and post-natal women from participating NITHA communities were interviewed about their attitudes, behaviours, and experiences related to commercial tobacco use and smoking cessation.

Of the respondents, half (50%), were pregnant at the time of survey. Majority (80%) of respondents were below 29 years old (see Figure 16). Age of respondents ranged from 16 to 55 years old with a mean age of 24.9 years old. In Canada, females between 25-29 years old have the highest smoking prevalence. This age group is also known to have the highest pregnancy rates[8].

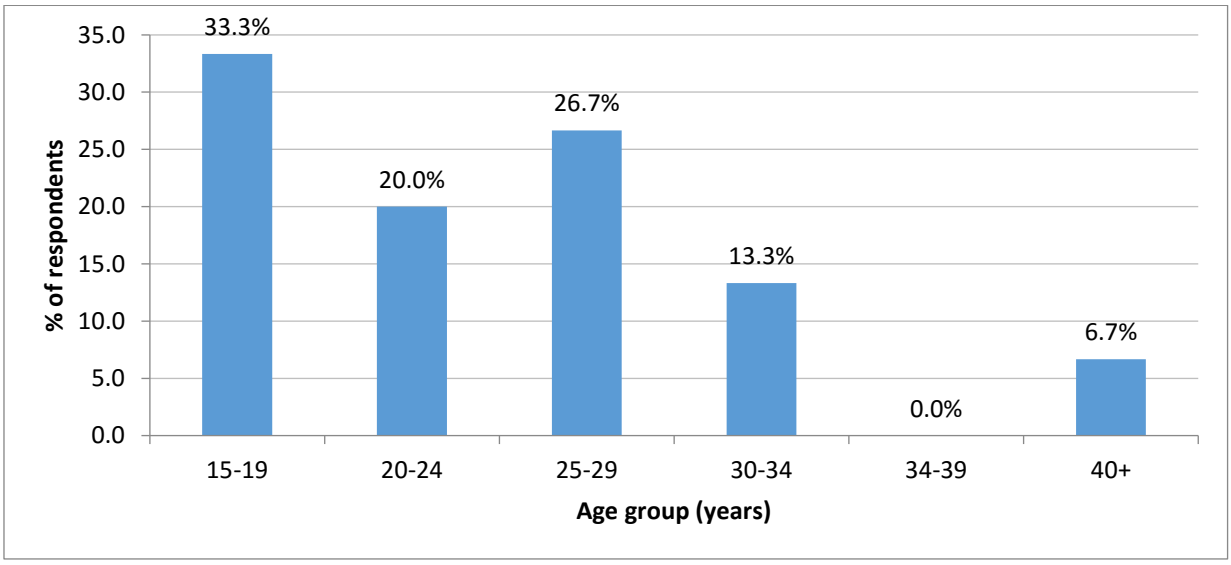


Figure 166: Age distribution of survey respondents (N=30)

2.1 Environment

In the 2011 Canadian census, the average number of people in a household was 2.5 and only 3% of houses nationally have 6 or more people living in them[9]. In the NSBE survey, respondents reported living in homes with an average of 7.3 people, ranging from 2 to 21 persons. This is almost 3 times the national average and crowding is a measure of inferior quality housing[10].

[8] Pregnets. Centre for Addictions and Mental Health. n.d. Pregnant and Smoking: A literature review that investigates the unique challenges that women experience during and after pregnancy. Accessed: April 7, 2016. http://www.pregnets.org/dl/Lit%20Review%20FINAL.pdf

[9] Statistics Canada. 2013. Household size, by province and territory (2011 Census). Accessed: April 7, 2016. http://www.statcan.gc.ca/tables-tableaux/sum-som/l01/cst01/famil53c-eng.htm

[10] Farley, S.M. 2015. Housing and the Environment: Smoking Triggers and Tobacco Smoke Exposure. Dissertation. The City University of New York.

Respondents were asked if they lived in smoke-free homes. Overall, 86% of respondents reported living in a smoke-free home (see Figure 17). Indoor air pollutant concentrations are much higher than they are outside and tobacco smoke is the largest source of indoor air particulate matter less than 2.5 micrometres. Environmental tobacco smoke has been shown as a causative and exacerbating trigger for asthma and children living in poor air quality housing are more likely to get sick, particularly with respiratory illness[10].

