Northern Tobacco Use Monitoring Survey
2004

Northwest Territories Report

Health and Social Services

1.0 Introduction

The Canadian Tobacco Use Monitoring Survey (CTUMS) was initiated in 1999 to provide Health Canada with reliable and continual data on tobacco use and related issues. CTUMS allows Health Canada to look at smoking prevalence in each of Canada's ten provinces for all persons aged 15 and older. Residents of Canada's three northern territories are excluded from the survey. To address this gap, Health Canada designated additional funding to conduct tobacco surveys in the three northern territories. In 2003, an agreement was reached between the Government of the Northwest Territories Department of Health and Social Services and Health Canada to carry out a tobacco use survey in the Northwest Territories (one of Canada's three territories). The NWT Bureau of Statistics completed the Northern Tobacco Use Monitoring Survey (NTUMS) in 2004. This survey provides a means of comparing tobacco use in the Northwest Territories to data collected through CTUMS.

1.1 Key Findings

- According to the results of the Northern Tobacco Use Monitoring Survey, 41% of the Northwest Territories population 15 years of age and older currently smoke cigarettes, and 29% reported smoking daily.
- Men are more likely than women to be current smokers (44% compared to 38%).
- Young adults between 20 and 24 years of age have the highest smoking rate of any age group, at 53%. Meanwhile, 43% of youth between 15 and 19 years of age and 41% of adults between 25 and 44 years of age indicated they currently smoke cigarettes. Smoking rates remain high among older adults, at 36%.
- The smoking prevalence among aboriginal residents was over two times higher than the rate among non-aboriginal residents (60% compared to 25%).
- Overall, daily smokers smoked an average of 14.0 cigarettes per day. Males smoke more cigarettes per day than females (15.9 vs. 11.8). Non-aboriginal daily smokers smoke more cigarettes per day than aboriginal daily smokers (16.6 vs. 12.3).
- An estimated 65% of current smokers indicated they are seriously considering quitting smoking within the next six months, and 31% indicated they are seriously considering quitting within the next 30 days.
- Just over one half (51%) of current smokers and 50% of daily smokers, indicated they stopped smoking one or more times in the past year for at least 24 hours because they were trying to quit.
- Approximately 7,000 Northwest Territories residents 15 years of age and older (or 22% of the population) are former smokers. The quit rate - the proportion of successful quitters among all those who have ever smoked (current and former smokers combined) – is estimated to be 34%.

- The vast majority of former smokers (81%) indicated that going "cold turkey" was the main method used to stop smoking. Another 10% indicated that nicotine patches or the drug Zyban was the main method that helped them quit.
- An estimated 21% of women between 20 and 44 years of age who had been pregnant in the past five years indicated they smoked regularly (that is, every day or almost every day) during their most recent pregnancy. In addition, 16% indicated their spouse/partner smoked regularly in the home during their most recent pregnancy.
- Almost one-third (30%) of NWT residents 15 years of age and older indicated that at least one family member or visitor smoked inside their home every day or almost every day. Aboriginal residents were twice as likely as non-aboriginal residents to report regular smoking inside the home (42% vs. 20%).
- An estimated 17% of the NWT population indicated that more than ten cigarettes are smoked inside their homes on a typical day, and 8% indicated more than 20 cigarettes.
- Among residents who indicated that smoking was permitted inside their home, 42% indicated that restrictions are in place.
- The majority of residents 15 years of age and older (93%) agreed that there should be a ban on smoking in offices and stores, 85% agreed there should be smoking bans in restaurants, 60% agreed there should be smoking bans in bars and nightclubs, and 90% agreed there should be smoking bans in other public places such as arenas and community halls.

2.0 Methodology

The target population for the Northern Tobacco Use Monitoring Survey was all persons 15 years of age and older living in the Northwest Territories with the exception of full-time residents of institutions. The survey questionnaire was designed in cooperation with the GNWT Department of Health & Social Services, based on core content identified by Health Canada from the CTUMS questionnaire.

2.1 Sample Design

The sample was designed with seven strata. The strata were the communities of Yellowknife, Hay River, Inuvik, Fort Smith, Norman Wells, smaller communities in the northern portion of the NWT, and smaller communities in the southern portion of the NWT. For the small communities in the northern part of the NWT, 5 out of 11 communities were chosen randomly for the sample. For the small communities in the southern part of the NWT, 5 out of 16 communities were chosen randomly for the sample. Telephone interviewing was used in Yellowknife, Hay River, Inuvik, and Fort Smith. In Norman Wells and smaller NWT communities, interviews were done face to face.

2.2 Sample Selection

The sample was selected for the face-to-face portion of the survey using an area frame maintained for all NWT communities by the NWT Bureau of Statistics. The telephone sample was selected using random digit dialing techniques.

2.3 Data Collection and Editing

Senior interviewers were hired to coordinate face-to-face interviews in smaller NWT communities. Most senior interviewers traveled to each community from Yellowknife. Community interviewers were then hired to work with the senior interviewer in each community to complete the survey. For the telephone portion of the survey, telephone interviewers were hired and worked in the Bureau of Statistics office in Yellowknife. Operations for NTUMS began on January 5, 2004 and ended February 13, 2004.

As Senior Interviewers returned completed questionnaires to the Bureau of Statistics, each questionnaire was reviewed and obvious corrections and edits were made. In some cases, respondents were re-contacted for clarification of survey responses. Data entry was completed directly from questionnaires on a database developed by the Bureau of Statistics. Following data entry, computer-assisted edits were performed to check for data entry errors and logical inconsistencies among responses.

2.4 Weighting

The idea behind estimation in a probability sample is that each person in the sample "represents", besides himself or herself, a number of other persons in the population not in the sample. In this way inferences about the total population can be made based on the sample. To accomplish this, each respondent in the survey was given a sample weight

depending on his or her sex, specific age category and aboriginal identity. These weights represent the frequency that the person represents the target populations. The sum of the weights over the sample provides an estimate of the population size. Population estimates used for weighting are based on published estimates of the NWT population produced by Statistics Canada and community population estimates produced by the Bureau of Statistics.

2.5 Sample Size & Response Rates

A total of 790 NWT residents completed the survey. The overall response rate was 78.5%. The response rates were relatively consistent across planned survey strata ranging from a low of 75.8% in Yellowknife to a high of 87.2% in the small communities in the northern part of the NWT.

2.6 Survey Errors

The estimates obtained from this survey are based on a sample. Different estimates might have been acquired if all residents were interviewed using the sample questionnaire. This difference between estimates obtained from a sample and those that would theoretically be obtained from a complete census of the population under similar conditions is called sampling error. Assuming the sample is drawn at random, the size of the sampling error can be determined using sampling theory. A discussion of measuring sampling error is provided below.

