

**LEGISLATIVE ASSEMBLY OF THE  
NORTHWEST TERRITORIES  
9<sup>TH</sup> ASSEMBLY, 11<sup>TH</sup> SESSION**

**TABLED DOCUMENT NO. 8-83(2)**

**TABLED ON SEPTEMBER 1, 1983**

# Tobacco Use among Students in the Northwest Territories 1982



Canada

  
Northwest  
Territories Health  
Promotion

**TOBACCO USE AMONG STUDENTS IN THE  
NORTHWEST TERRITORIES, 1982**

by

**W.J. Millar  
Health Promotion Directorate  
Health Services and Promotion Branch  
Health and Welfare Canada**

and

**S. Van Rensburg  
Department of Health  
Government of the Northwest Territories**

Published jointly by the Minister of  
National Health and Welfare and  
the Minister of Health, Government  
of the Northwest Territories, 1983.

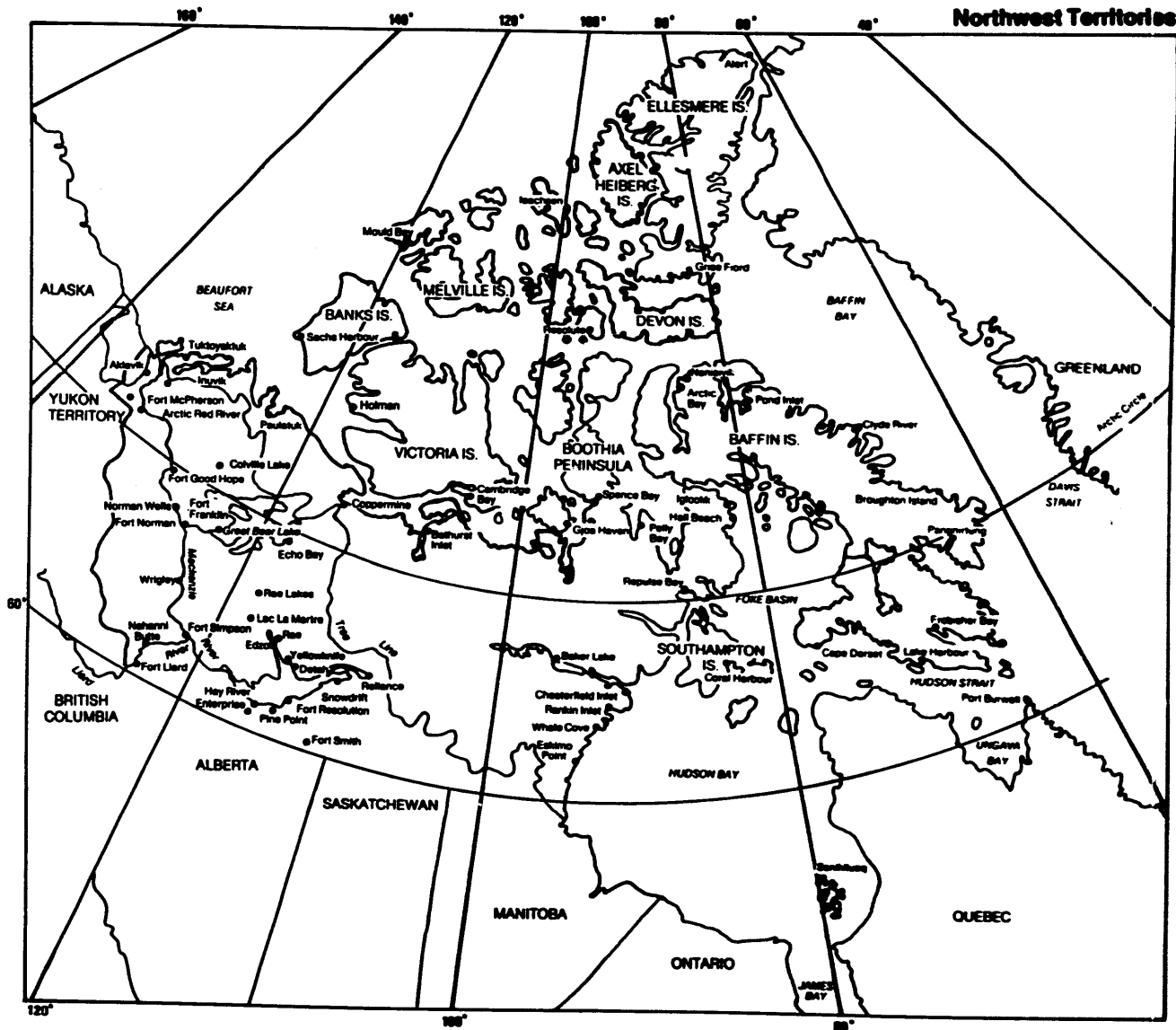
Also available in French under the  
title "L'usage du tabac dans les écoles  
des Territoires du Nord-Ouest, 1983".

## ACKNOWLEDGEMENTS

A number of persons contributed to the preparation of this study. Bill Bradley, John Diguier, Janine Hum and Howard Leung of the Analytical Services, Policy Planning and Information Branch, Health and Welfare Canada, provided survey design and data processing assistance. Ken Norton, Gina Blondin and Metro Solomon, of the Department of Education, Government of the Northwest Territories facilitated the administration of the survey. We also thank the teachers and students in the Northwest Territories who participated in the study.

## TABLE OF CONTENTS

	Page
<b>SUMMARY</b>	1
<b>INTRODUCTION</b>	3
<b>METHODOLOGY</b>	3
<b>RESULTS</b>	5-11
Smoking Prevalence	5
Current Smoking	5
Regular Smoking	6
Number of Cigarettes Smoked Per Week	7
Sources of Cigarettes	7
Regional Variations in Smoking Prevalence	8
Parental Smoking Behaviour	8
Sibling Influence on Smoking Behaviour	9
Peer Group Influence on Smoking Behaviour	9
Use of Chewing Tobacco	9
Use of Snuff	10
Beliefs Concerning the Health Consequences of Smoking and the Relation of those Beliefs to Smoking Behaviours	11
<b>CONCLUSIONS AND RECOMMENDATIONS</b>	12
Charts	13-18
Tables	19-34
<b>REFERENCES</b>	35
<b>Appendix A</b>	
Survey Questionnaire	37



## LIST OF TABLES

<b>SMOKING PREVALENCE</b>		<b>Page</b>
<b>Table 1</b>	<b>Percentage of Students Who Smoked in Last Four Weeks by Age Group, Sex and Ethnicity, Northwest Territories, 1982</b>	<b>19</b>
<b>Table 2</b>	<b>Percentage of Students Who Usually Smoke Every Day by Age Group, Sex and Ethnicity, Northwest Territories, 1982</b>	<b>20</b>
<b>Table 3</b>	<b>Current Smoking by Age and Educational Regions, Northwest Territories, 1982</b>	<b>21</b>
<b>Table 4</b>	<b>Percentage of Population Age 15 to 19 Classified As a Regular Smoker, Northwest Territories Compared to Canada</b>	<b>22</b>
 <b>SMOKING FREQUENCY</b>		
<b>Table 5</b>	<b>Number of Cigarettes Usually Smoked in a Week by Current Smokers by Ethnicity and Sex, Northwest Territories School Population, 1982</b>	<b>23</b>
<b>Table 6</b>	<b>Number of Cigarettes Usually Smoked in a Week by Regular Smokers by Ethnicity and Sex, Northwest Territories School Population, 1982</b>	<b>24</b>
<b>Table 7</b>	<b>Number of Cigarettes Usually Smoked in a Week by Current Smokers Age 15 to 19 by Ethnicity and Sex, Northwest Territories School Population, 1982</b>	<b>25</b>
 <b>SOURCE OF CIGARETTES</b>		
<b>Table 8</b>	<b>Primary Source of Cigarettes for Current Smokers by Ethnic group, Northwest Territories School Population, 1982</b>	<b>26</b>
 <b>SOCIAL CONTEXT OF SMOKING BEHAVIOUR</b>		
<b>Table 9</b>	<b>Percentage of Students Who Reported That They Were Current Smokers by Sex, Ethnicity and Smoking Behaviour of Parents, Northwest Territories School Population, 1982</b>	<b>27</b>

	<b>Page</b>
<b>Table 10</b> Percentage of Students Who Reported That They Were Current Smokers by Age, Ethnicity and Smoking Behaviour of Parents, Northwest Territories School Population, 1982	28
<b>Table 11</b> Percentage of Students Who Reported That They Were Current Smokers by Sex, Ethnicity and Smoking Behaviour of Siblings, Northwest Territories School Population, 1982	29
<b>Table 12</b> Percentage of Students Who Reported That They Were Current Smokers by Age, Ethnicity and Smoking Behaviour of Siblings, Northwest Territories School Population, 1982	30
<b>Table 13</b> Percentage of Students Who Reported That They Were Current Smokers by Sex, Ethnicity and Smoking Behaviour of Their Friends, Northwest Territories School Population, 1982	31
<b>Table 14</b> Percentage of Students Who Reported That They Were Current Smokers by Age, Ethnicity and Smoking Behaviour of Their Friends, Northwest Territories School Population, 1982	32

#### **USE OF CHEWING TOBACCO AND SNUFF**

<b>Table 15</b> Current Use of Chewing Tobacco by Age, Sex and Ethnicity, Northwest Territories School Population, 1982	33
<b>Table 16</b> Current Use of Snuff by Age, Sex and Ethnicity Northwest Territories School Population, 1982	34



## LIST OF CHARTS

	Page
Chart 1 Percentage of Student Population Who Indicated Having Ever Smoked by Age and Sex, Northwest Territories, 1982	13
Chart 2 Percentage of Student Population Who Indicated Having Ever Smoked by Age and Ethnic Group, Northwest Territories, 1982	14
Chart 3 Percentage of Male Student Population Who Indicated Having Ever Smoked by Age and Ethnic Group, Northwest Territories, 1982	15
Chart 4 Percentage of Female Student Population Who Indicated Having Ever Smoked by Age and Ethnic Group, Northwest Territories, 1982	16
Chart 5 Percentage of Student Population Who Indicated Having Smoked in the Past Four Weeks by Ethnic Group, Age and Sex, Northwest Territories, 1982	17
Chart 6 Percentage of Student Population Who Indicated Having Smoked Everyday by Ethnic Group, Age and Sex, Northwest Territories, 1982	18

## SUMMARY

The present survey was conducted in November 1982 to establish baseline measures of smoking behaviour in the school population of the Northwest Territories. The measures will be used to develop health education programs and to assess the effects of educational programs over time.

Smoking rates in the Northwest Territories school population are among the highest levels recorded for a school population in Canada. Smoking starts in the early years of elementary school and by the late adolescent years (15 to 19) 49% of boys and 53% of girls are regular smokers.