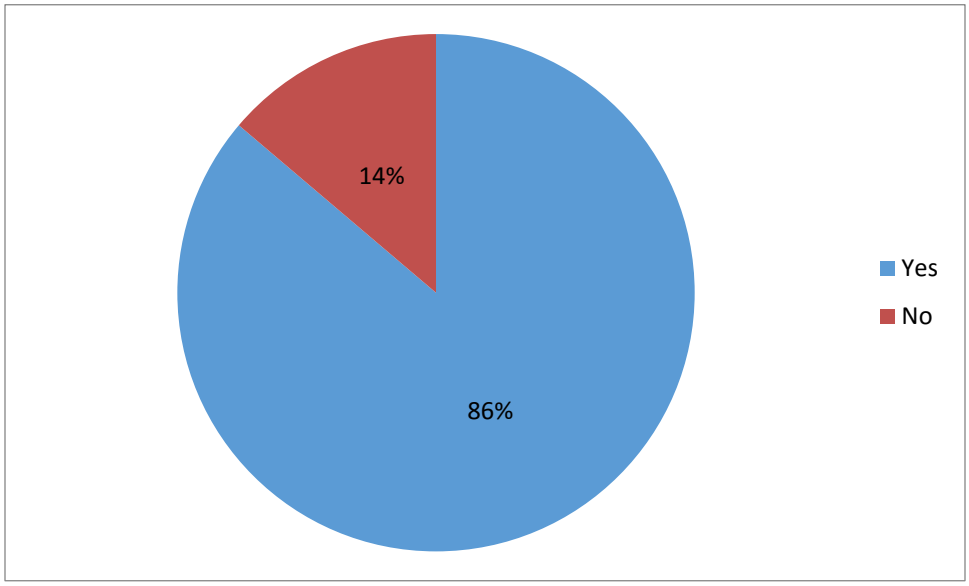


Figure 17: Proportion of respondents who lived in smoke-free homes (N=29)

2.2 Smoking Behaviour

'Non-traditional' or 'commercial' use of tobacco refers to the recreational use of tobacco products such as cigarettes, cigars, chew, or spit tobacco, whereas "traditional" use refers to the spiritual and medicinal use of tobacco plants[11]. In Canada, Indigenous populations have the highest prevalence of commercial tobacco use compared to non-Indigenous population. Approximately, 72% of Inuit, 57% of Metis, and 56% of First Nations peoples use commercial tobacco[4].

2.2.1 Current smoking behaviour

In the NSBE pre- and post-natal survey, respondents were asked whether they smoked cigarette. Results indicated that three-quarter (75%) of respondents were current smokers (see Figure 18). Of those, 36% smoked daily and 39% smoked occasionally. About 7% of survey respondents did not provide a valid response to this question. On average, daily and occasional smokers consumed 5.9 cigarettes per day, ranging from 1 to 12 cigarettes. About four in five (8%) respondents reported using smokeless tobacco products and although no respondents reported daily use of e-cigarettes, 17% used them occasionally.

[11] Mitchel, S. 2007. Tobacco Cessation Strategies for First Nations, Inuit and Metis. Aboriginal Act Now

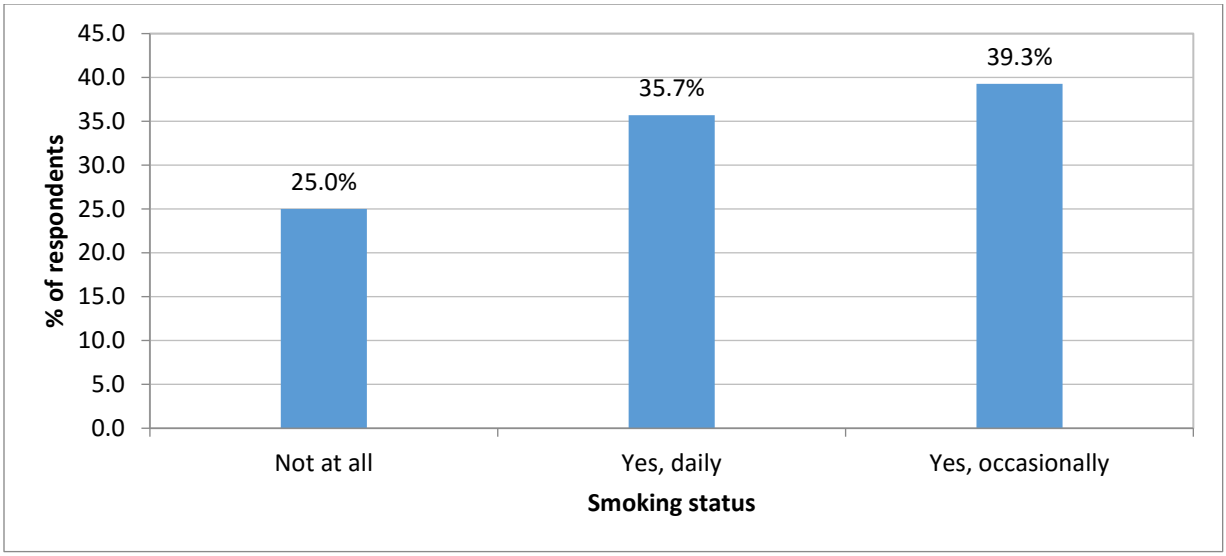


Figure 18: Smoking status of pre- and post-natal women (N=28)

Research has shown that women are more likely to quit smoking or smoke few cigarettes during pregnancy than at any other point in their lives, as pregnancy is a potential motivator of health-related behaviour change[8]. More than half of women continue to smoke during pregnancy, highlighting the strong social, physiological, and psychoactive effects of nicotine[8].