Another source of error in surveys is referred to as non-sampling errors. These errors may occur at almost every phase of survey operation. For example, interviewers may misunderstand instructions, respondents may make errors in answering questions, and data entry errors may occur. Surveys are designed to help minimize such errors. Generally, the effect of such errors is not known.

2.7 Partial Non-response

Partial non-response occurs when the respondent did not answer a question, or could not recall the requested information. Partial non-response can either be included or excluded when presenting survey results. In this report partial non-responses were excluded when estimates were calculated. By excluding those that did not state an answer, the total population figure is reduced and assumptions are made about what those people would have stated as an answer (i.e., their responses would have been distributed in the same way as those for people providing an answer). Partial non-response rates varied between estimates from a low of 0% for smoking status, to about 3% for levels of nicotine dependence, to 7% for the number of quit attempts and thoughts about quitting, and a high of about 9% for the stages of change index and main reasons for quitting.

2.8 Measurement of Sampling Error

Because the results of sample surveys are always subject to some uncertainty since only part of the population was interviewed, some indication of the magnitude of this sampling error would be helpful. Where the survey is based on probability sampling it is possible

to estimate the size of sampling errors by calculating the standard errors of the estimates derived from the survey results.

In this report, the standard errors were calculated using a formula assuming simple random sampling. As outlined above in the sample design section, this is not technically correct. The NTUMS utilizes a more complex sample design with stratification and multiple stages of selection that would in turn affect the estimation of the standard errors. In general, stratification can reduce the variability associated with standard errors if the estimates are relatively homogenous within strata. Previous surveys have shown that smoking prevalence is highly correlated with community of residence in the NWT with residents of smaller communities having similar smoking rates.[1] On the other hand, multiple stage sampling tends to increase the variability of estimates compared to simple random sampling. It is assumed that the effects of the sample design on the variability of estimates presented in this report are minimal and the simple binomial formula provides a good approximation of the standard errors.

Standard errors are important for a number of reasons. This statistic is used to calculate confidence intervals for estimates of the "true" population values based on the sample. It also forms the basis of a number of statistical techniques used in hypothesis testing. For example, is there a statistically significant difference in smoking prevalence between aboriginal and non-aboriginal residents? In this report, the standard error is primarily used to calculate the coefficient of variation (the ratio of the standard error to the sample estimate presented as a percentage). The coefficient of variation (CV) provides an indication of how reliable an estimate obtained from the sample can be expected to represent the true population value. According to Statistics Canada's data quality guidelines, an estimate with a CV less than 16.5% is acceptable. Those with a CV between 16.5% and 33.3% are marginal and should be flagged to caution users about the high levels of sampling error associated with the estimate. Estimates with a CV above 33.3% should not be published. This report adheres to these guidelines. Moreover, an estimate was also considered unacceptable and not released if the number of respondents who contributed to the calculation of the estimate was less than ten, regardless of the size of the CV.

[1] Government of the Northwest Territories. 2001. *The Facts About Smoking in The Northwest Territories.* http://www.hlthss.gov.nt.ca/content/Publications/Reports/Tobacco/Facts_About_Smoking/Facts_About_Smoking.pdf

3.0 Smoking Prevalence

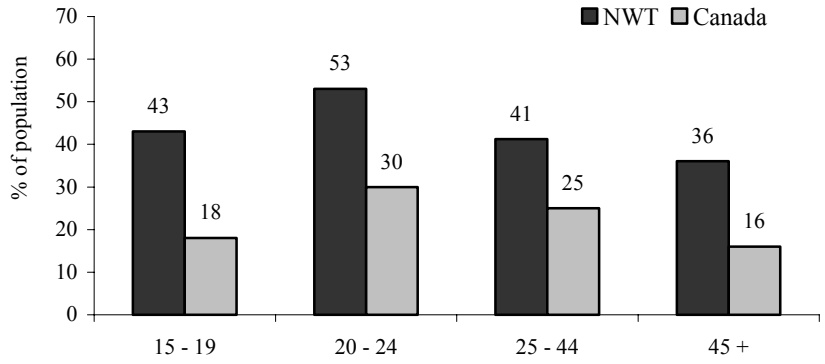
3.1 Overall Results

Approximately 13,000 people 15 years of age and older in the Northwest Territories, or 41% of the population in this age group, smoke cigarettes.[2] The prevalence of smoking in the territory is two times higher than it is in Canada as a whole (41% compared to 21%).[3]

The Northwest Territories has a younger population, than Canada, and while young adults are more likely to smoke than older adults, the difference in age structure does not explain the difference in smoking rates. For every age group examined, smoking prevalence was higher in the territory than it was in Canada (see figure 1).

Figure 1

Current Smokers by Age, NWT 2004 & Canada 2003



Sources: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories & 2003 Canadian Tobacco Use Monitoring Survey

Young adults between 20 and 24 years of age have the highest smoking rate of any age group, at 53%. Meanwhile, 43% of youth between 15 and 19 years of age and 41% of adults between 25 and 44 years of age indicated they smoke cigarettes. Smoking rates also remain high among older adults, at 36%.

The majority of NWT residents who currently smoke do so daily (70%). Overall, 29% of the territory's population 15 years of age and older smoke cigarettes daily, which means that 12% smoke on a non-daily basis. Youth between 15 and 19 have the lowest daily smoking rate (24%), almost as many smoke non-daily (19%). In this age group smoking uptake may still be occurring, characterized by an irregular pattern of smoking behaviour 'as youth move from experimentation to smoking every day as their addiction increases. By the age of 25, the vast majority of individuals who smoke do so on a daily basis (see Table A1 in Appendix A).

[2] Current smokers include both daily and non-daily smokers. See concepts and definitions in Appendix B.

[3] Tobacco Control Programme, Health Canada Supplementary Tables, CTUMS Annual 2003. http://www.hc-sc.gc.ca/hecs-sesc/tobacco/research/ctums/2003/Annual2003_supptables_eng.pdf

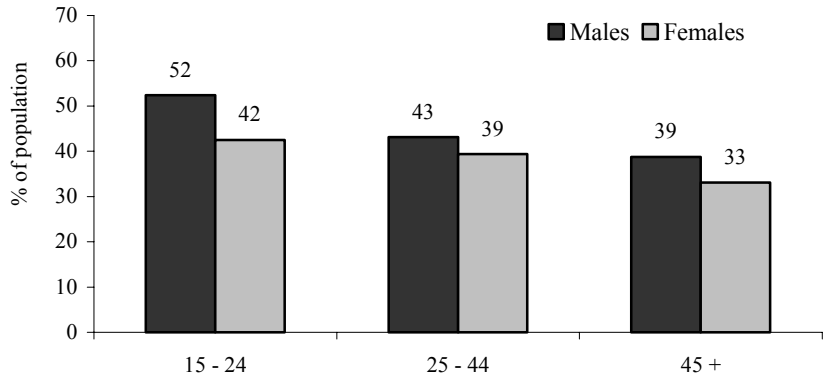
The average number of cigarettes smoked daily also increases with age. Daily smokers between 15 and 24 years of age consume, on average, 11.6 cigarettes per day. Meanwhile, daily smokers between 25 and 44 years of age and those 45 years of age and older consume, on average, 13.6 and 16.5 cigarettes per day respectively.

