APPENDIX 7

REPORT ON TEENAGE & YOUTH SMOKING HABITS IN KING’S COUNTY
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1. Report on Teenage & Youth Smoking Habits in King’s County

Prepared by Glyn Bissix, Ph.D and Liesel Carlsson, BSNH

Overview

According to the Nova Scotia Department of health, the effect of smoking on the lives of Canadian youth is monumental. Canadians age 15 who smoke now are more than twice as likely to die before age 70 as are non smoking 15 years olds. Health Canada predicts that more than 50% of deaths before age 70 will be caused by smoking among today's 15 year-old smokers. In contrast, about 6% will die prematurely because of traffic accidents, suicides, murders and HIV/AIDS, all combined (1).

Investment in youth is an investment in the future of the community’s health and well-being. The astounding statistics on the direct and indirect cost of smoking, which in Nova Scotia alone is estimated to near half a billion dollars (1) and the abovementioned mortality rates substantiate a greater investment in the health of our youth. With recent changes in tobacco control legislation that restrict youth access to tobacco, it is extremely important to monitor how these changes affect youth smoking trends. Baseline information can become the sounding board for evaluation of current legislation, and suggest changes for the future investment in programming.

Understanding more about smokers’ behavior, especially how smokers took up smoking and what environmental factors may have contributed to smoking adoption can provide valuable insights for reshaping public policy and smoking reduction program design. This report focuses on a number of key factors about youth and smoking behavior. It particularly focuses on the age youth began to smoke, how many cigarettes a day they smoke, and how living with a smoker influences smoking habits.

Eight questions pertaining to the smoking habits of the participant were included in the Health and Community Questionnaire section of the GPI-Kings survey. These questions, along with demographic information such as age and sex, bring into being the ensuing report. The extensive database derived from the GPI survey provides the opportunity for very detailed research into the wellbeing of Kings County.

Summary of Key Findings

One hundred and fifty one youth (62 males and 87 females) participated in the survey. There were noticeable gender and age differences in the smoking habits of youth. Of the 21% of youth who currently smoke for instance, two thirds were female (14%). King’s County Youth appear to

1 http://www.gov.ns.ca/health/tcu/health_effects.htm#3.
have lower smoking rates in comparison to both provincial and national averages. With the exception of 15 to 19 year old females, who exceed both the national and provincial average, the percentage of current youth smokers is relatively low in King’s County.

Females began to smoke an average of one to two years earlier than males. Fifteen to 17 year old females who smoke daily began to smoke at a mean age of 13, whereas males of the same age group began at 15. Even among the 20 to 24 year olds, women began to smoke one year earlier than men (16 vs. 17 years old).

Males smoked more cigarettes than females, even though fewer males smoked. The largest difference in the number of cigarettes smoked per day between the genders occurred in the 20 to 24 year old category, where males smoked significantly more cigarettes than their female counterparts (P<0.005). Males smoked a daily average of 19 cigarettes versus 12 cigarettes for females (mean difference = 7.48).

The results showed that of the 151 youth who filled out the survey, 43% lived with a smoker. Over half (51%) of those who lived with a smoker, lived with a smoker who smoked inside the house. Significantly more (p<0.001) current youth smokers lived in a home with a regular smoker (83%) than in a non-smoking household (17%).

The Workshop

Teenage and Youth Smoking Habits in Kings County
October 14, 2003
Acadia University

Presenters

Liesel Carlsson  liesel.carlsson@acadiau.ca
Dr. Glyn Bissix  glyn.bissix@acadiau.ca

Format

The presenters of the report divided the workshop into two sessions, interspersed with group discussions of the implications. The workshop ended with a strategizing session to encourage participants to work network and discuss possible future involvement.

Audience

Lillian Wight  The Advertiser  lillian_wight@hotmail.com
Nancy Levy  AVRSB  nandplevy@ns.sympatico.ca
Raymond Gaudet  PHS- SWNDHA  rgaudet@swndha.nshealth.ca
Feedback

Gender, Age and Youth Smoking Habits

- Results very close to what professionals know of the area
  - Except for 18-19 YO males
- Is the gender difference important? (i.e. - reflection on policy and program)
- When do people begin to smoke daily?
  - This is different from experimenting
  - The reported age was higher than expected
- Impact of legislation / policy / programs on smoking?
  - How do we measure the impact of our programs?
  - There is a problem with inability to locate survey respondents people in specific areas such as towns vs. rural areas i.e. (without postal codes)
  - Improvements or changes are likely the effect of complex and comprehensive social changes rather than due to a single factor.