In the NSBE survey, pre-natal (pregnant) respondents were less likely to smoke than post-natal women (those who were not pregnant). Almost one in three (27%) of pre-natal women report smoking daily compared to 40% of post-natal women. More post-natal women (47%) smoked occasionally compared to pre-natal women. Over one third (39%) of pre-natal women reported they never smoked (see Figures 19 and 20).

In Canada, research showed that between 10.5% and 17% of women smoked during their pregnancy[8, 13]. This varies substantially across the country as the 2009-2010 Canadian Community Health Survey showed the percentage of women smoking during pregnancy is 12% in Ontario, 34.8% in Albert, and 59.3% in the northern territories[13]

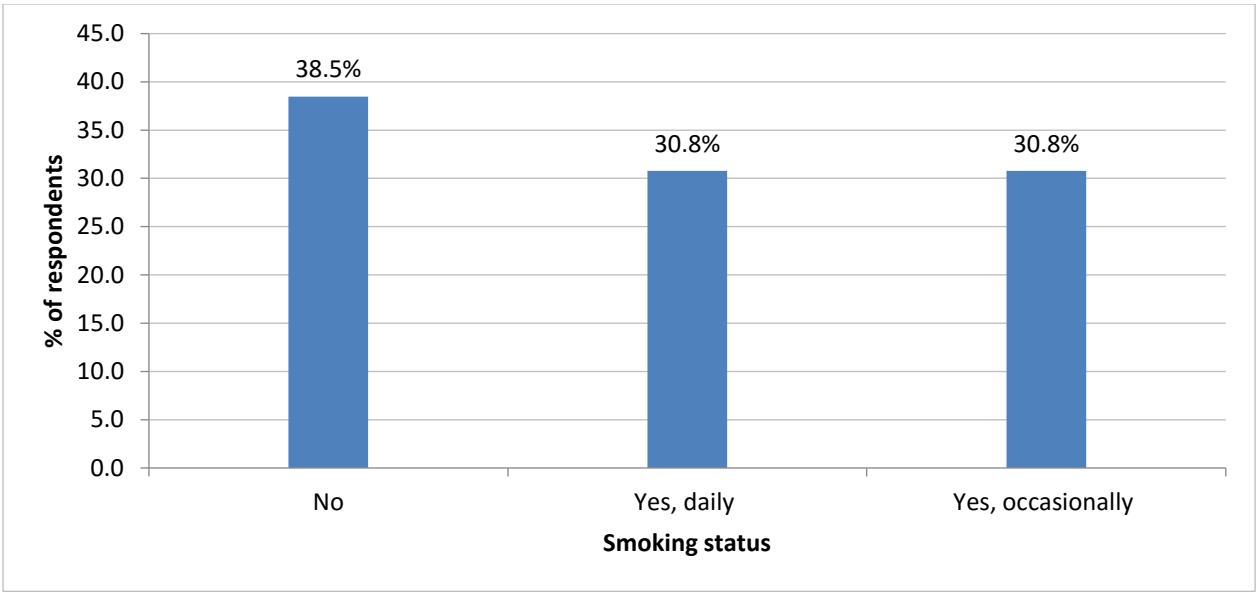


Figure 19: Reported smoking behaviour among pre-natal women (N=13)