3.2 Gender Differences

Men are more likely than women to be current smokers (44% compared to 38%). The difference was observed for all age groups examined but was more pronounced among youth between 15 and 24 years of age, where 52% of males indicated they smoke compared to 42% of females. The difference in smoking rates between men and women tended to be less noticeable among older adults. In general, there is no significant difference in the prevalence of smoking for men and women in any of the age groups.

Figure 2

Current Smokers by Age & Sex, NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

The prevalence of daily smoking is very similar for males and females (30% and 28% respectively). For those between 15 and 24 and those between 25 and 44, the daily smoking rate was basically the same. However, male daily smokers consume, on average, more cigarettes per day than female daily smokers (15.9 vs. 11.8). The difference was observed for all age groups (see Table A1, Appendix A).

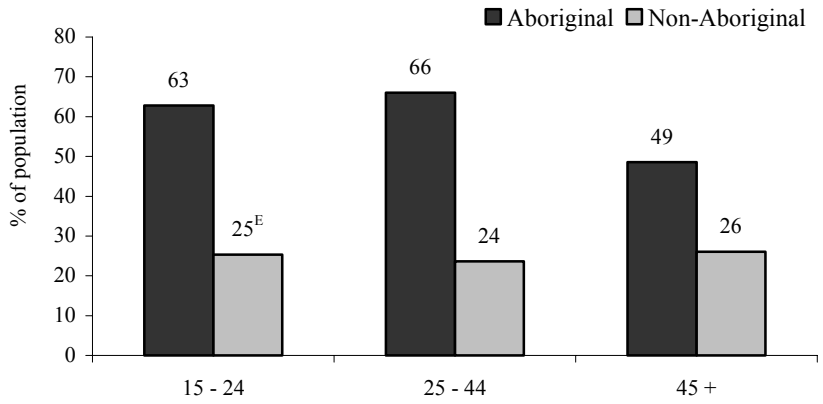
3.3 Aboriginal Identity

NWT residents who took part in the 2004 NWT Northern Tobacco Use Monitoring Survey were asked to describe their aboriginal status. When smoking prevalence for the aboriginal and non-aboriginal populations were compared, significant differences were observed. An estimated 60% of the aboriginal population 15 years of age and older indicated they smoke cigarettes, compared to 25% of non-aboriginal residents. The difference was greatest for those between 25 and 44 years of age. The smoking rate among aboriginal residents was 2.5 times higher than the non-aboriginal rate (66% vs. 24%). Meanwhile, 49% of aboriginal residents older than 44 years indicated they smoke

compared to 26% of non-aboriginal residents (see Figure 3). Interestingly, smoking prevalence among non-aboriginal residents was the same for each age group. However, the rate for 15 to 24 year old non-aboriginal residents should be interpreted with caution due to high sampling variability.

Figure 3

Current Smokers by Age & Ethnicity, NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

[E] Moderate sampling variability, interpret with caution.

The prevalence of daily smoking among Aboriginal residents was two times higher than the prevalence among non-aboriginal residents (40% vs. 19%). The former group were also much more likely than the latter to smoke on a non-daily basis (20% compared to 6%). On the other hand, non-aboriginal daily smokers consumed 16.6 cigarettes on average per day, compared with aboriginal daily smokers who consumed an average of 12.3 (see Table A2, Appendix A).

3.4 Education Levels

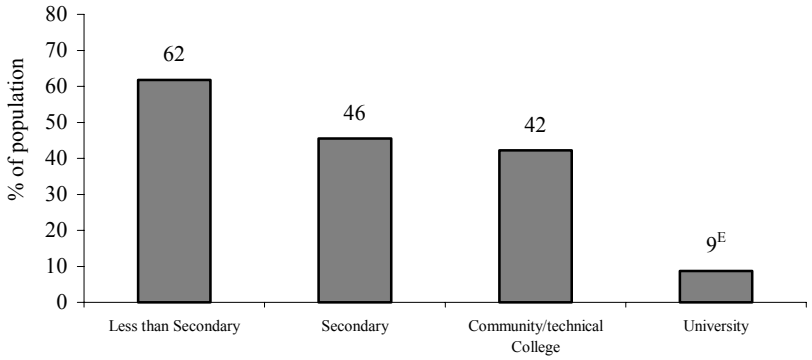
Individuals with higher levels of education are less likely to be smokers. Education is not only a good indicator of socioeconomic status but also provides some suggestion of people's abilities to access, understand, and possibly act on health-related information. The association between education levels and smoking rates are influenced by differences in age - for example, people with less than secondary education in the NWT tend to be over 50, and people over 50 are less likely to smoke. This can cause some confusion if the relationship between smoking prevalence and education levels is presented without reference to age. To control for this confounding effect, smoking rates for those with various levels of education were age-standardized.[4]

[4] The rates were age-standardized using the direct method with the overall NWT population as the standard population. It is important to point out that age-standardized rates are "artificial" in the sense that they do not actually exist in reality. They are meant to provide one summary measure to compare differences between people with different levels of education while controlling for differences in the age structure between the groups.

Figure 4 shows the sharp decline in smoking rates as education levels increase. After adjusting for differences in age structure, an estimated 62% of NWT residents 25 years of age and older with less than secondary education indicated they smoke, compared to 9% of university graduates. Meanwhile, 46% of those who completed secondary school and 42% of those who completed community or technical college smoke.

Figure 4

Age-Adjusted Current Smokers by Highest level of Schooling, Age 25 +, NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

[E] Moderate sampling variability, interpret with caution.

3.5 Nicotine Dependence

Over half (52%) of daily smokers in the NWT were sufficiently addicted to nicotine that they had their first cigarette within 30 minutes of waking each morning. Older daily smokers, those 45 years of age and older, were more likely than those between 25 and 44 to report smoking their cigarette within 30 minutes of waking (65% vs. 44%). They also appeared to be more addicted than youth between 15 and 24 years of age (see Table A3, Appendix A). Nicotine dependency was similar for both men and women. Fifty-two percent of both men and women indicated they have their first cigarette within 30 minutes of waking each morning.