Home Smoking Environment

- Does it really have any influence in a larger context?
  - Home smoking environment is not just exposure, it’s access and attitude towards smoking
- Smoke-free homes project, Smoke-Free Kings
  - Already in place, but unable to measure outcomes.
- Problem of preaching to the converted
- Awareness and Education is no longer key. Policy and programming must look deeper to effect behavior change.
Using the Results Requires Additional Research

- Insights into cause & effect
- Program / policy evaluation
- Direction for new, revised and more sophisticated program / policy

Participants were interested in further research into other environmental and lifestyle factors such as:

- Perceived health
  - Smoking viewed as a negative health practice rather than as a habit?
- Clustering of high risk behaviours
- Perceived mental health, depression and stress
- Core values and beliefs
- Volunteerism
- Education
- Tobacco possession laws for minors and what do smokers think about it?
- Intentions of changing lifestyle
- Income level
- Impact of public places legislation. -Inclusion of other tobacco products (i.e.- chewing tobacco)

Where do we go from here? The discussion included:

- Possible funding opportunities for tobacco research
- Acadia interested in partnering with community groups
- Networking between workshop participants

Data Source

There was positive feedback on the value of the data for Kings County health workers and policy makers.

Limitations of the Data

- Inability to specifically locate participants in terms of what programs they have been exposed to, or if their community is smoke free (e.g. Wolfville, Berwick)
- Inability to measure intentions for quitting, improving health etc.
- Literacy level of those who filled out the questionnaire
- 18-19 YO males smoking habits. Was the youth sample a truly random sample?
Assessment

The purpose of this study of youth smoking behavior and its subsequent presentation in a workshop format had several connected objectives. The first was to illustrate the usefulness of the database to elicit useful information about the Kings Community that might lead to rethinking public policy or suggest needed areas for further research. A second objective was to assess the power of the GPI-Kings database to elicit useful and reliable information when only a relatively small subset of the sampled population was examined. A third purpose was to stimulate interest in the community in exploring the database in increased with the possible outcome of forming joint community and university initiatives including the pursuit of additional funding.

This analysis provided community specific information on youth smoking in Kings County. Some of the results might easily have been expected by extrapolating trends found in provincial and national surveys but some insights were unique and raised questions about the future direction of smoking cessation programs targeted to youth. An important test of the database was to assess its worth when only subsets of the population were examined. When statistical tests of significance were applied to the data, such tests revealed acceptable levels of significance which further illustrated the database’s value. It is clear from the feedback received from workshop participants that this study did stimulate interest in the database and the need for further analyses. Whether that interest translates into follow-up activity that matures into working partnerships among policy practitioners and researchers remains to be seen.

Introduction

According to the Nova Scotia Department of Health, the effect of smoking on the lives of Canadian youth is monumental. Canadians age 15 who smoke now are more than twice as likely to die before age 70 as are non smoking 15 years olds. Health Canada predicts that smoking among today’s 15 year-old smokers will cause more than 50% additional deaths before age 70. In comparison, about 6% additional deaths will be due to the combined effects of traffic accidents, suicides, murders and HIV/AIDS (2).

Investment in youth is an investment in the future of the community’s health and well-being. The astounding statistics on the direct and indirect cost of smoking, which in Nova Scotia alone is estimated to be near half a billion dollars (3), and the abovementioned mortality rates substantiate the need for a greater investment in the health of our youth. With recent changes in tobacco control legislation in Nova Scotia, which restricts youth access to tobacco, it is extremely important to monitor how these public policy changes affect youth smoking trends. Baseline studies such as those made possible with resources such as the GPI-Kings database can become the springboard for evaluation of current legislation and provide direction for future investment in health promotion programming.

2 http://www.gov.ns.ca/health/tcu/health_effects.htm#3.
Understanding more about smokers’ behavior; especially how smokers took up smoking and what environmental factors may have contributed to smoking adoption can provide valuable insights for reshaping public policy and smoking reduction program design. This report focuses on a number of key factors about youth and smoking behavior. It particularly focuses on the age youth began to smoke, how many cigarettes a day they smoke, and how living with a smoker influences smoking habits. This report scratches at the surface of a wealth of potential knowledge about smoking behavior and lifestyles contained in a database developed by GPI-Atlantic of the residents of Kings County, Nova Scotia in 2000-1. As additional funding for analysis materializes, progressively more sophisticated insights can be gleaned from this database about smokers’ behavior and their physical, social and psychological environmental conditions; information useful in improving public policy that effectively leads to smoking reduction and cessation.