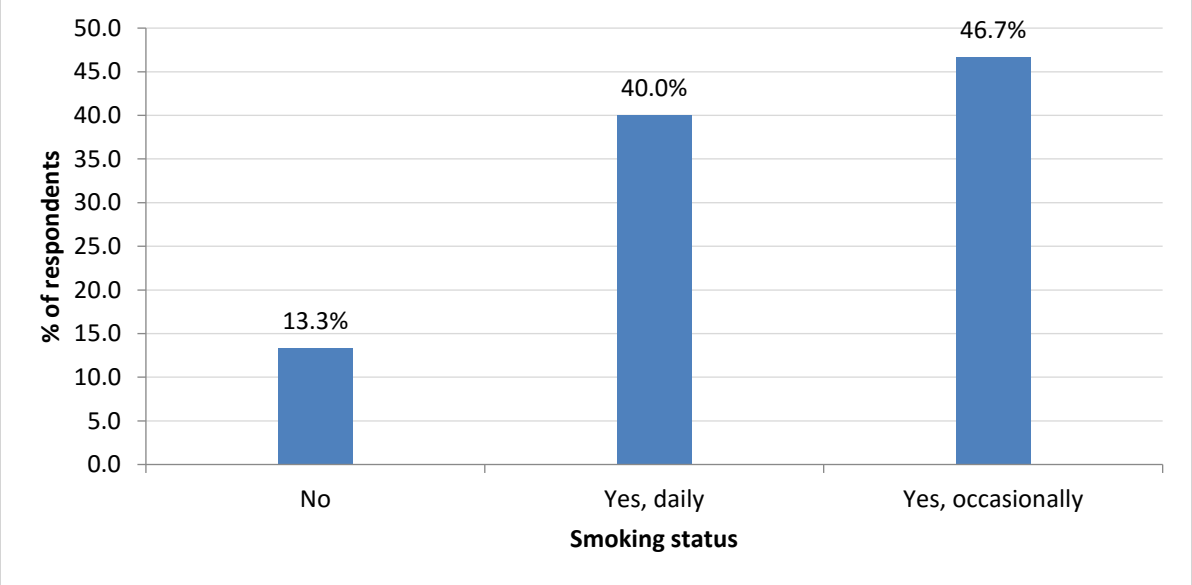


Figure 20: Reported smoking behaviour among post-natal women (N=15)

2.3 Cessation

A Greek study of 300 new mothers found that of the 48% who smoked during the first trimester of pregnancy and 83.3% attempted to quit, but only 45.1% were successful. Of the women who continued to smoke throughout pregnancy, 55.8% felt unable to quit smoking and 9.3% did not feel quitting was an important health issue. These mothers were more likely to report fetal and newborn complications, preterm birth and low birth weight, and higher levels of postnatal depressive and anxiety

symptomatology[12]. Smoking during pregnancy also modestly increased the risk of ectopic pregnancy, spontaneous abortion, abruptio placentae, placenta previa, and premature rupture of membranes[8]. Adverse birth or pregnancy outcomes from smoking or second-hand smoking increase in a dose dependent manner with exposure[10].

2.3.1 Quit advice by health care provider

In our study, respondents were asked whether health care provider advised them in the past three months about quitting smoking. Of the current smokers, two in five (44%) reported they were advised to quit smoking in the past 3 months. Nationally, women without regular access to a medical doctor are more likely to smoke during pregnancy and healthcare providers play a very important role in helping patients stop smoking[13].

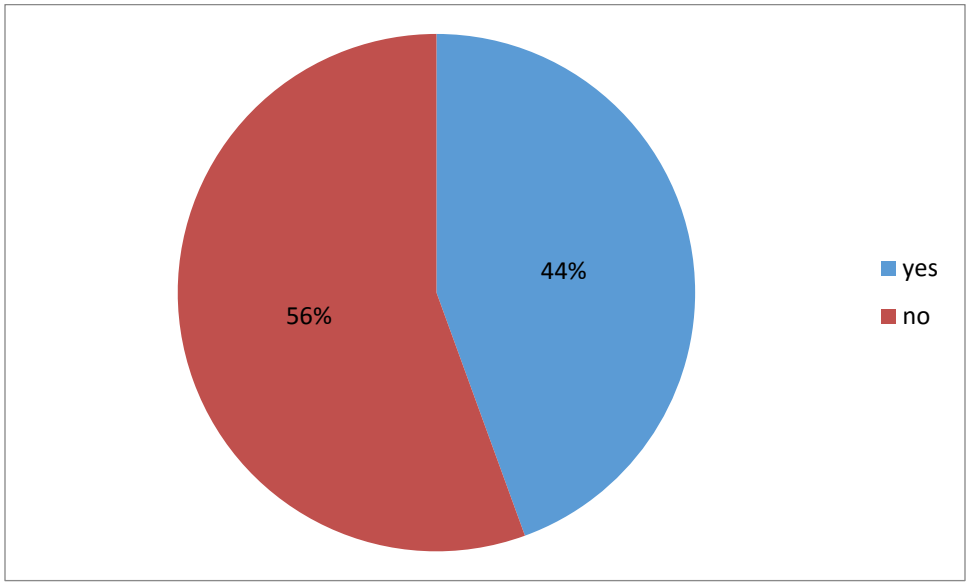


Figure 21: Percentage of who were advised to quit smoking by health care provider in the past 3 months (N=27)

2.3.2 Quit Attempts

Among current pre- and post-natal smokers, 53% reported having tried quitting smoking in the last 12 months. Of those, 5% had tried 1-2 times and 21% had tried 5 or more times to quit smoking in the last 12 months (see Figure 22).

[12] Vivilaki, V.G., et.al. 2016. Exposure to active and passive smoking among Greek pregnant women. Tob Induc Dis. 5(14); 12

[13] Yang, C. et.al. 2014. Smoking During Pregnancy: Findings for the 2009-2010 Canadian Community Health Survey. PLoS One. 9(1):84640.