4.0 Smoking Cessation

It is evident that a large number of youth and adults in the Northwest Territories smoke. If there is any good news, it is that smokers are able to quit. While nicotine is highly addictive, approximately 7,000 Northwest Territories residents 15 years of age and older (or 22% of the population) are former smokers. Put another way, 35% of youth and adults who had ever smoked no longer do so. Moreover, 65% of current smokers indicated they are seriously thinking about quitting within the next six months. One half of all current smokers indicated they had stopped smoking at least once in the past year for at least 24 hours because they were trying to quit.

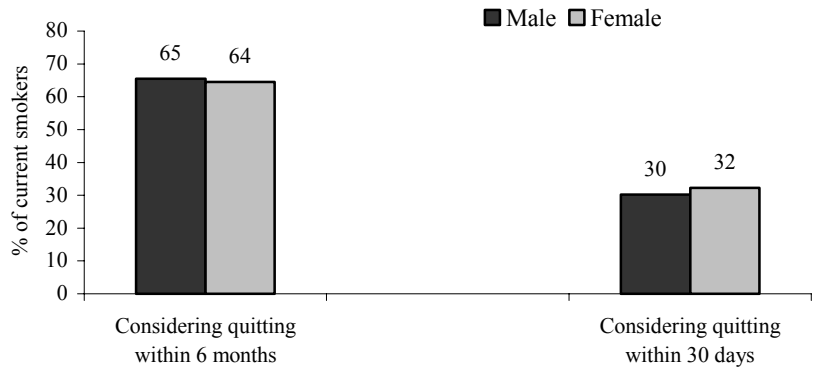
4.1 Considering Quitting Smoking

Thinking about quitting is the first step in the smoking cessation process. In the Northwest Territories a large number of current smokers - approximately 8,000 individuals 15 years and older - indicated they are seriously considering quitting within the next six months. This represents 65% of current smokers. Male and female current smokers were equally as likely to indicate they are seriously considering quitting within the next six months (65% compared to 64%). While current smokers between 25 and 44 years of age were more likely than those 45 years of age and older to be seriously considering quitting within the next six months, 70% compared to 58%, the difference was not significant (see Table A4, Appendix A).

Meanwhile, an estimated 31% of current smokers indicated they are seriously considering quitting within the next 30 days. Again, the proportion of males and females were about the same (31% compared to 29%). And while, 34% of residents between 25 and 44 indicated they are seriously considering quitting within the next 30 days, compared to 26% of adults 45 years of age and older, the difference was not significant.

Figure 5

Current Smokers who are Considering Quitting by Sex, Age 15 +, NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

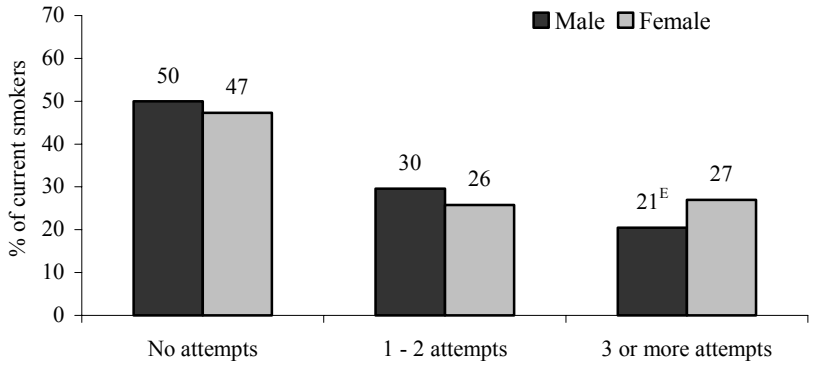
4.2 Quit Attempts

A smoker's expressed intention to quit is one possible signal that the quitting process has begun. However, it has little bearing on success unless action is taken to either reduce cigarette consumption or attempt to quit completely. At least one previous quit attempt is a better predictor of successful cessation than simply expressing an intention to quit.

Just over one half (51%) of current smokers indicated they initiated one or more quit attempts in the past year that lasted at least 24 hours: 28% made one to two attempts, while 23% made three or more attempts. There are no significant differences between male and female current smokers in the proportion who indicated they made at least one quit attempt in the past year (50% compared to 53% respectively). It appears that women made more quit attempts than men: 27% indicated they made three or more attempts, compared to 21% of men (see Table A5, Appendix A). However, the difference was not significant. Similar results were observed for daily smokers. Overall, 50% indicated they had made at least one quit attempt (see Table A6, Appendix A). Current smokers who tried to quit without success made an average of 4.5 attempts in the past year, while daily smokers made an average of 2.8 attempts.

Figure 6

Number of Quit Attempts in Past 12 Months by Sex, Current Smokers NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

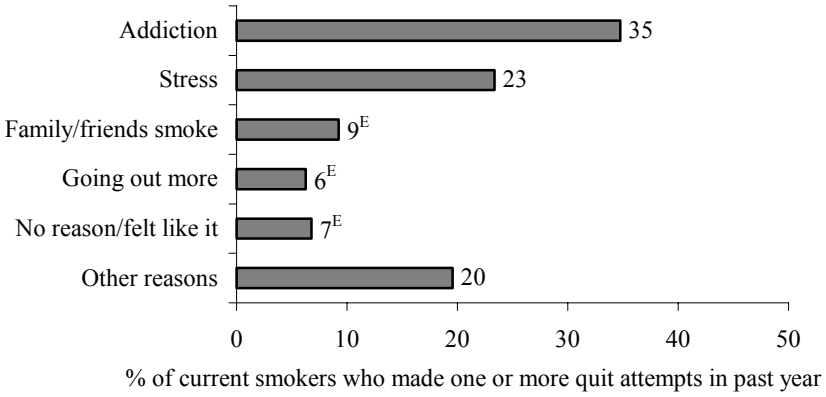
[E] Moderate sampling variability, interpret with caution.

Age does seem to influence the likelihood that daily smokers had attempted to quit smoking in the past year. An estimated 55% of current smokers between 25 and 44 years of age stopped smoking one or more times for at least 24 hours in the past year because they were trying to quit, compared to 38% of those 45 years of age and older (see Table A5 in Appendix A). However, individuals in both age groups were equally as likely to attempt quitting three or more times in the previous year.

Current smokers who had made one or more quit attempts in the past year were asked what was the main reason they began to smoke again. Addiction was the most common reason, cited by 35%. Another 23% indicated they started to smoke again because of stress and they needed to relax or calm down. An estimated 15% indicated that their social environment was the main contributing factor, 9% said they started again because their family or friends smoke, and another 6% said they were going out more to bars or parties. Meanwhile, 7% indicated they just felt like it and 20% provided a variety of other reasons including boredom and the desire to control body weight.

Figure 7

Main Reason Began to Smoke Again, Current Smokers, Age 15+, NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

[E] Moderate sampling variability, interpret with caution.