The age of smoking onset is earlier among Inuit and Indian/Métis youth than among non-natives. By age 15 to 19 approximately 58% of Inuit youth and 45% of Indian/Métis youth are regular smokers. Non-native youth have a smoking prevalence rate of 42%. The smoking prevalence rates in each of the three ethnic groups are twice the level recorded in the national population.

The age of smoking onset is lower among girls than among boys. In all three ethnic groups, after age ten, the prevalence of regular smoking is higher for girls. In the 15 to 19 age group 61% of Inuit, 49% of Indian/Métis and 47% of non-native girls are regular smokers. Within the same age group 55% of Inuit, 39% of Indian/Métis and 36% of non-native boys smoke regularly.

Girls are also more likely to smoke more cigarettes a week than boys. Among regular smokers, 20% of girls smoked over 60 cigarettes a week compared to 17% of boys.

Although the prevalence of regular smoking is lower among non-native youth the amount consumed per week is considerably higher. Approximately 34% of non-native regular smokers consumed over 60 cigarettes a week compared to 18% of Indian/Métis, and 11% of Inuit regular smokers.

Approximately nine percent of Northwest Territories school children use chewing tobacco or snuff. Use tends to be more prevalent among Inuit and Indian/Métis boys in the 10 to 14 age group. Approximately 25% of Inuit and 20% of Indian/Métis boys report current use of chewing tobacco. After age 14 usage levels decline for Indian/Métis youth but remain stable for Inuit youth.

The survey confirmed findings of earlier studies relating to the influence of social factors on the smoking behaviour of school children. Four variables explained a large proportion of smoking behaviour. Age, smoking behaviour of friends, smoking behaviour of brothers and sisters, and parental smoking were important predictors of current smoking status.

The smoking prevalence levels within the Northwest Territories school population have ominous implications for the current and long-term health status of the students.

## INTRODUCTION

Although a number of studies have provided data relating to smoking prevalence among Canadian adolescents on a regional (1,2,3,4) and on a national level (5,6), there have been no systematic surveys of smoking prevalence among the youth of the Northwest Territories.

The present study was conducted in November 1982 to establish baseline measures of smoking behaviour in the school population of the Northwest Territories. The measures will be used to develop health promotion programs and to assess the effect of health promotion efforts over time.

## METHODOLOGY

Sampling techniques were not used in the survey. Because of the small size of the school population, the importance of the behaviour and the desire to provide each participating school with direct feedback, all schools with grades three to twelve were asked to participate. This grade range overlaps ages 8 to 19. Some schools included students between the ages of 5 and 7. Responses from these students are included in the analysis. In the report, prevalence rates are based on age groups 5 to 9, 10 to 14 and 15 to 19. A small number of cases below age 5 and above age 19 are excluded from the analysis, leaving a total of 7305 cases.

A standard self-report form was used for all grade levels. To ensure comparability the questionnaire schedule was similar to the national survey of smoking in the school population which was conducted in 1978 (6). The forms were colour coded by educational regions within the Northwest Territories.\*

Survey questions related to "ever use" and "current use" of cigarettes, snuff and chewing tobacco; family and peer use of tobacco, knowledge of smoking-related health risks and selected socio-demographic characteristics. Students were asked to state whether their ethnic origin was Inuit, Indian, Métis or other.

The "other" category was defined as non-native. These categories correspond to the categories used by the Department of Education in the Northwest Territories. To ensure confidentiality, students were not required to write their names on the questionnaires.

A total of 66 of the 70 schools in the Northwest Territories participated in the survey, representing a school response rate of 94%. Non-response was due to radio-communication problems and the loss of

\* Note: Educational Region refers to school administrative districts within the Northwest Territories.

some survey questionnaires. An estimate of the response rate for the student population is known as the Department of Education provided a computer printout of student enrollment by grade level, age, sex and ethnicity by school and region.

A total of 7305 completed questionnaires were returned. The response rate of the 10 to 14 and 15 to 19 age groups was 70%. A number of factors may have contributed to the 30% non-response rate.

- o individual students may not have completed the questionnaire.
- o students may have been absent from school due to illness, or weather conditions on the day the survey was administered.
- o there may have been some fluctuation in enrollment between the date of the enrollment summary (March 1982) and the survey (November 1982).

It is difficult to assess what bias non-responses introduce. Students who smoke are more likely to be absent because of smoking-related health problems. An additional consideration is that students may have under-reported their smoking behaviour in the presence of a classroom teacher. For this reason, the estimates of smoking prevalence in this report should be viewed as conservative indicators of smoking prevalence.

Students were classified into smoker categories consistent with definitions of smoking employed in earlier surveys and the classification of smoking behaviour employed by Statistics Canada in the Labour Force surveys. The classification scheme is as follows:

Never Smoked - Respondent answered no to the question "Have you ever smoked?"

Ever Smoked - Respondent answered yes to the question "Have you ever smoked?"

Current Smoker - Respondent answered yes to the question "Have you smoked in the past four weeks?"

Regular Smoker - Respondent who had smoked in the past four weeks answered yes to the question "Do you usually smoke every day?"

Occasional Smoker - Respondent who had smoked in the past four weeks answered no to the question "Do you usually smoke every day?"

The analysis of smoking behaviour in this report focuses on current and regular smokers.

## RESULTS

### Smoking Prevalence

Responses to the question "Have you ever smoked?" were used to assess lifetime prevalence of tobacco use. The probability of ever using tobacco is a direct function of age and by late adolescence most youth have tried smoking. Examination of ever use curves may provide some indication of differences between groups in the onset of smoking experimentation.

In theory, the slope of the curve which indicates "ever use" of tobacco marks the opportunity for exposure to cigarettes. One of the most important points in the ever use curve is where the point of inflection, the place where the curve changes direction, occurs. This point represents an increase in exposure to tobacco. Charts 1 to 4 present cumulative "ever use" curves by age, sex and ethnic group. Among Indian and Inuit youth the age of initial exposure to tobacco is much lower than among non-native youth. Around age 8 approximately 40% of Inuit youth had "ever smoked" compared to 38% of Indian youth and 25% of non-native youth.

An examination of cumulative curves by sex and ethnicity reveals that "ever use" is highest among the Inuit, intermediate for the Indian and lowest for non-native youth among both males and females. After age 10, females exhibit higher "ever use" proportions within all three ethnic groups. Around age 17, among boys, 91% of the Inuit, 78% of Indian/Métis and 70% of the non-native had "ever smoked". Among girls of the same age, 95% of the Inuit, 89% of the Indian/Métis and 83% of the non-native had "ever smoked".

### Current Smoking

Current smoking estimates are based on responses to the question "Have you smoked in the past four weeks?" This classification includes regular and occasional smokers, and respondents who may have experimented with smoking in the previous month. (Chart 5)

Approximately 28% of the student population indicated that they had smoked in the past four weeks. Girls (30.1%) were more likely to have smoked than boys (25.5%). Approximately five percent of the 5 to 9 age group reported smoking in the past month. This increased to 27% within the 10 to 14 age group and 63% among the 15 to 19 age group. (Table 1)

There were clear sex differences in smoking prevalence. After age 10, the proportion of current smokers is higher among girls than among boys. In the total population, at ages 10 to 14, 30% of the girls

smoked compared to 23% of the boys. By age 15 to 19 69% of the girls and 57% of the boys were current smokers. The greater tendency of the girls to smoke is apparent within each ethnic group. Among students age 15 to 19, the smoking prevalence of girls is at least ten percentage points higher than among boys.

Strong ethnic differences in smoking behaviour are apparent. In all age groups, and for both sexes, smoking among Inuit youth is more prevalent than among the Indian/Métis and the non-native. Indian/Métis rates were intermediate and the non-native students exhibited the lowest smoking prevalence. At age 15, 73% of the Inuit students smoked in the past four weeks compared to 65% among the Indian/Métis and 50% among non-native youth.

### Regular Smoking

Respondents who indicated that they "usually smoked every day" were classified as regular smokers. This definition is similar to the definition of regular smoking used by Statistics Canada in the Labour Force Survey supplements on smoking. (Chart 6)

Approximately 17% of the student population age 5 to 19 indicated that they were regular smokers. The prevalence of regular smoking was 1.5% within the 5 to 9 age group, 13% among 10 to 14 year olds and 48% among 15 to 19 year olds.

In the 5 to 9 age group boys were more likely to be regular smokers than girls. After age 10, the proportion of girls who smoke regularly is higher. Among 10 to 14 year olds, 16% of girls are regular smokers compared to 11% of boys. In the late adolescent age groups (15 to 19), 53% of girls and 44% of boys smoke regularly.

Ethnicity is strongly associated with regular smoking. Within the 15 to 19 age group, 58% of Inuit, 45% of Indian/Métis and 42% of non-native students are regular smokers. The highest smoking rates in the Northwest Territories school population are found among Inuit youth. Sixty-one percent of Inuit girls and 55% of Inuit boys age 15 to 19 are regular smokers.

In summary, the prevalence of regular smoking in the Northwest Territories school population is very high. Table 4 compares smoking rates for the 15 to 19 age group to estimates of regular smoking within the national population at selected points in time. Although there is some variance in the size of national smoking prevalence rates due to the method of data collection, smoking rates in the Northwest Territories are generally much higher than the national average. It should be noted that smoking prevalence among Northwest Territories youth age 15 to 19 may be higher than indicated in this report, because

youth who have left school, or who were not present at the time of the survey are likely to have higher smoking rates than the general school population.

#### Number of Cigarettes Smoked Per Week (Tables 5, 6, 7)

The proportion of smokers in a population is a measure of the population exposed to the risks associated with cigarette smoking. The number of cigarettes consumed in a week is one measure of the degree of exposure to risk. Weekly consumption of cigarettes is influenced by a number of factors. The financial resources of the youth, the availability of cigarettes within the household, and the smoking behaviour of parents, siblings and peers influence the frequency of smoking.

Weekly consumption was ascertained by asking current and regular smokers how many cigarettes they usually smoked in a week. For both boys and girls, reported weekly consumption increased with age. The proportion of male current smokers who reported 60 or more cigarettes per week was 19% compared to 21% females as seen in Table 5. Among youth age 15 to 19 years (Table 7), smoking prevalence was lower among non-native youth but the consumption of cigarettes was higher. Approximately 36% of non-native current smokers smoked over 60 cigarettes a week compared to 16% among Indian/Métis youth and 13% among Inuit students. Within each ethnic group, girls were more likely to smoke 60 or more cigarettes per week.

#### Source of Cigarettes (Table 8)

The frequency of smoking among Northwest Territories youth is probably related to the availability of money to purchase cigarettes. Respondents were asked "Where do you get your cigarettes most of the time?" Response categories were parents, friends and buy myself. A small proportion of the students gave more than one response.