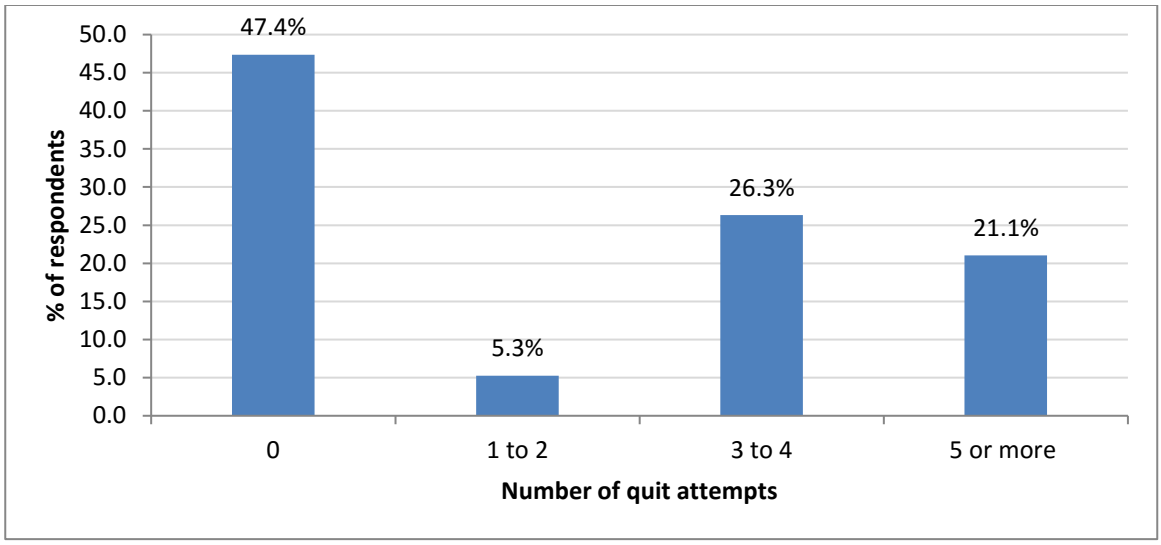


Figure 22: Number of attempts made to quit smoking within the last 12 months by pre- and post-natal women (N=19)

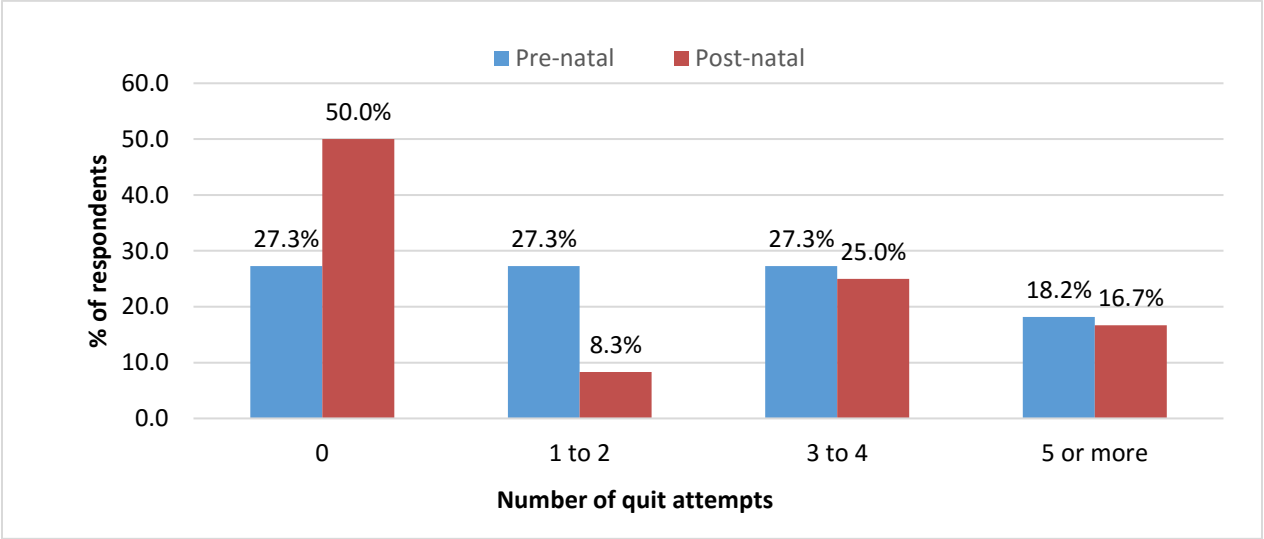


Figure 23: Number of attempts made to quit smoking within the last 12 months by pre-natal (N=11) and post-natal women (N=12)

Of the pre-natal women who responded, three-quarter (73%) had made at least one attempt to quit smoking in the last 12 months and 27% did not make any attempt to quit. Half (50%) of post-natal women made no attempt to quit in the last 12 month (see Figure 23).

2.3.3 Desire to quit smoking

Over half (52%) pre- and post-natal smokers reported they would like to quit smoking, within the next 3 to 6 months and one in five (19%) respondents did not have any desire to quit (see Figure 24).