4.3 Successful Quitters

Approximately 7,000 Northwest Territories residents 15 years of age and older (or 22% of the population) are former smokers. It is apparent that while a large number of adults in the Territories smoke, a large number have also been able to stop smoking. The quit rate - the proportion of successful quitters among all those who have ever smoked (current and former smokers combined) – is one way to gauge how successful residents of the Northwest Territories are at quitting.[5] An estimated 63% of residents 15 years of age and older either currently smoke or have been a smoker at some point in their life. Of these ever smokers, an estimated 34% no longer smoke, a rate much lower than the overall Canadian quit rate of 56%.[6]

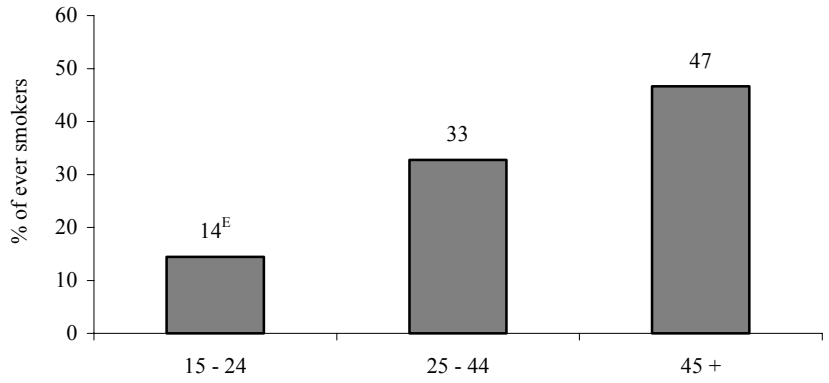
[5] However, it is important to point out that quit rates may not present a true picture if former smokers deny ever having smoked, especially if they quit a long time ago, or if ex-smokers who were not smoking when surveyed relapse.

[6] Tobacco Control Programme, Health Canada Supplementary Tables, CTUMS Annual 2003. http://www.hc-sc.gc.ca/hecs-sesc/tobacco/research/ctums/2003/Annual2003_supptables_eng.pdf

The overall rate of quitting is similar for men (33%) and women (35%), and increases with age. An estimated 14% of youth between 15 and 24 years of age quit, compared to 33% of adults between 25 and 44 years of age, and 47% of those 45 years of age and older.

Figure 8

Quit Rates by Age, Age 15 +, NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

[E] Moderate sampling variability, interpret with caution.

It also appears that once aboriginal persons start to smoke they are less likely than non-aboriginal persons to quit. The quit rates among the aboriginal population in the NWT was two times lower than the rate among the non-aboriginal population (23% for the former, compared to 50% for the latter). The difference was observed for both those 25 to 44 years of age and those 45 years of age and older (see TableA7, Appendix A).

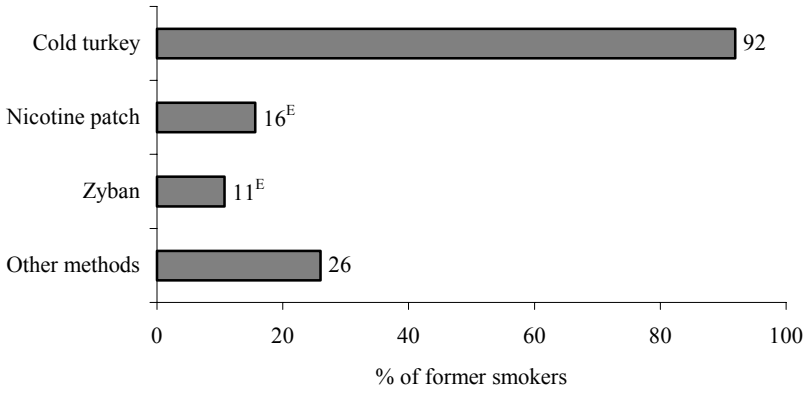
4.4 Why & How People Quit Smoking

When asked what was the main reason they quit smoking, the majority of former smokers (64%) indicated health concerns. Nine percent said it was due to a pregnancy or a baby in the household (17% of women), and the other 27% provided a variety of reasons.

Former smokers were also asked what methods they ever used to try to quit smoking (respondents could identify more than one method used in their successful or unsuccessful quit attempts). The vast majority (92%) said they tried to quit by going "cold turkey." Another 16% indicated they had tried nicotine patches, 11% tried the drug Zyban, and 8% tried nicotine chewing gum. Former smokers who quit less than three years ago were as likely as those who quit three or more years ago to indicate they tried "cold turkey," (88% compared to 93%). However, the former group was more likely to indicate that they tried to quit using nicotine patches (38%) and Zyban (28%). Cutting back or reducing consumption gradually, using nicotine chewing gum and switching to light or mild cigarettes were among some of the other methods noted.

Figure 9

Methods Ever Used to Try to Quit Smoking, Age 15 +, NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

[E] Moderate sampling variability, interpret with caution.

Former smokers were also asked what was the main method that helped them to stop smoking. The vast majority indicated they used no assistance or aid, 81% indicated that going "cold turkey" was the main method used, while another 10% indicated that nicotine patches or the drug Zyban was the main method that helped them stop smoking. The remaining 9% reported a variety of other methods, including counseling by a health care provider and the use of nicotine chewing gum. Residents who quit less than three years ago were as likely as those who quit three or more years ago to report that going "cold turkey" was the main method they used to quit (73% vs. 83% respectively).

4.5 Stages of Change

As with smoking initiation, quitting smoking is a process that occurs over time. Smoking cessation is often conceptualized within the framework of a stages-of-change model, which sees behaviour change as a series of actions or events consisting of five phases. In the first phase - precontemplation - there is no thought or awareness of the need to change behaviour. In the next two phases – contemplation and preparation- individuals are thinking about the problem and the possibility of change. Individuals in the preparation stage have taken at least one step towards changing their behaviour. In the next stage individuals take action and modify their behaviour during a period of several months. Finally, they must successfully maintain the changed behaviour for an extended period of time.[7]

The stages-of-change model forms the basis of a quitting continuum. Current smokers who are not thinking about quitting are at the lowest end of the continuum. They

[7] Osler M, Prescott E. *Psychosocial, behavioural, and health determinants of successful smoking cessation: a longitudinal study of Danish adults*. Tobacco Control 1998; 7: 262-267.

represent the proportion of smokers who are not responding to smoking cessation messages. About 23% of NWT residents 15 years of age and older who had ever smoked are in the precontemplation stage. Meanwhile, 25% of ever smokers are in the contemplation and 14% are in the preparation stages. At the time of the survey, an estimated 3% of NWT ever smokers were in the action phase of quitting. That is they quit smoking less than six months prior to the survey. Finally, 34% of ever smokers had quit at least six months prior to the survey (see Table A8, Appendix A).[8]

[8] The discrepancy in the proportion of former smokers in this section and section 4.3 is due to the higher number of non-responses in the stages of change index.