Table 8 presents data relating to the source of cigarettes for current smokers. Non-native youth (66%) were more likely to buy their own cigarettes. Approximately 60% of the Indian/Métis and 32% of Inuit students purchased their own cigarettes. Friends were an important source of cigarettes for Inuit youth (43%). Parents were a primary source for three per cent of Indian/Métis respondents, 14% for Inuit respondents and four per cent among non-native youth. The fact that parents were a primary source for cigarettes does not necessarily imply that parents gave the cigarettes to the students. In a number of cases students wrote on the questionnaire schedule that they helped themselves to the parents' cigarettes.



### Regional Variations in Smoking Prevalence (Table 3)

Regional variations in smoking rates were examined by comparing current smoking rates within the educational districts of the Northwest Territories (Table 3). There was considerable variation in smoking rates. In the total population, the current smoking rate was highest in Baffin Region (37.5%) followed by Inuvik (29.2%), Fort Smith (26.6%) and Kitikmeot (23.6%); prevalence rates tended to be the lowest in non-government (17.8%) and Keewatin Region schools (12.4%).

The prevalence of current smoking within the 5 to 9 age group is especially striking in Baffin Region. Approximately 13% of the 5 to 9 age group reported smoking within the last four weeks. This rate is three times higher than the level in Inuvik Region (4.7%) and twelve times higher than the level reported within non-government schools.

The prevalence of current smoking within educational regions is associated with the ethnic composition and age distribution of the student population within each region. In Baffin Region approximately 88% of the student population are Inuit. Within the non-government schools approximately one percent of students are Inuit and 70% are non-native.

### Parental Smoking Behaviour (Tables 9, 10)

Parental smoking behaviour influences smoking among youth at all ages. Parents serve as role models who inadvertently teach the techniques of smoking, the social setting for smoking behaviour, and the rationalizations for lighting up a cigarette. The availability of cigarettes within the household also provides a greater opportunity for youth to experiment at an early age.

Students were asked whether their mother or their father smoked. Responses were categorized into both parents smoke, one parent smokes and neither parent smokes. Families in which both parents smoked were more prevalent among the Inuit. Approximately 53% of Inuit youth stated that both parents smoked, compared to 45% among Indian/Métis students and 36% among non-native youth. This pattern is consistent with data from a number of sources regarding higher smoking rates among the Inuit and Indian adult populations. (7,8,9,10)

Among boys in families where both parents smoke 28% of the respondents are current smokers. The rate is 25% where one parent smokes and 17% where neither parent smokes. Comparable rates for girls are 33%, 31% and 20%. (Table 9)

These data support the observation that parental smoking is related to smoking by children. The relationship between smoking and the smoking practices of one's siblings and one's friends, however, was more substantial than the relationship between parental smoking and the smoking behaviour of their children.

### Sibling Influence on Smoking Behaviour (Tables 11, 12)

Sibling smoking behaviour was also strongly associated with current smoking behaviour. Respondents were asked "Do any of your brothers smoke?" and "Do any of your sisters smoke?". Responses were classified into three categories. Smoking Siblings (both sexes) refers to respondents who had one or more brothers and sisters who smoked.

Smoking Sibling(s) (of one sex) refers to respondents who indicated that they had either brothers or sisters who smoked. The third category refers to respondents who had no smoking siblings.

In all age groups, respondents who indicated that they had both brothers and sisters who smoked, were more likely to be current smokers than respondents who had smoking siblings of the same sex or no siblings who smoked.

### Peer Group Influence on Smoking Behaviour (Tables 13, 14)

Adolescence is a period in which a variety of behaviours relevant to health are initially learned and tried out. The changing environment of the adolescent has health implications because peers come to play a greater influence on behaviour, relative to the role of parents or other adults. Peer smoking has been found to be highly associated with adolescent smoking behaviours. (1,5,6)

Tables 13 and 14 present data relating to the relationship between smoking behaviour of friends and current smoking of the respondent. Respondents were asked "How many of your good friends smoke?" Response categories were none, some, most or all. At all age levels, and in each ethnic group there was a strong association between peer group smoking and current smoking. In the 10 to 14 age group respondents who indicated that all of their friends smoked were nineteen times more likely to be current smokers than students who indicated that none of their good friends smoked.

### Use of Chewing Tobacco (Table 15)

In Canada most tobacco is consumed as cigarettes, pipe tobacco or cigars. Some groups in the Canadian population use chewing tobacco or wet snuff on a regular or occasional basis. The chewing tobacco or snuff is generally chewed or retained between the cheek and gum and the nicotine and other substances are absorbed through the oral mucosa.

Respondents were asked whether they had ever used chewing tobacco and whether they now used chewing tobacco: Approximately 17% of the student population reported that they had used chewing

tobacco. "Ever use" was more common among boys (26%) than girls (8%). There was a sharp ethnic difference in usage patterns. Inuit (23%) and Indian/Métis youth (21%) were more likely than non-native (7%) to have tried chewing tobacco.

Table 15 indicates current use of chewing tobacco by age, sex and ethnicity. Approximately nine percent of the student population are current users of chewing tobacco. Boys (13.7%) are more likely than girls (2.9%) to be current users. The use of chewing tobacco by five-year age groups follows a curvilinear pattern. For both boys and girls, the prevalence of chewing tobacco use peaks in the 10 to 14 age group and declines in the 15 to 19-year-old age group. The reduction in chewing tobacco use among older students is probably related to the greater popularity of cigarette smoking after age fourteen. Among boys, usage is nine percent among 5 to 9-year-olds, 16% in the 10 to 14-year-old age group and 14% among 15 to 19 age group.

The pattern of use by age among Indian/Métis and non-native youth follows the general pattern. Among Inuit boys, the use of chewing tobacco reaches a peak at ages 10 to 14 (25%) and declines only slightly (23%) by age 15 to 19.

#### Use of Snuff (Table 16)

The use of snuff in the Northwest Territories school population is not as prevalent as the use of chewing tobacco. Approximately 10% of the respondents reported that they were current users of snuff. Use of snuff follows the same pattern as use of chewing tobacco. In the 5 to 9 age group six percent of the students are current users, usage increases to 12% in the 10 to 14 age group and declines to 10% in the 15 to 19 age group.

Indian/Métis and Inuit students were more likely to be current users of snuff. Approximately 17% of the Indian/Métis, 11% of the Inuit and 2% of the non-native youth claimed to be current users. Within each ethnic group boys were more likely to be current users of snuff.

The use of chewing tobacco and snuff appears to be a phenomenon that peaks around the time that youth take up cigarette smoking. There are a number of health risks associated with the use of chewing tobacco. (11,12) Smokeless tobacco contains high levels of nicotine which can lead to the development of physical dependence. Known cancer-producing chemicals have the potential of producing pre-cancerous lesions and cancer of the oral cavity, pharynx, larynx and oesophagus. (13) These risks are associated with the frequency and duration of use. The more immediate effect of chewing tobacco and snuff is probably on the dental health of youth. Plug tobacco contains burley, cigar and Virginia tobaccos and is sweetened with honey, sugars, molasses, syrups and licorice. (14) Chewing tobacco can

produce significant effects on the soft and hard tissues of the mouth, excessive wear of the occlusive and incisal surfaces of the teeth, gum recession and advanced periodontal disease. (15)

### **Beliefs Concerning the Health Consequences of Smoking and the Relation of those Beliefs to Smoking Behaviours**

Student beliefs about the health consequences of smoking were examined in the survey. Respondents were asked whether they agreed or disagreed with the following statements. "Cigarette smoking can cause lung cancer", and "cigarette smoking is harmful to young people". Response options were agree, disagree and don't know. Responses to the first question may be summarized as follows.

- Approximately 95% of the student population agreed with the statement that "Cigarette smoking causes lung cancer".
- The proportion of students who expressed agreement with the statement increased slightly with age. Females were somewhat more likely to agree.
- Non-Native youth were more likely to express agreement with the statement, although the proportions indicating agreement among Indian and Inuit youth were still over 90%.
- Current smokers were less likely to agree with the statement, however, the vast majority of smokers agreed with the statement.

The responses to the statement "Cigarette smoking can be harmful to young people" were similar in pattern. In all age groups, within each ethnic group and for both sexes, a majority of the respondents reported that they agreed with the statement. Girls were more likely to express agreement with the statement than boys, and non-native students were more likely to agree than native students. Current smokers were only slightly less inclined to agree. The data supported the view that the vast majority of students agreed with the view that smoking is harmful.

It should be pointed out that knowledge or beliefs about the dangers of smoking are often confused with attitudes toward smoking behaviour. Attitudes may be much more complex than simple beliefs about the desirability of smoking. Various factors influence attitudes toward smoking. These factors include the social, psychological and cultural context which supports the behaviour.

## CONCLUSIONS AND RECOMMENDATIONS

This survey has examined smoking behaviour in the Northwest Territories school population. Regardless of the potential bias introduced by the fact that the survey was administered in a classroom setting, a number of major findings have implications for the health of Northwest Territories youth and health promotion programs.

It is clear that the onset of smoking behaviour is earlier and the prevalence of smoking is higher than recorded in surveys elsewhere in Canada. It is also apparent that within the school population, the prevalence of smoking is generally higher among native youth.

The social climate supportive of high smoking rates appears to be more pronounced among Indian/Métis and Inuit youth. On the basis of the proportion of students who indicated that their parents smoked, it is likely that the majority of adults in the Northwest Territories smoke. Therefore health promotion programs directed at smoking among youth would have to take into account the effect of family smoking patterns on youth.

While smoking prevalence is higher among native youth, the frequency of smoking is higher among non-native youth. This pattern may reflect differences between non-native and native students in the availability of cigarettes or in the financial resources to purchase cigarettes.

An additional cause for concern is the higher prevalence of smoking among girls. After age 10, the smoking rate among girls is higher in all three ethnic groups. Over 60% of Inuit girls between the ages of 15 to 19 admit to daily smoking. Girls were generally more likely to smoke over 60 cigarettes a week.

There were strong regional differences in smoking prevalence within the Northwest Territories. These regional differences appear to be due to variations in the ethnic composition of the student population.

The data from the survey confirmed earlier findings relating to social context and smoking behaviour. Four variables, age, peer group smoking, sibling smoking and parental smoking behaviour explain a large proportion of the smoking behaviour of Northwest Territories' youth.

The use of chewing tobacco and snuff by youth appears to be a phenomenon that is limited to Inuit and Indian/Métis boys. The use of chewing tobacco and snuff may be a behaviour that is engaged in until the youth takes up cigarette smoking. Probably the most immediate effect of chewing tobacco and snuff use is on the dental health of the children. Health promotion programs directed at tobacco use in the Northwest Territories should also address the use of non-smoked tobacco.