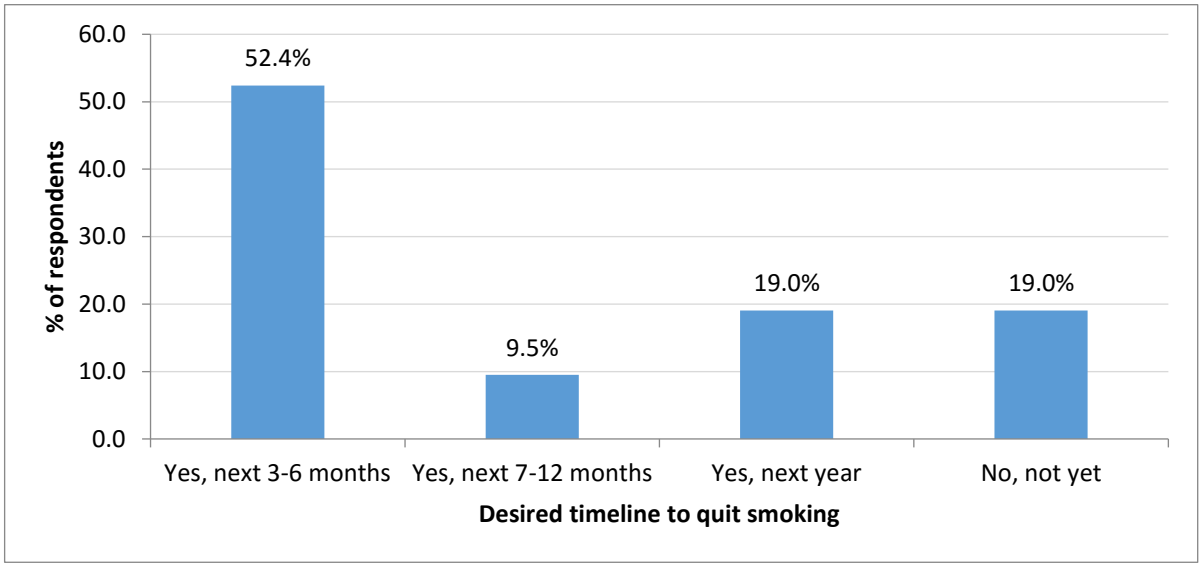


Figure 24 Percentage of pre- and post-natal smokers who desire to quit smoking (N=21)

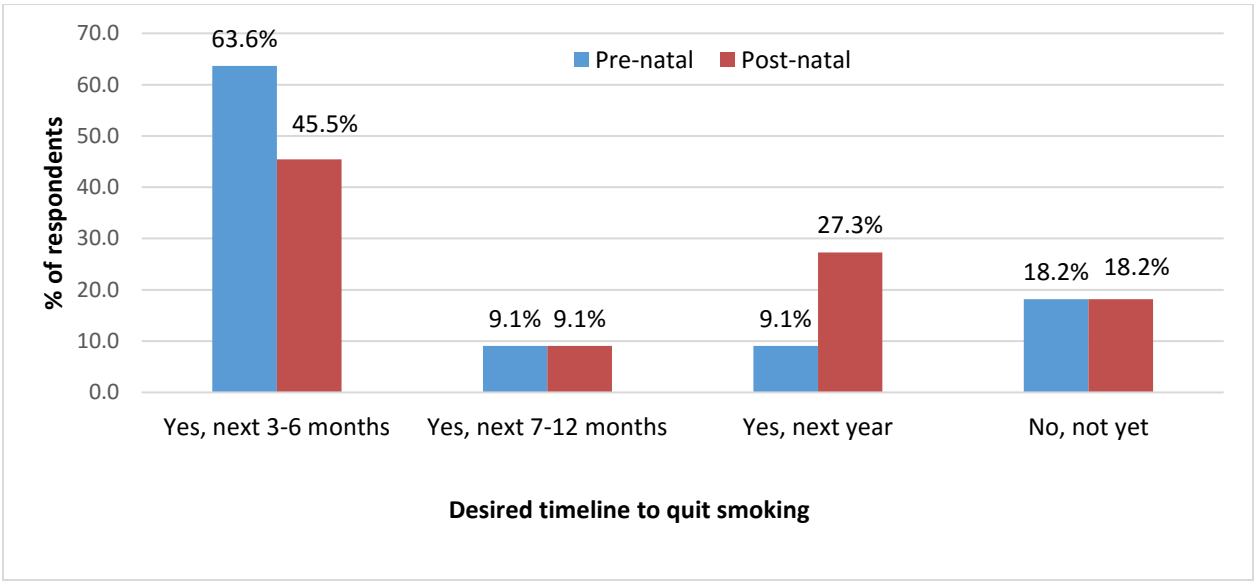


Figure 25: Percentage of pre-natal (N=11) and post-natal (N=11) smokers who desire to quit smoking

Almost two in three (64%) pre-natal smokers reported they wanted to quit in the next 3-6 months while almost half (46%) of post-natal smoker indicated their desire to quit smoking in the same time period (see Figure 25).