Eight questions pertaining to the smoking habits of the participant were included in the Health and Community Questionnaire section of the survey. These questions, along with demographic information such as age and sex, were used to generate the following report. The specific smoking related questions are: Does anyone in your house smoke regularly? Does anyone in your house smoke regularly inside the house? At the present time, do you smoke cigarettes? Have you ever smoked cigarettes at all? At what age did you begin to smoke cigarettes daily? How many cigarettes do you smoke each day now? How soon, after you first wake up, do you smoke your first cigarette? If you are working, what are the restrictions on smoking at your place of work? The extensive database that is derived from the GPI survey provides the opportunity for detailed analysis of the perceived and actual relationships concerning the physical and mental health, happiness, food consumption habits, employment, etc. and the smoking habits of King’s county youth.

Review of Current Literature

In the late 1990’s, Nova Scotia had the highest smoking prevalence (29%), daily cigarette consumption, and rate of dependence of all Canadian Provinces (3). In 1998, 36% of grade 7,9,10 and 12 students smoked, this rate was up from 26% in 1991 (4). This was five percentage points above the national average of 31% for 15 to 19 year old Canadians (5). The prevalence of smoking among 15 to 19 year old Canadians has since dropped to 22% and among Nova Scotians of the same age, to 20%. Nova Scotia youth smoking rates are no longer the highest in the country (5) but match national averages for both males and females aged 15 to 24. However, 20 to 24 year old Nova Scotian youth smokers outnumber national youth smokers by three percentage points (34% vs 31%).

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3 The Cost of Tobacco in Nova Scotia, prepared for Cancer Care Nova Scotia (October, 2001) by Ronald Colman, Ph.D.
The Canadian Tobacco Use Monitoring Survey, 2002 (6) or CTUMS provides in depth, regularly updated, national data on tobacco use in Canada. CTUMS is implemented twice a year in order to systematically evaluate smoking trends, the effects of changing smoking legislation, tobacco control strategies, policies and programs. The primary objective of CTUMS is to track changes in smoking status and amount smoked, especially in those most at risk; 15 to 24 year olds (6).

The CTUMS Canadian results from 2002 show that smoking rates increase with age. Eighteen percent of 15 to 17 year olds, 28% of 18 to 19 year olds and 31% of 20 to 24 year olds are current smokers. The survey also presented current smoking rates for Nova Scotia that show increasing smoking rates with increasing age. Twenty percent of 15 to 19 year olds currently smoke in this province, a rate that rises to 34% among 20 to 24 year olds.

Among youth (15 to 24), slightly more females are current smokers than males (27% of females smoked and 26% of males smoked). In 15 to 19 year old category, the difference was greatest, with 24% of females vs. 20% of males currently smoking. There were no apparent gender differences in smoking rates among Nova Scotian youth, as 27% of both male and female youth currently smoke. However, data for more detailed analysis was not available to make more age specific analyses.

The number of cigarettes that Canadian youth smoke differed greatly between males and females. Male youth (15 to 24) smoked more (15.5 cigarettes) than females (11.8 cigarettes). Similar to national averages, male youths in Nova Scotia smoked more cigarettes per day than females with an average of 15.3 cigarettes vs. 13.5 cigarettes respectively.

Recently, Health Canada’s Tobacco Control Programme released a document (7) that outlined the sales compliance (refusal of tobacco sales to minors) of tobacco retailers. The report indicated that 71.2% of retailers refuse to sell to minors. As minors get older, it becomes easier to purchase cigarettes, but it remains more difficult for underage girls to buy tobacco than boys. A full 1/3 (33.6%) of underage boys do not get asked for ID. The Halifax compliance rate is far below the national average at 54%. The compliance rate goal for the nation, set out in the Federal Tobacco Control Strategy at 80%, is still above the current national rate and far above the Halifax rate. Developments on a number of fronts in Nova Scotia nevertheless show that this goal is not out of reach despite the current gap.