Chart 1

PERCENTAGE OF STUDENT POPULATION  
WHO INDICATED HAVING EVER SMOKED BY AGE AND SEX  
NORTHWEST TERRITORIES 1982

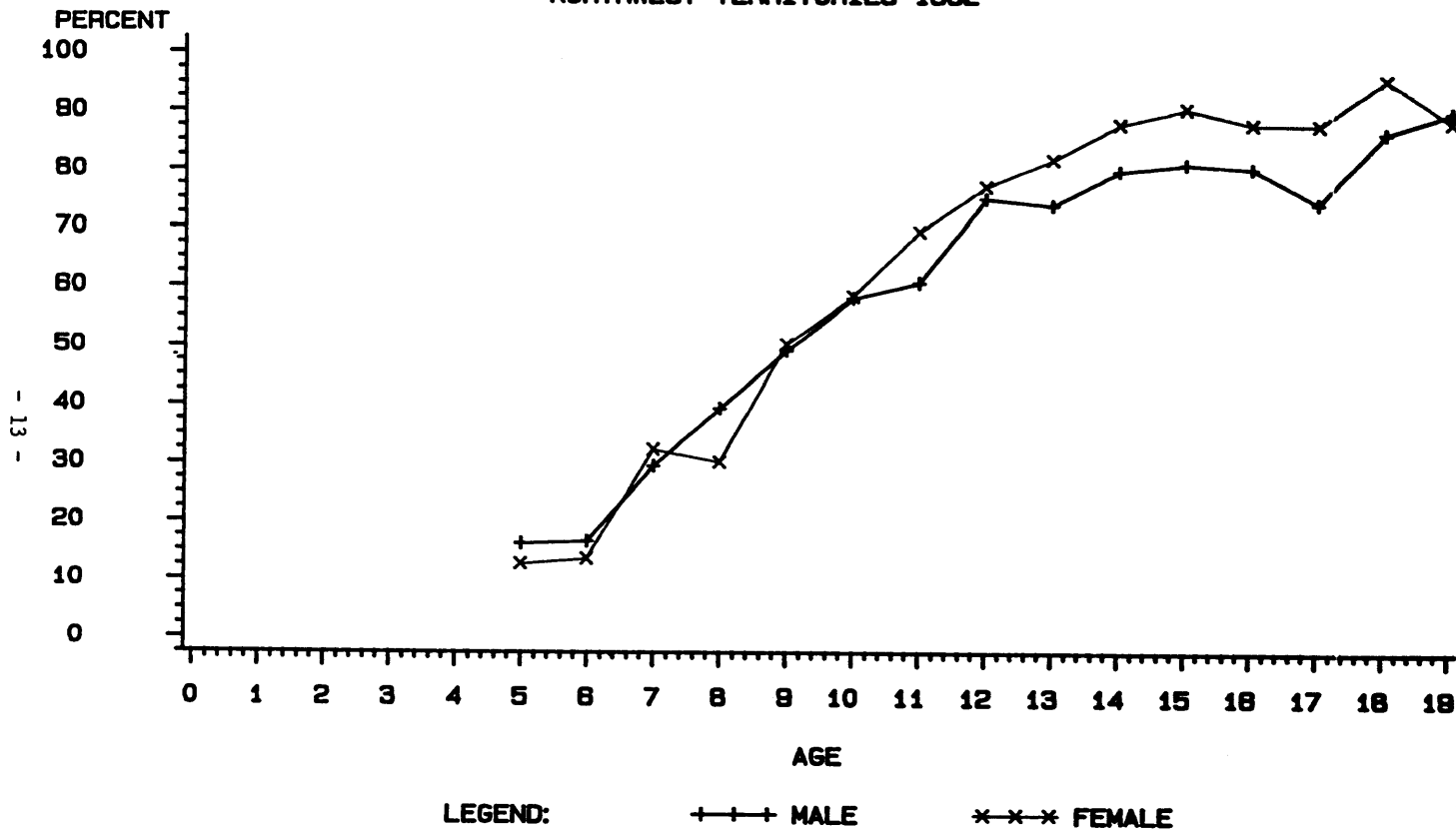
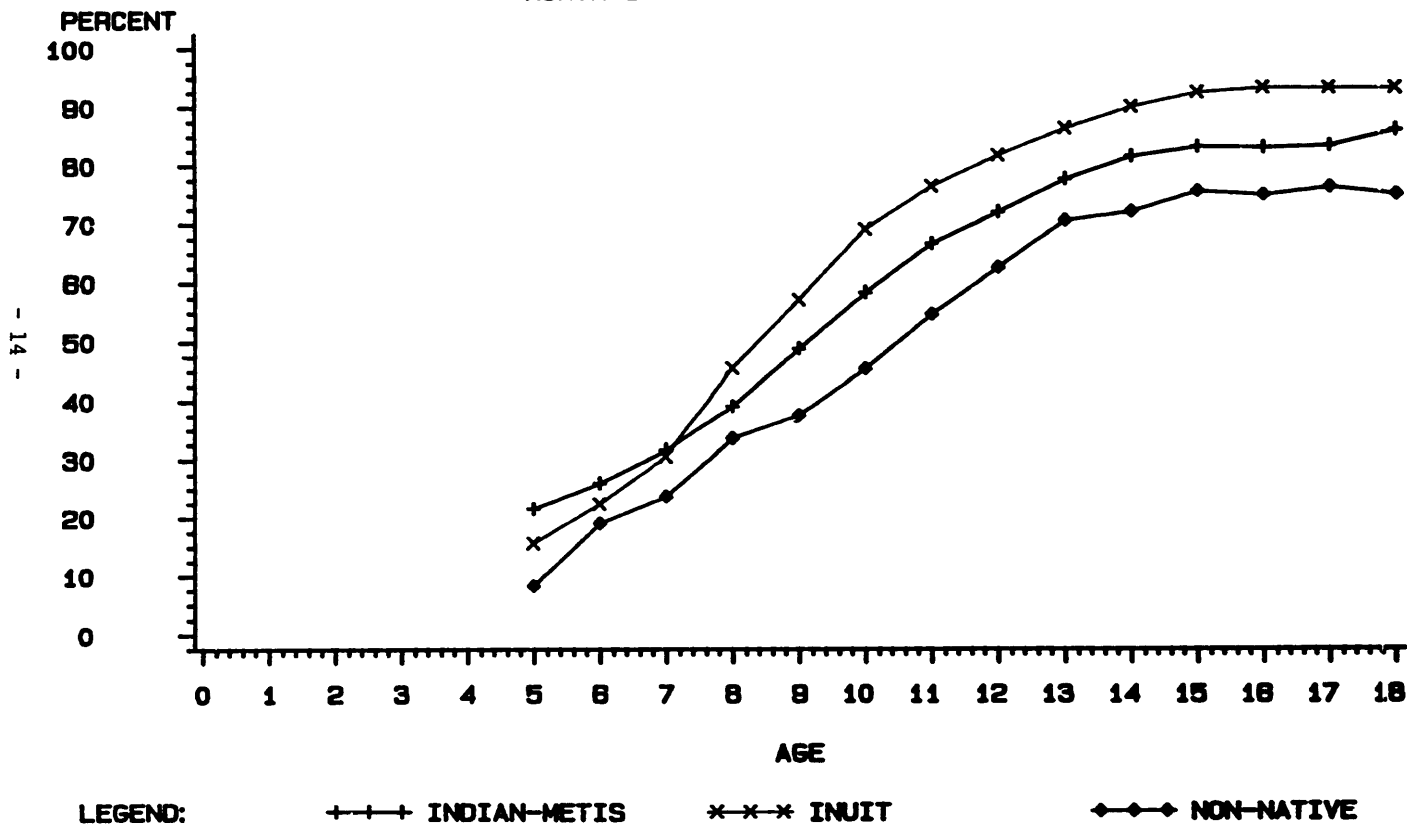


Chart 2

PERCENTAGE OF STUDENT POPULATION  
WHO INDICATED HAVING EVER SMOKED BY AGE AND ETHNIC GROUP  
NORTHWEST TERRITORIES 1982



PERCENTAGE OF MALE STUDENT POPULATION  
WHO INDICATED HAVING EVER SMOKED BY AGE AND ETHNIC GROUP  
NORTHWEST TERRITORIES 1982

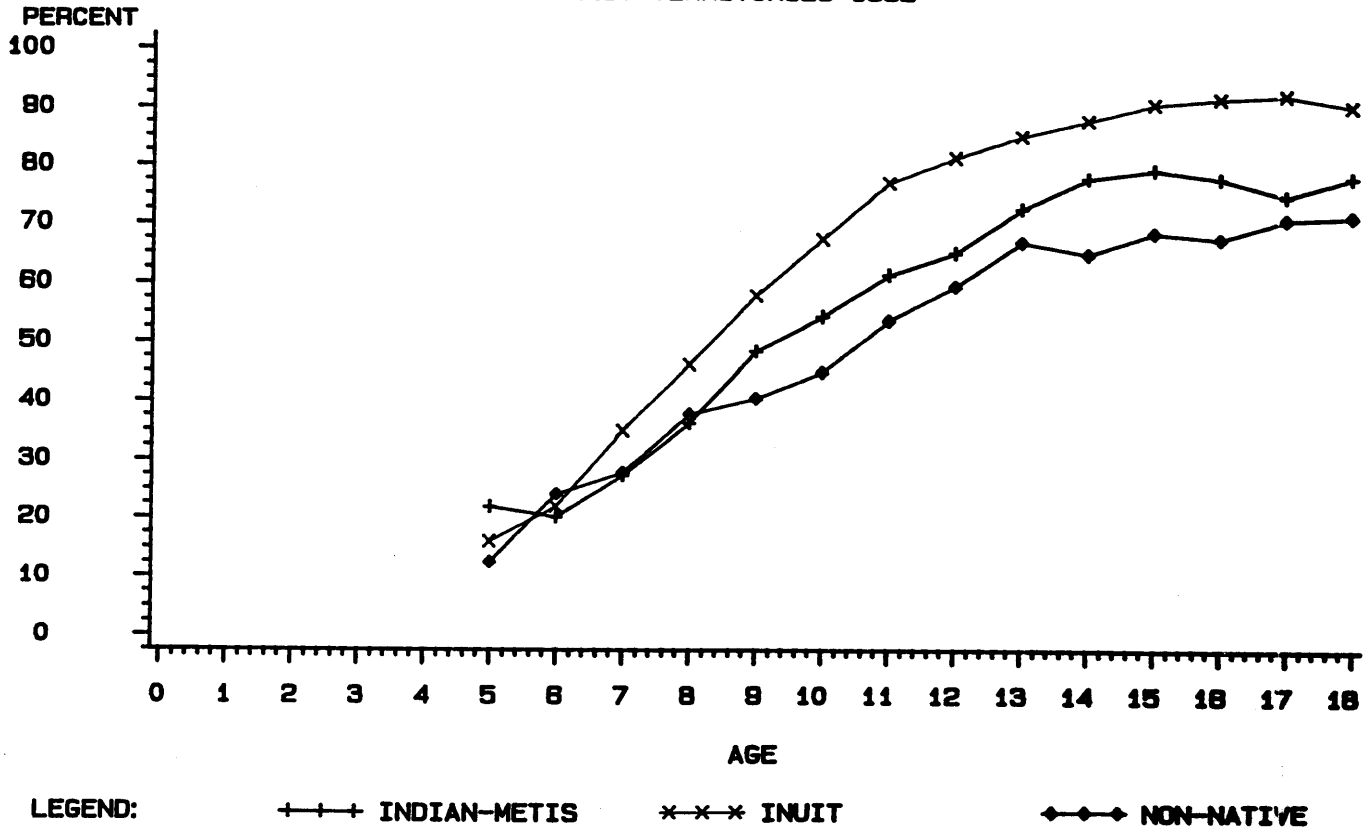




Chart 4

PERCENTAGE OF FEMALE STUDENT POPULATION  
WHO INDICATED HAVING EVER SMOKED BY AGE AND ETHNIC GROUP  
NORTHWEST TERRITORIES 1982