5.0 Smoking During Pregnancy & Environmental Tobacco Smoke

Long-term exposure to environmental tobacco smoke (ETS) is a significant health hazard. Exposure to ETS has been linked to lung cancer, cardiovascular diseases, and respiratory diseases. Infants and young children are particularly vulnerable to the effects of ETS exposure, and the home is the most important site of such exposure. Maternal smoking during pregnancy can have adverse effects on the health of the fetus and the outcome of the pregnancy. The fetus can also be adversely affected if the expectant mother is a nonsmoker regularly exposed to ETS.

5.1 Smoking During Pregnancy

Women between 20 and 44 years of age were asked if they had been pregnant in the past five years. An estimated 42% said yes. Of these women, 21% indicated they smoked regularly (that is, every day or almost every day) during their most recent pregnancy. In addition, 16% indicated their spouse/partner smoked regularly in the home during their most recent pregnancy. Meanwhile, 43% of recent mothers between 20 and 44 years of age who are current smokers acknowledged smoking regularly during their most recent pregnancy (see Table A9, Appendix A).

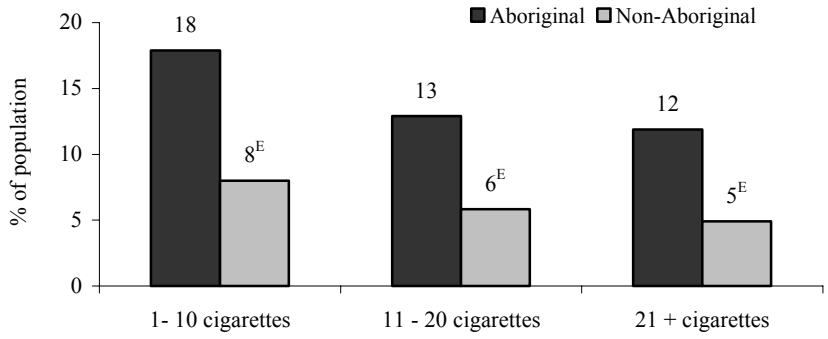
5.2 Environmental Tobacco Smoke in the Home

Almost one-third (30%) of NWT residents 15 years of age and older indicated that at least one family member or visitor smoked inside their home every day or almost every day. Aboriginal residents were two times more likely than non-aboriginal residents to report regular smoking inside the home (43% vs. 20%). Moreover, a significantly higher proportion of aboriginal residents reported that three or more people regularly smoke inside their home: 18%, compared to 3% for non-aboriginal residents (see Table A10, Appendix A).

The number of cigarettes smoked inside households on a typical day is also an important indicator of exposure to ETS. The actual amount of ETS would be greater in a household where two people smoked 20 cigarettes each, compared to a household where four people smoked five cigarettes each. In the survey, respondents were asked how many cigarettes are smoked inside their home on a typical day. An estimated 17% of the NWT population indicated that more than ten cigarettes are smoked inside their homes on a typical day, while 8% indicated more than 20 cigarettes. Again, there were significant differences between aboriginal and non-aboriginal residents. One quarter (25%) of the former group indicated that more than ten cigarettes were smoked inside their home on a typical day, compared to 11% of the latter group (see Table A11, Appendix A).

Figure 10

Population Reporting Regular Smoking Inside the Home, by Number of Cigarettes & Aboriginal Identity, Age 15 +, NWT 2004



Source: 2004 Northern Tobacco Use Monitoring Survey, Northwest Territories

[E] Moderate sampling variability, interpret with caution

A different picture emerges when the analysis is restricted to those who indicated that smoking occurs on a regular basis inside their home. Of this group, 58% indicated that more than ten cigarettes are typically smoked in the home, and 27% put the number at greater than 20 cigarettes. Meanwhile, 58% of aboriginal residents who indicated that smoking occurs inside the home on a regular basis said that more than ten cigarettes are typically smoked per day, compared to 57% of non-aboriginal residents (see Table A11, Appendix A). In other words, it appears that while aboriginal residents were two times more likely than non-aboriginal residents to report regular smoking inside the home, there was no difference between each group in the number of cigarettes smoked in homes where smoking occurs.

5.3 Restrictions on Smoking Inside the Home

Individuals who indicated that no smoking regularly occurred inside of the home were asked if smoking was permitted inside their home. Of this group, 87% said no. No differences were observed between aboriginal and non-aboriginal residents. Eighty nine percent of the former group and 86% of the latter said smoking was not permitted inside their homes.

Among residents who indicated that smoking was permitted inside their homes, 42% indicated that restrictions are in place. Again, there were no differences between aboriginal and non-aboriginal residents who indicated smoking is restricted inside their home (42% vs. 41%). When asked how smoking cigarettes is restricted inside their home, 53% indicated that smoking is permitted in certain rooms only, another 31% indicated smoking is restricted in the presence of young children, and 29% gave a variety of other responses. There were no significant differences between aboriginal and non-aboriginal residents in the types of restrictions indicated.

5.4 Bans on Smoking in Public Places

All of those who took part in the 2004 NWT Tobacco Use Monitoring Survey were asked if the agreed or disagreed with a ban on smoking in various public places. The overwhelming majority of residents (93%) agreed that there should be a ban on smoking in offices and stores. There was also clear agreement that there should be smoking bans in restaurants (85% agreed, 15% disagreed). There was less concurrence on smoking bans in bars and nightclubs: 60% agreed there should be a ban while 40% disagreed. Meanwhile the vast majority (90%) agreed there should be smoking bans in other public places such as arenas and community halls (see Table A12, Appendix A).

Appendix A

Tables

NTUMS, Northwest Territories, 2004

Table A1
Smoking Status and average number of cigarettes smoked per day by age group & sex, age 15 +, NWT, 2004

	Population Estimate (#)	Current Smokers (%)	Daily Smokers (%)	Non-daily Smokers (%)	Former Smokers (%)	Never Smokers (%)	Average cigarettes smoked per day[1]
Total	31,233	41	29	12	22	37	14.0
15 - 24	6,515	48	30	18[E]	9[E]	44	11.6
15 - 19	3,337	43	24[E]	19[E]	F	56	12.0[E]
20 - 24	3,178	53	35[E]	18[E]	17[E]	30[E]	11.3
25 - 44	14,458	41	30	11	21	37	13.6
45 +	10,260	36	26	10	33	31	16.5
Male	15,988	44	30	14	23	34	15.9
15 - 24	3,553	52	30[E]	22[E]	F	42	13.5
15 - 19	1,763	48[E]	F	F	F	51[E]	16.6
20 - 24	1,790	57	35[E]	F	F	34[E]	11.1[E]
25 - 44	7,105	43	30	13[E]	22	35	15.5
45 +	5,330	39	29	9[E]	35	26	18.5
Female	15,244	38	28	10	22	40	11.8
15 - 24	2,962	42	29[E]	F	F	45	7.8
15 - 19	1,575	38[E]	F	F	F	62[E]	F
20 - 24	1,387	48[E]	34[E]	F	27[E]	F	F
25 - 44	7,353	39	30	9[E]	21	40	11.7
45 +	4,929	33	23	10[E]	30	37	13.9

[1] Daily smokers only

[E] Moderate sampling variability, interpret with caution.