2.3.4 Reasons for quitting smoking

Current pre- and post-natal smokers were asked to indicate the reasons for wanting to quit smoking. They were asked to check all the reasons that apply. The most common reason cited by respondents for wanting to quit smoking was to live a healthier lifestyle (81%). Wanting to quit because of respect for loved ones was the second most common reason cited by respondents (57%). Almost all respondents reported more than one reason for wanting to quit smoking (see Table 4).

Table 4: Reason why pre- and post-natal smokers desire to quit smoking (N=21)

Reason for quitting	Percent (%)
Respect for cultural/traditional significance	14.3
Healthier lifestyle	81.0
Other health conditions	14.3
Healthcare provider support	23.8
Peer pressure	9.5
Respect for loved ones	57.1
Greater awareness of health effects	23.8
To have a healthy pregnancy	52.4
To save money	52.4
Others	13.3

Past smokers were asked what method they used in the past to quit smoking. Of the respondents two in three (57%) reported they had used will power while 21% relied on assistance from family members (see Table 5). Among current smokers, 43% had tried quitting smoking through will power alone.

Table 5: Tobacco cessation methods used by current smokers (N=21) and past smokers (N=14) to quit smoking

Method for quitting smoking	Past smokers (%)	Current smokers (%)
Will power	57.1	42.9
Assistance from family	21.4	14.3
Nicotine gum	0.0	9.5
Nicotine patch	0.0	4.8
Champix	0.0	0.0
Zyban	0.0	0.0
Other prescription meds	0.0	0.0
Traditional methods	0.0	9.5
Help of healthcare provider	7.1	4.8
Help of spirituality	14.3	4.8
Other	0.0	9.5

When asked about initiatives/programs that could be implemented in their communities to address commercial tobacco use, majority (70%) of respondents would like to see more smoke-free homes. Other suggestion included smoke free public places (67%), quitting challenges (63%) (see Table 6).

Table 6: Suggested community-level activities pre- and post-natal women for smoking education, prevention and protection (N=30)

Activities/program	% of respondents
Posters	60.0
Pamphlets	36.7
Info Sessions	40.0
Smoke free public places	66.7
Counselling	43.3
Community awareness campaigns	43.3
Quitting challenges	63.3
Youth activities	60.0
Smoke free homes	70.0
Enforced smoking policies	30.0
Tobacco store policies against selling to kids	30.0

Section 3: Smoking and Tuberculosis

Smoking damages the lungs making smokers more susceptible to tuberculosis (TB) infection. Smoking also harms the immune system so smokers are less able to fight TB infections[14]. Smokers are also two to three times more likely than non-smokers to develop TB disease[11].

Between 2008 and 2015, 17% of active TB cases reported in NITHA identified as smokers, which ranged from a low of 2.9% of cases in 2008 to a high of 39.3% of cases in 2014 (see Figure 26).

Key characteristics of smokers diagnosed with TB disease in NITHA from 2008 to 2015:

- On average, 38% of all TB cases were smear positive. Of those 51% were cigarette smokers.
- Smoking behaviour was similar across genders, as 18% of male TB cases and 17% of female TB cases were smokers.
- In terms of age, the 15-24 year-old age group had the highest number of active TB cases who are smokers, which accounts for 29% of all cases in this cohort (see Figure 27).
- In one of NITHA's high TB incidence community, 41% of all TB cases were smokers, the highest proportion of any NITHA community.
- People who smoked are more likely than non-smokers to have another risk factor present; 56% of cases who smoked also drank alcohol, 21% reported drug use, 14.0% had diabetes, and 54% had a contact risk factor, while only 14% had no other risk factors.