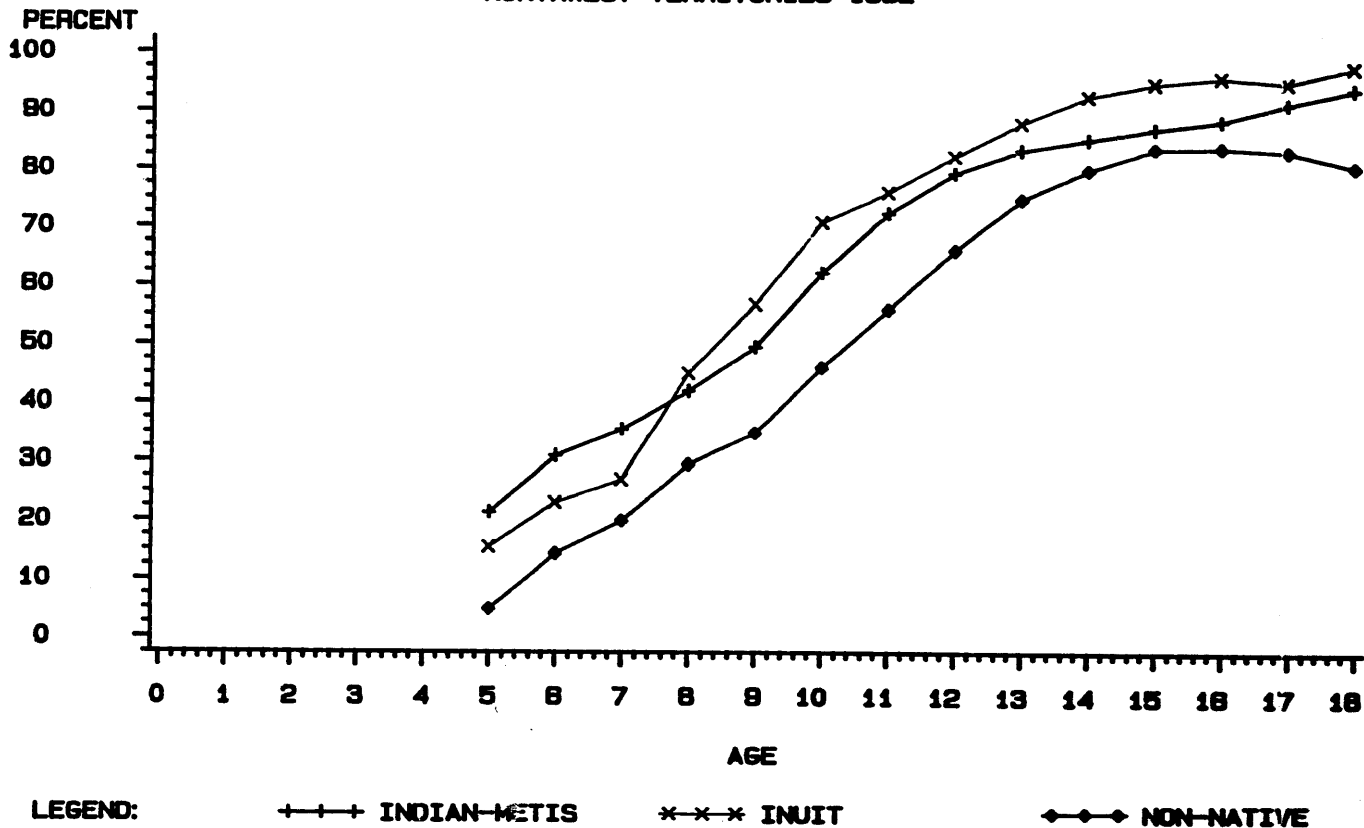


Chart 5

PERCENTAGE OF STUDENT POPULATION WHO INDICATED HAVING  
SMOKED IN PAST FOUR WEEKS BY ETHNIC GROUP, AGE AND SEX  
NORTHWEST TERRITORIES 1982

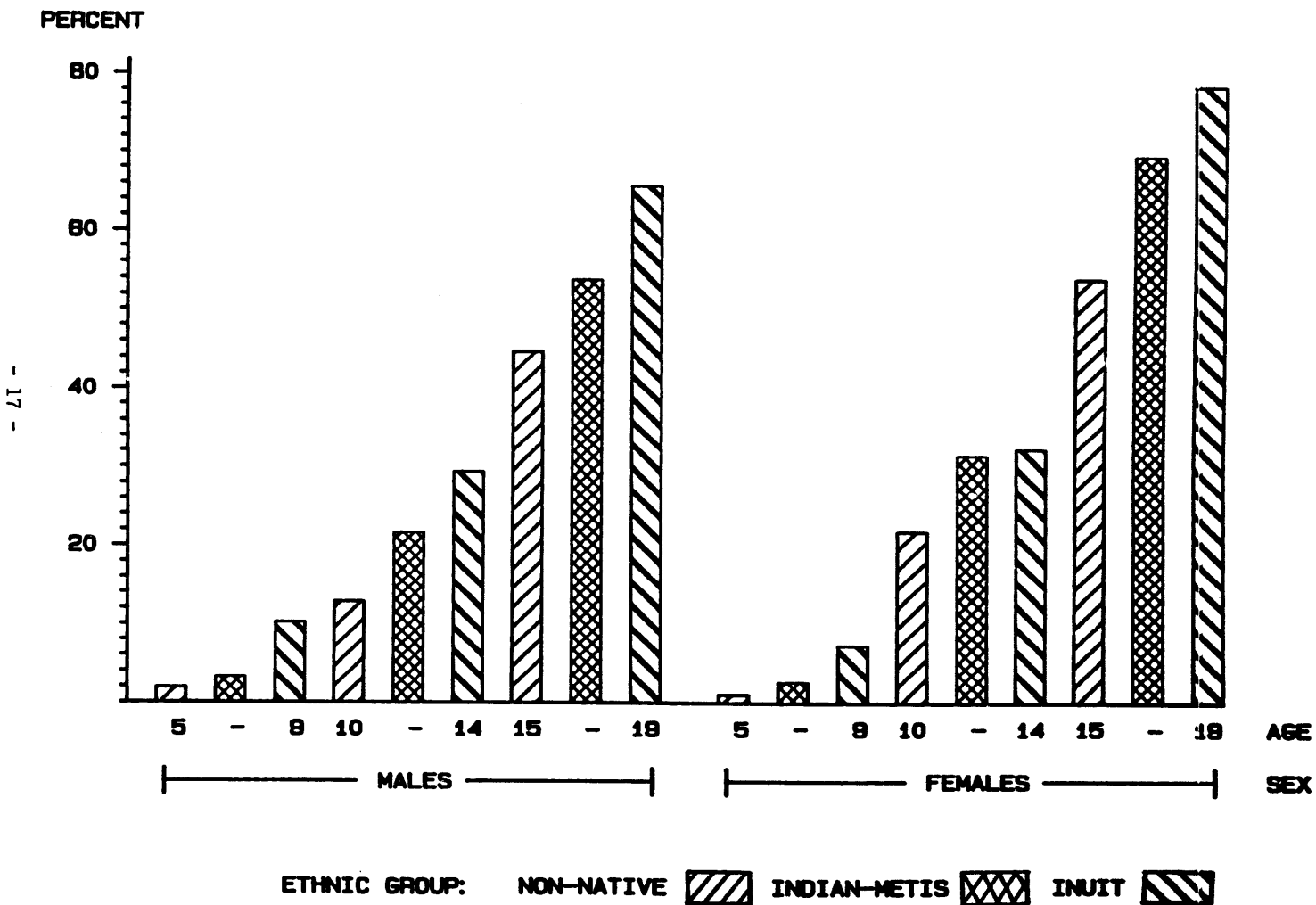


Chart 6

PERCENTAGE OF STUDENT POPULATION WHO INDICATED HAVING  
SMOKED EVERYDAY BY ETHNIC GROUP, AGE AND SEX  
NORTHWEST TERRITORIES 1982