[F] High sampling variability - although an estimate may be determined from the tables, data should be suppressed.

Estimates may not sum to 100 percent due to rounding.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A2
Smoking Status and average number of cigarettes smoked per day by age group and aboriginal identity, age 15 +, NWT, 2004

	Population Estimate (#)	Current Smokers (%)	Daily Smokers (%)	Non-daily Smokers (%)	Former Smokers (%)	Never Smokers (%)	Average cigarettes smoked per day[1]
Total	31,233	41	29	12	22	37	14.0
15 - 24	6,515	48	30	18[E]	9[E]	44	11.6
15 - 19	3,337	43	24[E]	19[E]	F	56	12.0[E]
20 - 24	3,178	53	35[E]	18[E]	17[E]	30[E]	11.3
25 - 44	14,458	41	30	11	21	37	13.6
45 +	10,260	36	26	10	33	31	16.5
Aboriginal	14,465	60	40	20	19	21	12.3
15 - 24	1,993	63	38	25[E]	F	28[E]	8.4
15 - 19	1,932	59	31[E]	F	F	39[E]	F
20 - 24	3,925	66	45[E]	F	F	F	9.8[E]
25 - 44	5,997	66	45	21	17[E]	17[E]	12.7
45 +	4,543	49	35	14[E]	30	22[E]	15.2
Non-Aboriginal	16,768	25	19	6[E]	25	50	16.6
15 - 24	1,345	25	17	F	F	68	F
15 - 19	1,245	19	15	F	F	81	F
20 - 24	2,590	32	19	F	F	53[E]	F
25 - 44	8,462	24	19	F	24	52	15.0
45 +	5,716	26	20	F	35	39	17.8

[1] Daily smokers only

[E] Moderate sampling variability, interpret with caution.

[F] High sampling variability - although an estimate may be determined from the tables, data should be suppressed.

Estimates may not sum to 100 percent due to rounding.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A3
Nicotine dependence by age group and sex, daily smokers, age 15 +, NWT 2004

		Time of first cigarette after waking	
	Population Estimate (#)	Within 30 minutes (%)	More than 30 minutes (%)
Total	8,756	52	48
15 - 24	1,848	51[E]	49[E]
25 - 44	4,258	44	56
45 +	2,650	65	35
Male	4,678	52	48
15 - 24	1,074	65[E]	F
25 - 44	2,034	41[E]	59
45 +	1,570	56	44[E]
Female	4,079	52	48
15 - 24	773	F	70[E]
25 - 44	2,225	47	53
45 +	1,081	77	F

[E] Moderate sampling variability, interpret with caution.

[F] High sampling variability - although an estimate may be determined from the tables, data should be suppressed.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A4
Current smokers seriously considering quitting within next 6 months and next 30 days by age group and sex, age 15 +, NWT 2004

		Seriously considering quitting	
	Population Estimate (#)	within next 6 months (%)	within next 30 days (%)
Total	11,979	65	31
15 - 24	2,720	64	33[E]
25 - 44	5,657	70	34
45 +	3,602	58	26[E]
Male	6,536	65	30
15 - 24	1,633	68	41[E]
25 - 44	2,862	71	32[E]
45 +	2,041	55	19[E]
Female	5,445	64	32
15 - 24	1,088	58[E]	F
25 - 44	2,796	68	36
45 +	1,561	62	35[E]

[E] Moderate sampling variability, interpret with caution.

[F] High sampling variability - although an estimate may be determined from the tables, data should be suppressed.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A5
Number of quit attempts in past 12 months by age group and sex, current smokers, age 15 +, NWT 2004

	Population Estimate (#)	No attempts (%)	1 - 2 attempts (%)	3 or more attempts (%)
Total	11,697	49	28	23
15 - 24	2,740	40[E]	30[E]	30[E]
25 - 44	5,646	45	34	21[E]
45 +	3,311	62	15[E]	22[E]
Male	6,437	50	30	21[E]
15 - 24	1,654	39[E]	35[E]	F
25 - 44	2,918	45	35[E]	20[E]
45 +	1,865	67	F	17[E]
Female	5,258	47	26	27
15 - 24	1,084	41[E]	F	F
25 - 44	2,728	45	33	22[E]
45 +	1,446	57	F	30[E]

[E] Moderate sampling variability, interpret with caution.

[F] High sampling variability - although an estimate may be determined from the tables, data should be suppressed.

Estimates may not sum to total due to rounding.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A6
Number of quit attempts in past 12 months by age group and sex, daily smokers, age 15 +, NWT 2004

	Population Estimate (#)	No attempts (%)	1 - 2 attempts (%)	3 or more attempts (%)
Total	8,430	50	30	20
15 - 24	1,785	48[E]	39[E]	F
25 - 44	4,270	43	35	22[E]
45 +	2,375	64	14[E]	22[E]
Male	4,545	52	31	17[E]
15 - 24	1,040	F	F	F
25 - 44	2,084	44[E]	36[E]	F
45 +	1,421	68	F	F
Female	3,885	48	29	24[E]
15 - 24	746	F	F	F
25 - 44	2,185	43	34[E]	23[E]
45 +	954	57[E]	F	F

[E] Moderate sampling variability, interpret with caution.

[F] High sampling variability - although an estimate may be determined from the tables, data should be suppressed.

Estimates may not sum to total due to rounding.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A7
Quit rates by age group, sex, and aboriginal identity, age 15 +, NWT 2004

	Population Estimate (#)	Total quitters (%)	Short-term quitters (%)	Long-term quitters (%)
Total	19,435	34	5[E]	29
15 - 24	3,648	14[E]	F	11[E]
25 - 44	8,861	33	8[E]	25
45 +	6,926	47	F	44
Male	10,494	33	5[E]	28
15 - 24	2,017	F	F	F
25 - 44	4,589	33	10[E]	23[E]
45 +	3,888	47	F	45
Female	8,939	35	5[E]	30
15 - 24	1,630	23[E]	F	F
25 - 44	4,272	32	F	26
45 +	3,037	46	F	43
Aboriginal	11,186	23	4[E]	19
15 - 24	2,809	F	F	F
25 - 44	4,924	20[E]	F	14[E]
45 +	3,453	36	F	33
Non-Aboriginal	8,250	50	6[E]	44
15 - 24	839	F	F	F
25 - 44	3,938	49	11[E]	38
45 +	3,473	57	F	55

[E] Moderate sampling variability, interpret with caution.