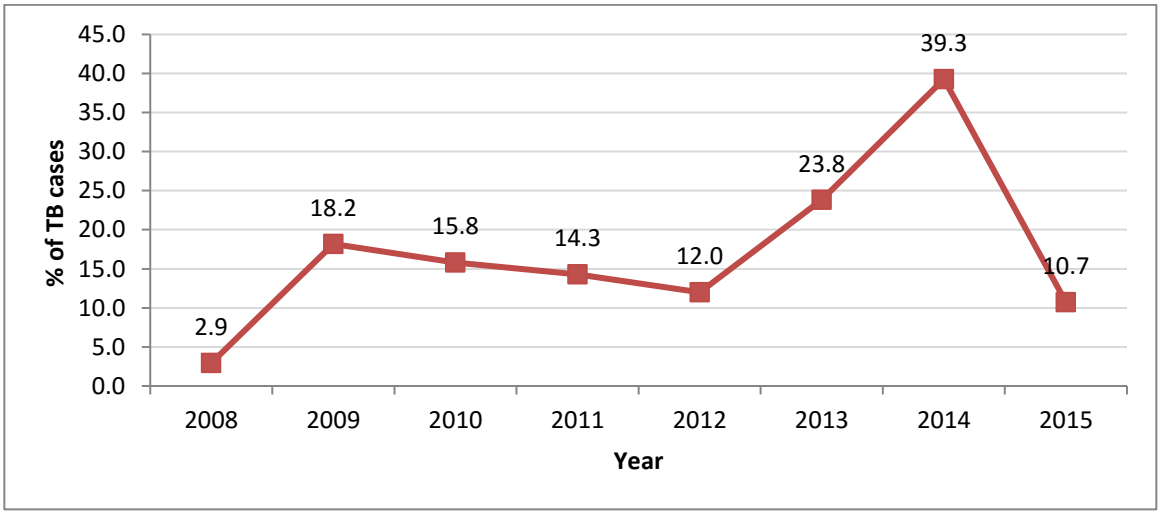
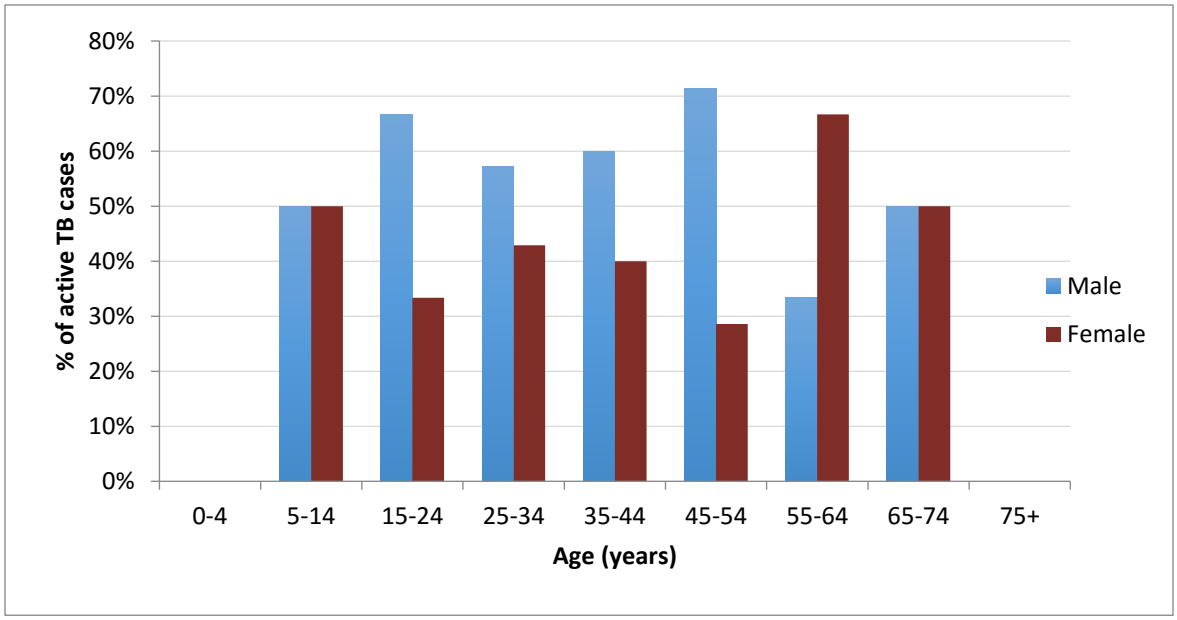


Figure 26: Percentage of active TB cases who are smokers by year, NITHA, 2008-2015

[14] Public Health Agency of Canada. 2010. Tuberculosis and Tobacco Smoking. Accessed: March 14, 2016. http://www.phac-aspc.gc.ca/tbpc-latb/fa-fi/tbtobacco-tabag-eng.php



Source: TB Prevention and Control SK, Prepared by PHU NITHA, August 2016

Figure 27: Percentage of active TB cases that are smokers by age group and gender, NITHA, 2008-2005

Glossary

Current smoker: refers to respondents who had smoked at least one commercial tobacco product within one month preceding the interview. This includes daily and occasional smokers. Current smoking status was determined from the response to the question "At the **present** time do you smoke cigarette(s)?"

- **Daily smoker**: refers to respondents who indicated "Yes, daily" to the question "At the **present** time do you smoke cigarette(s)?" Respondent smoked at least one cigarette every day.
- **Occasional smoker**: refers to respondents who indicated “Yes, occasionally” to the question "At the **present** time do you smoke cigarette(s)?" Respondent smoked at least one cigarette but not every day.

Current non-smoker: refers to respondents who indicated "No" or “Not Applicable” to the question "At the **present** time do you smoke cigarette(s)?" Respondent was not smoking at the time of the survey but may have smoked in the past.

Past smoker: refers to respondents who indicated “Yes, daily” or “Yes occasionally” to the question “In the **past**, have you ever smoked cigarette, used smokeless tobacco or e-cigarette?” Respondent was not smoking at the time of the interview,

Pre-natal: referred to female respondents who indicated “Yes” to the question “Are you currently pregnant?” Respondent was pregnant at the time of survey.

Post-natal: referred to female respondents who indicated “No” to the question “Are you currently pregnant?” However, respondent had at least one child below the age of 5years in her household.