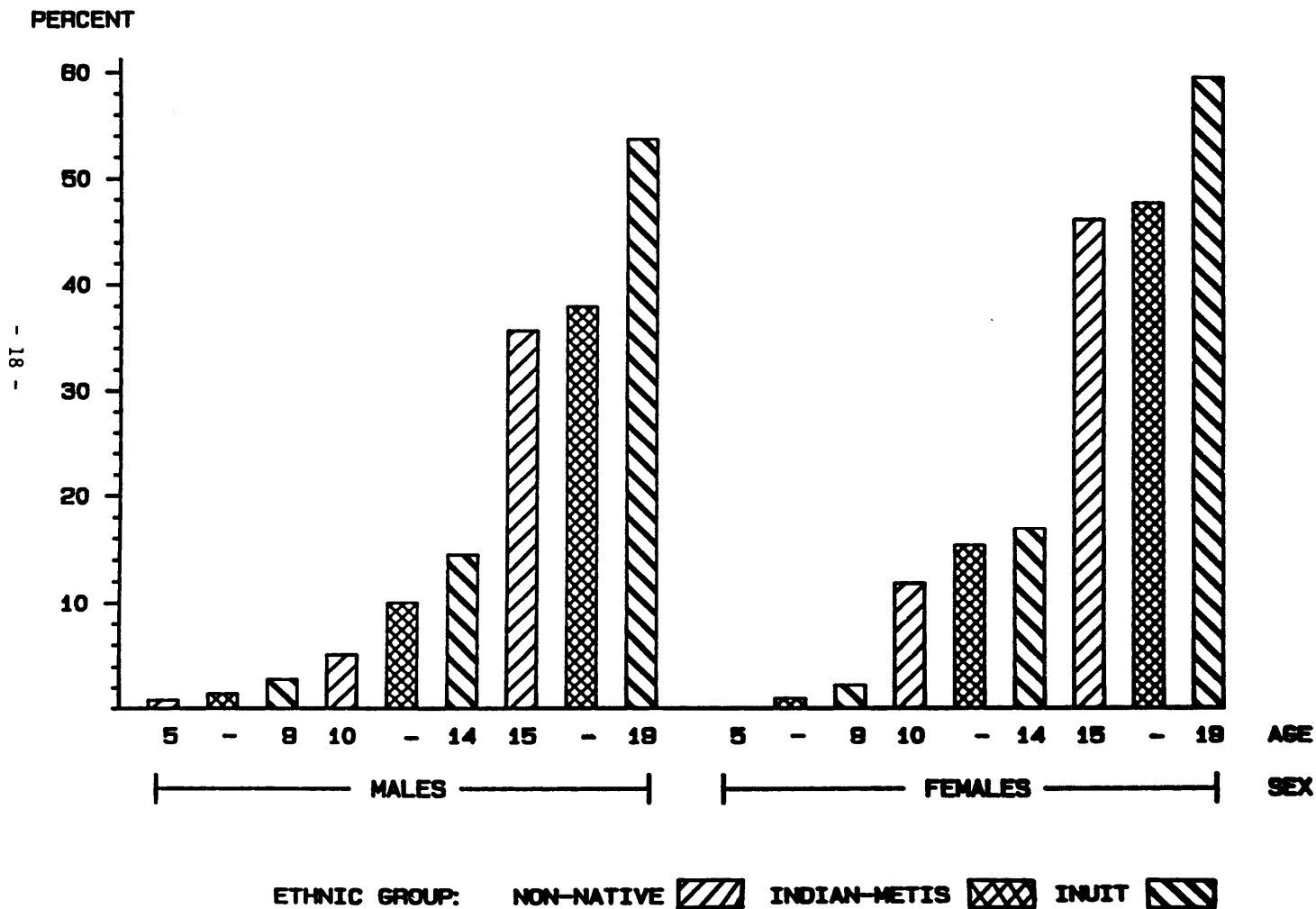


TABLE 1

PERCENTAGE OF STUDENTS WHO SMOKED IN LAST  
FOUR WEEKS BY AGE GROUP, SEX AND ETHNICITY,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\*

AGE GROUP	ETHNIC GROUP	MALES	FEMALES	BOTH SEXES
5-9	Inuit	10.9% (439)	7.9% (471)	9.3% (910)
	Indian/Métis	3.4 (204)	2.9 (208)	3.1 (412)
	Non-Native	2.0 (357)	1.1 (372)	1.5 (729)
TOTAL		6.2 (1000)	4.5 (1051)	5.3 (2051)
10-14	Inuit	31.7% (701)	34.8% (690)	33.2% (1391)
	Indian/Métis	22.7 (428)	33.4 (431)	28.1 (854)
	Non-Native	13.8 (581)	23.0 (556)	18.3 (1137)
TOTAL		23.3 (1710)	30.5 (1677)	26.9 (3387)
15-19	Inuit	67.8% (286)	80.1% (241)	73.4% (527)
	Indian/Métis	57.2 (173)	71.6 (194)	64.9 (367)
	Non-Native	45.8 (284)	56.1 (228)	50.4 (512)
TOTAL		56.9 (743)	69.4 (663)	62.8 (1406)

\* Numbers in parentheses represent the base N's upon which the percentages are based.

Base N = 6844  
Unknown/No Answer = 461  
Total N = 7305

TABLE 2

**PERCENTAGE OF STUDENTS WHO USUALLY SMOKE EVERY DAY  
BY AGE GROUP, SEX AND ETHNICITY,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\***

AGE GROUP	ETHNIC GROUP	MALES	FEMALES	BOTH SEXES
5-9	Inuit	2.7% (455)	2.2% (490)	2.5% (945)
	Indian/Métis	1.4 (210)	0.9 (214)	1.2 (424)
	Non-Native	0.8 (369)	- (373)	0.4 (742)
TOTAL		1.8 (1034)	1.2 (1077)	1.5 (2111)
10-14	Inuit	15.3% (712)	17.8% (709)	16.5% (1421)
	Indian/Métis	10.4 (433)	16.1 (436)	13.2 (869)
	Non-Native	5.4 (592)	12.4 (558)	8.8 (1150)
TOTAL		10.7 (1737)	15.6 (1703)	13.1 (3440)
15-19	Inuit	55.0% (289)	61.0% (246)	57.8% (535)
	Indian/Métis	39.5 (177)	49.5 (194)	44.7 (371)
	Non-Native	36.6 (284)	47.6 (231)	41.6 (515)
TOTAL		44.4 (750)	53.1 (671)	48.5 (1421)

\* Numbers in parentheses represent base N's upon which percentages are based. Unknowns and No Answers are excluded from the calculation of percentages. These responses represent 4.6% of the total N and their exclusion had little effect on the percentages.

Base N = 6972  
Unknown/No Answer = 333  
Total N = 7305

TABLE 3

**CURRENT SMOKING BY AGE AND EDUCATIONAL REGION,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\***

EDUCATIONAL REGION	AGE GROUP			TOTAL
	5-9	10-14	15-19	
FORT SMITH	2.0% (592)	21.3% (972)	54.0% (717)	26.6% (2281)
INUVIK	4.7 (275)	25.7 (545)	67.9 (224)	29.2 (1044)
BAFFIN	12.6 (516)	39.8 (728)	78.9 (270)	37.5 (1514)
KEEWATIN	2.8 (354)	13.5 (430)	46.0 (87)	12.4 (871)
KITIKMEOT	4.0 (174)	25.9 (290)	56.6 (83)	23.6 (547)
NON-GOVERNMENT	0.6 (318)	21.4 (658)	61.1 (72)	17.8 (1048)
TOTAL	4.9 (2224)	25.1 (3623)	60.8 (1453)	26.1 (7305)

Current smokers are defined as students who reported they had smoked in the previous four weeks.

\* Numbers in parentheses represent base N's upon which percentages are derived.

TABLE 4

PERCENTAGE OF POPULATION AGE 15 to 19 CLASSIFIED AS A REGULAR  
SMOKER,  
NORTHWEST TERRITORIES COMPARED TO CANADA

SURVEY	DESCRIPTION OF SURVEY	MALES	FEMALES
Labour Force Survey 1981	household survey proxy reporting*	22.8%	23.4%
Canada Health Survey 1978/1979	household survey self-reporting	32.3	33.9
Smoking Habits of Canadian School Children - 1978	school population probability sample self-reporting	23.8	29.0
Gallup Youth Omnibus Survey - 1982	modified probability sample, self-reporting	31.5	35.4
Northwest Territories 1982	school population census (self-reporting)		
	Non-Native	36.6	47.6
	Indian/Métis	39.5	49.5
	Inuit	55.0	61.0
	TOTAL	44.4	53.1

\* Proxy-reporting refers to an instance in which another individual in the household provides information relating to the behaviour of household members. Self-reporting tends to result in higher rates.

TABLE 5

NUMBER OF CIGARETTES USUALLY SMOKED IN A WEEK BY CURRENT SMOKERS BY  
ETHNICITY AND SEX, NORTHWEST TERRITORIES SCHOOL POPULATION 1982

NUMBER OF CIGARETTES PER WEEK	INDIANS/METIS			INUIT			NON-NATIVE			TOTAL SCHOOL POPULATION		
	MALES	FEMALES	BOTH SEXES	MALES	FEMALES	BOTH SEXES	MALES	FEMALES	BOTH SEXES	MALES	FEMALES	BOTH SEXES
I do not smoke *	5.0%	2.5%	3.5%	2.8%	4.0%	3.4%	6.2%	3.9%	4.9%	4.1%	3.5%	3.8%
1-4	25.1	25.6	25.4	24.6	23.6	24.1	21.4	19.1	20.2	24.0	23.0	23.5
5-9	14.6	14.7	14.7	19.8	21.8	20.7	9.0	10.2	9.7	16.0	16.8	16.4
10-19	18.6	21.1	20.0	18.1	19.2	18.6	12.9	16.0	14.6	16.9	18.9	18.0
20-39	19.1	17.2	18.0	20.5	16.5	18.5	14.3	17.2	15.9	18.7	16.9	17.7
40-59	8.5	7.0	7.6	7.4	8.2	7.8	14.8	8.6	11.4	9.4	8.0	8.7
60 or more	9.0	11.9	10.7	6.8	6.7	6.7	21.4	25.0	23.3	10.8	12.9	11.9
TOTAL N	(199)	(285)	(484)	(459)	(449)	(908)	(210)	(256)	(466)	(868)	(990)	(1858)

\* Respondents who reported that they had smoked in the past four weeks, but did not smoke on a weekly basis. These students could be categorized as experimenters.



TABLE 6

NUMBER OF CIGARETTES USUALLY SMOKED IN ONE WEEK BY REGULAR SMOKERS\*  
BY ETHNICITY AND SEX, NORTHWEST TERRITORIES SCHOOL POPULATION, 1982

NUMBER OF CIGARETTES PER WEEK	INDIANS/METIS			INUIT			NON-NATIVE			TOTAL SCHOOL POPULATION		
	MALES	FEMALES	BOTH SEXES	MALES	FEMALES	BOTH SEXES	MALES	FEMALES	BOTH SEXES	MALES	FEMALES	BOTH SEXES
1-9	15.5%	15.0%	15.2%	27.1%	29.5%	28.3%	10.8%	9.5%	9.8%	20.2%	19.9%	20.0%
10-19	25.0	29.9	27.9	20.6	24.8	22.7	14.5	19.5	17.4	20.0	24.7	22.6
20-39	30.2	23.4	26.2	30.6	23.1	26.8	20.3	23.5	22.2	27.9	23.2	25.4
40-59	13.8	12.0	12.7	11.0	12.2	11.6	22.5	12.3	16.8	14.7	12.2	13.3
60 or more	15.5	19.7	18.0	10.7	10.4	10.6	31.9	35.2	33.8	17.2	20.0	18.7
TOTAL N	(116)	(167)	(283)	(281)	(278)	(559)	(138)	(179)	(317)	(535)	(624)	(1159)

\* Regular smokers are respondents who reported that they usually smoked everyday.