[F] High sampling variability - although an estimate may be determined from the tables, data should be suppressed.

Estimates may not sum to total due to rounding.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A8
Stages of change by age group and sex, current & former smokers, age 15 +, NWT 2004

	Population Estimate (#)	Precon-templation (%)	Contemplation (%)	Preparation (%)	Action (%)	Maintenance (%)
Total	18,008	23	25	14	3[E]	34
15 - 24	3,195	31[E]	29[E]	23[E]	F	15[E]
25 - 44	8,158	21	28	16	5[E]	31
45 +	6,655	22	20	9[E]	F	47
Male	9,656	23	25	15	F	34
15 - 24	1,734	F	32[E]	29	F	F
25 - 44	4,124	20[E]	27[E]	16[E]	F	33
45 +	3,798	24[E]	21[E]	F	F	46
Female	8,351	23	25	14	F	34
15 - 24	1,461	32[E]	F	F	F	F
25 - 44	4,034	22[E]	29	15[E]	F	29
45 +	2,856	21[E]	19[E]	F	F	47

[E] Moderate sampling variability, interpret with caution.

[F] High sampling variability - although an estimate may be determined from the tables, data should be suppressed.

Estimates may not sum to 100 percent due to rounding.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A9
Smoking & pregnancy, women age 20 - 44,[1] NWT 2004

	Population Estimate (#)	Smoked regularly during most recent pregnancy (%)	Population Estimate (#)	Spouse smoked regularly at home during most recent pregnancy (%)
Women 20 - 44	3,243	21[E]	3,044	16[E]
Ever smokers	2,150	31[E]	1,951	23[E]
Current Smokers	1,412	43[E]	1,247	29[E]

[1] women aged 20 - 44 who had been pregnant in the previous five years.

[E] Moderate sampling variability, interpret with caution.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A10
Population reporting regular smoking inside household, by number of smokers and aboriginal identity, Age 15 +, NWT 2004

	Population Estimate (#)	Total (%)	One Smoker (%)	Two Smokers (%)	Three or more Smokers (%)	Average Number of Smokers[1]
Total	31,161	30	12	8	10	2.9
Aboriginal	14,395	43	16	9	18	3.4
Non-Aboriginal	16,766	20	9	7[E]	3[E]	2.1

[1] Population reporting at least one person smoking cigarettes inside their home every day or almost every day.

[E] Moderate sampling variability, interpret with caution.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A11
Population reporting regular smoking inside household, by number of cigarettes typically smoked and aboriginal identity, Age 15 +, NWT 2004

	Population Estimate (#)	Total (%)	1 to 10 cigarettes (%)	11 to 20 cigarettes (%)	21 or more cigarettes (%)
Total Population Age 15 +					
Total	30,914	30	13	9	8
Aboriginal	14,351	43	18	13	12
Non-Aboriginal	16,563	19	8	6[E]	5[E]
Population Age 15 + Living in Smoking Household					
Total	9,230	100	42	31	27
Aboriginal	6,128	100	42	30	28
Non-Aboriginal	3,102	100	43	31[E]	26[E]

[E] Moderate sampling variability, interpret with caution.

Estimates may not sum to total due to rounding.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Table A12
Proportion of population agreed or disagreed with smoking bans in various public places, Age 15 +, NWT 2004

	Population Estimate (#)	Strongly Agree (%)	Agree (%)	Disagree (%)	Strongly Disagree (%)
Smoking ban in offices and stores	30,839	59	34	5	2[E]
Smoking ban in restaurants	30,641	53	32	12	3[E]
Smoking ban in bars and night clubs	29,867	32	28	28	12
Smoking ban in other public places likes arenas	30,678	54	36	8	2[E]

[E] Moderate sampling variability, interpret with caution.

Estimates may not sum to 100 percent due to rounding.

Source: Northern Tobacco Use Monitoring Survey, Northwest Territories, 2004

Appendix B

Concepts and Definitions

A number of standard concepts and definitions should be used in the analysis and interpretation of the data presented in this report.

Smoking Status

Daily smoker: refers to those who respond "every day" to the question "At the present time do you smoke cigarettes every day, occasionally or not all?"

Non-daily smoker: often referred to as "occasional" smoker, refers to those who respond "Occasionally" to the question "At the present time do you smoke cigarettes every day, occasionally or not all?"

Current smoker: includes daily smokers and non-daily smokers (also known as occasional smokers). Determined from the response to the question "At the present time do you smoke cigarettes every day, occasionally, or not at all?"

Smoking prevalence: the number of current smokers in a specified group, divided by the total population of that group, expressed as a percentage. May also be referred to as the "smoking rate".

Former smoker: was not smoking at the time of the interview, however, answered "Yes" to the question "Have you smoked at least 100 cigarettes in your life?"

Short-term quitter: former smoker who quit smoking less than one year prior to the survey. Determined by the response to the question "When did you stop smoking? Was it less than 1 year ago, 1 to 2 years ago, 3 to 5 years ago, or more than 5 years ago?"

Long term quitter: former smoker who quit smoking a year or more ago and has not resumed smoking during that time frame. Determined by the response to the question "When did you stop smoking? Was it less than 1 year ago, 1 to 2 years ago, 3 to 5 years ago, or more than 5 years ago?"

Ever-smokers: current and former smokers combined.

Quit rate: the ratio of the number of former smokers in a specified group divided by the number of ever-smokers in that group.

Never-smoker: was not smoking at the time of the interview and answered "No" to the question "Have you smoked at least 100 cigarettes in your life?"

Stages of Change

The five following stages describe readiness to quit smoking.

Precontemplation: current smokers who answered "No" to the question, "Are you seriously considering quitting within the next six months?"

Contemplation: current smokers who are either:

- seriously considering quitting within the next six months, but answered "No" to the question, "Are you seriously considering quitting within the next 30 days?" or,
- were seriously considering quitting within the next 30 days, but did not try to quit for at least 24 hours during the past year (i.e. answered "None" to the question, "In the last year, how many times have you stopped smoking for at least 24 hours because you were trying to quit?").

Preparation: current smokers who were seriously considering quitting within the next 30 days and had quit smoking at least once, for at least 24 hours, during the past year.

Action: former smokers (i.e., did not currently smoke) who had quit smoking within the past six months (inclusive).

Maintenance: former smokers who, at the time of the interview, had quit smoking at least six months ago.