TABLE 7

NUMBER OF CIGARETTES USUALLY SMOKED IN ONE WEEK BY CURRENT SMOKERS  
AGE 15 TO 19, BY ETHNICITY AND SEX, NORTHWEST TERRITORIES 1982

NUMBER OF CIGARETTES PER WEEK	INDIANS/METIS			INUIT			NON-NATIVE			TOTAL SCHOOL POPULATION		
	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL	MALES	FEMALES	TOTAL
I do not smoke*	3.1%	0.7%	1.7%	1.0%	-	0.5%	3.1%	1.6%	2.4%	2.1%	0.7%	1.4%
1-4	15.3	15.2	15.2	9.8	12.4	11.3	7.8	8.7	8.2	10.5	12.4	11.5
5-9	14.3	11.6	12.7	12.4	18.6	15.4	6.3	3.8	5.1	11.0	12.4	11.6
10-19	18.4	24.6	22.0	18.0	17.6	17.8	8.6	13.4	11.0	15.2	18.5	17.0
20-39	25.5	21.7	23.3	34.5	23.6	29.1	19.5	20.5	20.0	27.9	22.1	24.8
40-59	9.2	8.7	8.9	11.3	14.5	12.8	21.9	13.4	17.6	14.0	12.4	13.2
60 or more	14.3	17.4	16.2	12.9	13.3	13.1	32.8	38.6	35.7	19.3	21.5	20.5
TOTAL N	(98)	(138)	(236)	(194)	(188)	(382)	(128)	(127)	(255)	(420)	(453)	(873)

\* Respondents who reported that they had smoked in the past four weeks, but did not smoke on a weekly basis. These students could be categorized as 'experimenters'.

TABLE 8

PRIMARY SOURCE OF CIGARETTES FOR CURRENT SMOKERS  
 BY ETHNIC GROUP, NORTHWEST TERRITORIES  
 SCHOOL POPULATION, 1982

SOURCE OF CIGARETTES	INDIAN/METIS	INUIT	NON-NATIVE
BUY MYSELF	59.7%	31.7%	66.0%
FRIENDS	28.3	43.3	23.0
PARENTS	3.3	13.6	4.1
OTHER*	8.7	11.4	6.9
BASE N	481	900	465

\* OTHER A small proportion of respondents gave more than one response to the question i.e. parents, buy myself, friends.

TABLE 9

PERCENTAGE OF STUDENTS WHO REPORTED THAT THEY WERE CURRENT SMOKERS  
BY SEX, ETHNICITY AND SMOKING BEHAVIOUR OF PARENTS,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1992\*

SEX	ETHNIC GROUP	BOTH PARENTS SMOKE	ONE PARENT SMOKES	NEITHER PARENT SMOKES
MALES	Indian/Métis	25.6% (371)	25.5% (310)	20.0% (80)
	Inuit	33.8 (724)	31.7 (473)	24.9 (177)
	Non-Native	21.3 (422)	18.3 (431)	13.0 (330)
	TOTAL	28.3 (1517)	25.4 (1214)	17.5 (587)
FEMALES	Indian/Métis	37.5 (339)	35.4 (356)	27.8 (108)
	Inuit	33.3 (721)	36.4 (450)	25.7 (187)
	Non-Native	29.8 (393)	22.7 (414)	14.0 (314)
	TOTAL	33.3 (1453)	31.5 (1222)	20.0 (609)
BOTH SEXES	Indian/Métis	31.3 (710)	30.8 (666)	24.5 (188)
	Inuit	33.6 (1445)	34.0 (923)	25.3 (364)
	Non-Native	25.4 (815)	20.5 (845)	13.5 (644)
	TOTAL	30.8 (2970)	28.4 (2434)	18.8 (1196)

Base N = 6600  
Unknown/No Answer = 705  
Total N = 7305

\* Numbers in parentheses are base N's for the percentages.

TABLE 10

**PERCENTAGE OF STUDENTS WHO REPORTED THAT THEY WERE CURRENT SMOKERS  
BY AGE, ETHNICITY AND SMOKING BEHAVIOUR OF PARENTS,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\***

AGE	ETHNIC GROUP	BOTH PARENTS SMOKE	ONE PARENT SMOKES	NEITHER PARENT SMOKES
5-9	Indian/Métis	3.6% (196)	1.4% (222)	0.7% (142)
	Inuit	9.8 (498)	8.5 (271)	7.2 (125)
	Non-Native	2.7 (223)	1.5 (275)	0.5 (208)
	<b>TOTAL</b>	<b>6.8 (917)</b>	<b>3.9 (768)</b>	<b>2.3 (475)</b>
10-14	Indian/Métis	30.6 (392)	27.5 (334)	22.2 (99)
	Inuit	36.2 (713)	32.5 (452)	23.3 (176)
	Non-Native	21.7 (397)	20.1 (403)	12.5 (305)
	<b>TOTAL</b>	<b>30.9 (1502)</b>	<b>26.9 (1189)</b>	<b>17.4 (580)</b>
15-19	Indian/Métis	64.2 (148)	68.8 (157)	57.5 (40)
	Inuit	76.1 (234)	72.0 (200)	66.7 (63)
	Non-Native	59.0 (195)	52.7 (167)	36.6 (131)
	<b>TOTAL</b>	<b>67.3 (577)</b>	<b>64.9 (524)</b>	<b>48.3 (234)</b>

Base N = 6600  
 Unknown/No Answer = 705  
 Total N = 7305

\* Numbers in parentheses are base N's for the percentages.

TABLE 11

PERCENTAGE OF STUDENTS WHO REPORTED THAT THEY WERE CURRENT SMOKERS BY SEX, ETHNICITY AND SMOKING BEHAVIOUR, OF SIBLINGS, NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\*

SEX	ETHNIC GROUP	SMOKING SIBLINGS (BOTH SEXES)	SMOKING SIBLINGS (SAME SEX)	NO SMOKING SIBLING
MALES	Indian/Métis	33.6% (265)	31.0% (232)	13.6% (308)
	Inuit	43.4 (622)	34.9 (416)	12.6 (388)
	Non-Native	35.3 (116)	34.4 (262)	10.2 (844)
	TOTAL	39.9 (1003)	33.7 (910)	11.5 (1540)
FEMALES	Indian/Métis	47.8 (270)	42.1 (252)	17.4 (311)
	Inuit	47.6 (572)	34.4 (407)	13.7 (423)
	Non-Native	51.9 (106)	38.9 (265)	13.5 (785)
	TOTAL	48.1 (948)	37.8 (924)	14.1 (1519)
BOTH SEXES	Indian/Métis	40.7 (535)	36.8 (484)	15.5 (619)
	Inuit	45.4 (1194)	34.6 (823)	13.2 (811)
	Non-Native	43.2 (222)	36.6 (527)	11.5 (1629)
	TOTAL	(1951)	(1834)	(3059)

Base N = 6844

Unknown/No Answer = 461

Total N = 7305

\* Numbers in parenthesis are base N's for the percentages.

TABLE 12

PERCENTAGE OF STUDENTS WHO REPORTED THAT THEY WERE CURRENT SMOKERS  
BY AGE, ETHNICITY AND SMOKING BEHAVIOUR OF SIBLINGS,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\*

SEX	ETHNIC GROUP	SMOKING SIBLINGS (BOTH SEXES)	SMOKING SMOKES (SAME SEX)	NO SMOKING SIBLING
5-9	Indian/Métis	5.7% (70)	4.8% (84)	1.9% (258)
	Inuit	14.7 (245)	12.7 (236)	4.4 (429)
	Non-Native	5.0 (20)	6.0 (67)	0.9 (642)
	TOTAL	12.2 (335)	9.8 (387)	2.3 (1329)
10-14	Indian/Métis	35.1 (305)	29.4 (262)	19.5 (292)
	Inuit	40.5 (635)	33.6 (425)	18.7 (331)
	Non-Native	33.3 (108)	28.7 (272)	12.4 (757)
	TOTAL	38.2 (1048)	31.1 (959)	15.4 (1380)
15-19	Indian/Métis	66.9 (160)	70.3 (138)	49.3 (69)
	Inuit	79.3 (314)	69.1 (162)	51.0 (51)
	Non-Native	62.8 (94)	59.0 (188)	38.3 (230)
	TOTAL	73.1 (568)	65.6 (488)	42.3 (350)

Base N = 6844  
Unknown/No Answer = 461  
Total N = 7305

\* Numbers in parentheses are base N's for the percentages.

TABLE 13

**PERCENTAGE OF STUDENTS WHO REPORTED THAT THEY WERE  
CURRENT SMOKERS BY AGE, SEX AND SMOKING  
BEHAVIOUR OF FRIENDS, NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\***

SEX	ETHNIC GROUP	HOW MANY OF YOUR GOOD FRIENDS SMOKE?			
		NONE	SOME	MOST	ALL
MALES	Indian/Métis	2.5% (285)	22.1% (290)	58.0% (150)	60.7% (66)
	Inuit	5.7 (418)	20.4 (495)	65.2 (313)	74.6 (181)
	Non-Native	1.5 (521)	15.3 (476)	60.6 (170)	69.6 (46)
	TOTAL	3.2 (1224)	18.9 (1261)	62.2 (633)	72.7 (293)
FEMALES	Indian/Métis	2.4 (209)	27.2 (302)	59.1 (208)	75.5 (106)
	Inuit	2.6 (422)	25.1 (490)	68.0 (297)	72.9 (177)
	Non-Native	1.1 (457)	18.2 (396)	59.9 (237)	71.9 (57)
	TOTAL	1.9 (1088)	23.3 (1188)	62.9 (742)	73.5 (340)
BOTH SEXES	Indian/Métis	2.4 (494)	24.7 (592)	58.7 (358)	73.3 (172)
	Inuit	4.2 (840)	22.7 (985)	66.6 (610)	73.7 (358)
	Non-Native	1.3 (978)	16.6 (872)	60.2 (407)	70.9 (103)
	TOTAL	2.5 (2312)	21.0 (2449)	62.5 (1375)	73.1 (633)

Base N = 6769  
 Unknown/No Answer = 536  
 Total N = 7305

\* Numbers in parentheses are base N's for the percentages



TABLE 14

**PERCENTAGE OF STUDENTS WHO REPORTED THAT THEY WERE CURRENT SMOKERS  
BY AGE, ETHNICITY AND SMOKING BEHAVIOUR OF FRIENDS,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\***

AGE	ETHNIC GROUP	HOW MANY OF YOUR GOOD FRIENDS SMOKE?			
		NONE	SOME	MOST	ALL
5-9	Indian/Métis	1.5% (264)	3.6% (110)	27.8% (18)	- (2)
	Inuit	3.0 (566)	15.7 (268)	23.3 (30)	52.2 (23)
	Non-Native	0.6 (544)	3.2 (156)	20.0 (15)	- (1)
	<b>TOTAL</b>	<b>1.7 (1374)</b>	<b>9.6 (534)</b>	<b>23.8 (63)</b>	<b>46.2 (26)</b>
10-14	Indian/Métis	3.3 (215)	23.0 (366)	50.5 (184)	65.5 (87)
	Inuit	6.2 (260)	22.0 (608)	58.9 (304)	65.7 (198)
	Non-Native	1.6 (380)	14.3 (491)	49.3 (209)	58.3 (48)
	<b>TOTAL</b>	<b>3.4 (855)</b>	<b>19.7 (1465)</b>	<b>53.8 (697)</b>	<b>64.6 (333)</b>
15-19	Indian/Métis	7.1 (14)	49.6 (115)	71.8 (156)	82.9 (82)
	Inuit	20.0 (10)	44.4 (108)	79.5 (273)	88.9 (135)
	Non-Native	7.7 (52)	31.2 (221)	76.4 (182)	83.3 (54)
	<b>TOTAL</b>	<b>7.1 (76)</b>	<b>39.2 (444)</b>	<b>76.6 (611)</b>	<b>86.0 (271)</b>

Base N = 6749

Unknown/No Answer = 556

Total N = 7305

\* Numbers in parentheses are base N's for the percentages

**TABLE 15**

**CURRENT USE OF CHEWING TOBACCO BY AGE, SEX AND ETHNICITY,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\***

AGE GROUP	ETHNIC GROUP	MALES	FEMALES	BOTH SEXES
5-9	Inuit	14.6% (466)	3.5% (508)	8.8% (974)
	Indian/Métis	9.7 (216)	3.5 (226)	6.6 (442)
	Non-Native	2.3 (387)	0.8 (391)	1.5 (778)
<b>TOTAL</b>		<b>9.2 (1069)</b>	<b>2.6 (1125)</b>	<b>5.8 (2194)</b>
10-14	Inuit	24.6% (740)	4.8% (732)	14.7% (1472)
	Indian/Métis	19.8 (439)	8.0 (450)	13.8 (889)
	Non-Native	3.5 (622)	1.2 (585)	2.4 (1207)
<b>TOTAL</b>		<b>16.2 (1798)</b>	<b>4.4 (1767)</b>	<b>10.4 (3565)</b>
15-19	Inuit	23.2% (293)	3.7% (244)	14.3% (537)
	Indian/Métis	12.6 (183)	2.5 (198)	7.3 (381)
	Non-Native	4.8 (289)	2.5 (237)	3.8 (526)
<b>TOTAL</b>		<b>13.7 (765)</b>	<b>2.9 (679)</b>	<b>8.7 (1444)</b>

\* Numbers in parentheses represent base N's upon which percentages are based.

Base N = 7203  
 Unknown/No Answer = 102  
 Total N = 7305

TABLE 16

**CURRENT USE OF SNUFF BY AGE, SEX AND ETHNICITY,  
NORTHWEST TERRITORIES SCHOOL POPULATION, 1982\***

AGE GROUP	ETHNIC GROUP	MALES	FEMALES	BOTH SEXES
5-9	Indian/Métis	10.3% (214)	12.5% (224)	11.4% (438)
	Inuit	12.0 (468)	2.4 (505)	7.0 (973)
	Non-Native	2.1 (381)	1.0 (391)	1.5 (772)
	<b>TOTAL</b>	<b>8.1 (1063)</b>	<b>3.9 (1120)</b>	<b>5.9 (2183)</b>
10-14	Indian/Métis	25.5% (443)	16.6% (453)	21.0% (896)
	Inuit	23.8 (748)	4.0 (728)	14.0 (1476)
	Non-Native	3.4 (625)	2.2 (583)	2.8 (1208)
	<b>TOTAL</b>	<b>17.2 (1816)</b>	<b>6.6 (1764)</b>	<b>12.0 (3580)</b>
15-19	Indian/Métis	20.2% (183)	8.1% (198)	13.9% (381)
	Inuit	22.0 (291)	3.3 (244)	13.5 (535)
	Non-Native	4.5 (290)	1.3 (237)	3.0 (527)
	<b>TOTAL</b>	<b>14.9 (764)</b>	<b>4.0 (679)</b>	<b>9.8 (1443)</b>

\* Numbers in parentheses represent base N's upon which the percentages are based.

Base N = 7206  
 Unknown/No Answer = 101  
 Total N = 7305

## REFERENCES

1. Matthews, V.L., Piper, G.W. The Saskatoon smoking study: habits and beliefs of children in grades seven and eight about smoking. Department of Social and Preventive Medicine, University of Saskatchewan, Saskatoon, May 1974.
2. Piper, G.W., Jones, J.A., Matthews, V.L. The Saskatoon smoking study, results of the second year. Canadian Journal of Public Health. 65: 127-129 March/April 1974.
3. Morison, J.B., Medovy, H. Smoking habits of Winnipeg school children, Canadian Medical Association Journal 84: 1006-1113, 1961.
4. Morison, J.B., Smoking habits of Winnipeg school students, 1960-1980, Canadian Medical Association Journal 126: 153, 154, January 15, 1982.
5. Hanley, J.A., Robinson, J.C. Cigarette smoking and the young: a national survey, Canadian Medical Association Journal, March 20, 1976, Vol. 114: 511-517.
6. Brown, J.S., Cherry, W.A., Forbes, W.F. Smoking habits of Canadian school children: a summary report. Health Promotion Directorate, Health Services and Promotion Branch, Health and Welfare Canada, January 1980.
7. Beaudry, P.H. Pulmonary function survey of the Canadian Eastern Arctic Eskimo, Archives of Environmental Health, Vol. 17, Oct. 1968, 524-528.
8. Young, Kue T. Self-perceived and clinically-assessed health status of Indians in Northwestern Ontario: analysis of a health survey. Canadian Journal of Public Health Vol. 13, July/Aug. 1982, 272-277.
9. Schaefer, O., Timmerman, J.F.W., Eaton, R.D.P., Matthews, A.R. General and nutritional health in two eskimo populations at different stages of accumulation. Canadian Journal of Public Health, 1980; 71: 397-404.
10. Wigle, D.T., Johanssen, H. Letter to Editor. Canadian Medical Association Journal, June 1, 1982. p. 1277-78.
11. Winn, D.M. et al. Snuff dipping and oral cancer among women in the Southern United States, New England Journal of Medicine. 304(13): 745-749, March 26, 1981.

12. Christen, A.G., Glover, E.D. Smokeless tobacco: seduction of youth, World Smoking and Health, 6(2): 20-24, Summer, 1981.
13. Glover, E.D., Christen, A.G., Henderson, A.H. Just a pinch between the cheek and gum, Journal of School Health, 51(6): 415-418, 1981.
14. U.S. Department of Health Education and Welfare, Smoking and Health-A Report of the Surgeon General, Washington, 1979.
15. Christen, A.G., Swanson, B.Z., Glover, E.D., Henderson, A.H. Smokeless tobacco: the folklore and social history of snuffing, sneezing, dipping and chewing; Journal of the American Dental Association. Vol. 105, November 1982 p. 821-829.

1982 SURVEY OF SMOKING HABITS OF NORTHWEST TERRITORIES' STUDENTS

1. ARE YOU A BOY <input type="checkbox"/> A GIRL <input type="checkbox"/>	8. HOW MANY CIGARETTES DO YOU USUALLY SMOKE IN A WEEK? I DO NOT SMOKE
2. WHAT IS YOUR AGE? YEARS	1 - 4 <input type="checkbox"/>
3. WHERE DO YOU LIVE? (PRINT NAME OF SETTLEMENT)	5 - 9 <input type="checkbox"/>
4. WHICH GROUP ARE YOU A MEMBER OF? INDIAN <input type="checkbox"/> INUIT <input type="checkbox"/> METIS <input type="checkbox"/> OTHER <input type="checkbox"/>	10 - 19 <input type="checkbox"/>
5. HAVE YOU EVER SMOKED? YES <input type="checkbox"/> NO <input type="checkbox"/>	20 - 39 <input type="checkbox"/>
IF THE ANSWER TO QUESTION 5 IS <u>NO</u> , SKIP TO QUESTION 13.	40 - 59 <input type="checkbox"/>
6. AT WHAT AGE DID YOU SMOKE YOUR FIRST CIGARETTE? AT AGE	60 OR MORE <input type="checkbox"/>
7. HAVE YOU SMOKED IN THE LAST FOUR WEEKS? YES <input type="checkbox"/> NO <input type="checkbox"/>	9. AT WHAT AGE DID YOU START SMOKING ONE OR MORE CIGARETTES A WEEK? AT AGE
IF THE ANSWER TO QUESTION 7 IS <u>NO</u> , SKIP TO QUESTION 13.	10. DO YOU USUALLY SMOKE EVERY DAY? YES <input type="checkbox"/> NO <input type="checkbox"/>
	11. DO EITHER OF YOUR PARENTS KNOW THAT YOU SMOKE? YES <input type="checkbox"/> NO <input type="checkbox"/> CAN'T ANSWER <input type="checkbox"/>
	12. WHERE DO YOU GET YOUR CIGARETTES MOST OF THE TIME? MY PARENTS GIVE THEM TO ME <input type="checkbox"/> MY FRIENDS GIVE THEM TO ME <input type="checkbox"/> I BUY THEM MYSELF <input type="checkbox"/>

1982 SURVEY OF SMOKING HABITS OF NORTHWEST TERRITORIES' STUDENTS

NOW, EVERYBODY ANSWERS THE FOLLOWING QUESTIONS	PLEASE INDICATE WHETHER YOU AGREE OR DISAGREE WITH THE FOLLOWING STATEMENTS
13. DOES YOUR FATHER SMOKE? YES <input type="checkbox"/> NO <input type="checkbox"/> CAN'T ANSWER <input type="checkbox"/>	18. CIGARETTE SMOKING IS HARMFUL TO YOUNG PEOPLE AGREE <input type="checkbox"/> DISAGREE <input type="checkbox"/> DON'T KNOW <input type="checkbox"/>
14. DOES YOUR MOTHER SMOKE? YES <input type="checkbox"/> NO <input type="checkbox"/> CAN'T ANSWER <input type="checkbox"/>	19. CIGARETTE SMOKING CAN CAUSE LUNG CANCER AGREE <input type="checkbox"/> DISAGREE <input type="checkbox"/> DON'T KNOW <input type="checkbox"/>
15. DO ANY OF YOUR BROTHERS SMOKE? YES <input type="checkbox"/> NO <input type="checkbox"/> I HAVE NO BROTHERS <input type="checkbox"/>	20. HAVE YOU EVER USED CHEWING TOBACCO? YES <input type="checkbox"/> NO <input type="checkbox"/>
16. DO ANY OF YOUR SISTERS SMOKE? YES <input type="checkbox"/> NO <input type="checkbox"/> I HAVE NO SISTERS <input type="checkbox"/>	21. DO YOU NOW USE CHEWING TOBACCO? YES <input type="checkbox"/> NO <input type="checkbox"/>
17. HOW MANY OF YOUR GOOD FRIENDS SMOKE? NONE <input type="checkbox"/> SOME <input type="checkbox"/> MOST <input type="checkbox"/> ALL <input type="checkbox"/>	22. HAVE YOU EVER USED SHUFF? YES <input type="checkbox"/> NO <input type="checkbox"/>
	23. DO YOU NOW USE SHUFF? YES <input type="checkbox"/> NO <input type="checkbox"/>
THANK YOU	