Youth smoking prevention is one of the key elements in the comprehensive and long term Nova Scotia Tobacco Strategy (8). This strategy includes the development of a school smoking prevention program and enforcing and educating the public about new legislation surrounding tobacco. An Act to Protect Young Persons and Other Persons from Tobacco Smoke (9) protects those under the age of 19 from second-hand tobacco smoke by creating smoke free public places. It also limits youth under the age of 19 from even possessing tobacco. This legislation came into

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6. http://www.gosmokefree.ca/ctums. Results from the two 2002 surveys are presented in the annual results summary and supplementary tables.
force January 1 2003 and is part of the province’s comprehensive tobacco strategy and can be found on the Nova Scotia Department of Health website.

The monstrous health and economic costs incurred by Nova Scotians due to tobacco use was detailed in a comprehensive report called *The Cost of Tobacco in Nova Scotia* (3), prepared by Ronald Colman in 2001. The report highlighted a well documented fact that in industrialized nations, smoking is the most preventable cause of death and illness which includes instances of cancer, heart disease and respiratory complications. Health problems attributable to smoking account for most of the direct health care costs of smoking. Added to this are indirect costs such as loss of productivity, absenteeism, insurance costs and providing smoking areas. An estimated half a billion dollars are spent annually in Nova Scotia on indirect and direct costs of smoking (3).

According to Colman, 16 000 underage smokers spend a staggering $10.6 million annually in Nova Scotia on cigarettes. At today’s rates 65 000 children and teens in Nova Scotia will become regular smokers and of these, 15 000 will be killed by their addiction by middle age (3).

Continual monitoring of progress at the local level is necessary to reach both rural and urban youth equally throughout the province. Local initiatives, such as Smoke Free King’s, work to reinforce and support all pieces of the Nova Scotia Tobacco Strategy. With a clear vision to reduce the harm related to tobacco use and exposure to tobacco smoke (10), Smoke Free King’s has been successfully active in providing public education, lobbying and advocacy work at the provincial and municipal level, carrying out compliance checks and working closely with youth prevention. Smoke-Free Kings was established in December 1994 and consists of a group of volunteers and professionals. It is with local initiatives like these that the GPI survey information is best used. By providing a central link between the information, the community and government, they can use current, local information to direct their actions where they are needed most.

**Methodology**

Developed by GPI Atlantic, Measuring Well-being in King’s County surveyed over 1900 participants living in the area in 2001. It obtained very detailed demographic, health, employment, peace and security, food habits and ecological footprint information from each of the individuals. Each survey took approximately three hours to complete.

The statistical analyses were run using SPSS (11) at Acadia University with the intention of returning the information to the community, in order to generate community interest. Some of this information has been presented at the GPI Atlantic meetings held in the spring of 2003 in Wolfville and Berwick, NS (12).

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10 As of October 6th, 2003, the mission and objectives will be updated.
12 April 8th, Berwick; June 5th, Wolfville.
There were 151 youth (62 males and 87 females) that participated in the survey. Youth was defined as 15 to 24 years of age. Seventy-five were 15-17 years old, 28 were 18-19 years old and 48 were 20-24 years old. Whenever possible, for the sake of comparison between provincial and King’s County data, the three youth age categories (15 to 17, 18 to 19 and 20 to 24) are presented. Where data to provide this is not available, age categories are aggregated \(^{13}\). Current smokers, or smokers, include both daily and occasional smokers unless otherwise named as such.

### Results

The first striking aspect that emerged from the data is the noticeable difference between the smoking habits of male and female youth. While 21% of youth in King’s County are smokers, twice as many females smoke as compared to males (of those 21%, only 7% were male and the remaining 14% were female). In addition, a higher percentage of females are daily smokers, and this difference broadens with increasing age. Only 10% of males aged 15 to 17 compared to 14% of females are daily smokers. Zero percent of males (14) and 21% of females aged 18 to 19 are daily smokers. Eighteen percent of males and 23% of females aged 20 to 24 are daily smokers.

As well, there were noticeable differences with respect to when males and females began to smoke. The data show that females begin to smoke earlier than males (See figure 1). Fifteen to 17 year old females who smoke daily began to smoke at a mean age of 13, whereas males of the same age group began at 15 \(^{15}\). Eighteen to 24 year old females \(^{14}\) who smoked daily started on average at 16 years old. Even among the 20 to 24 year olds, women began to smoke one year earlier than men (16 vs. 17 years old). The earliest age that 15 to 17, 18 to 19 and 20 to 24 year olds began to smoke was 11, 14 and 12 respectively.

Of youth smokers (daily or occasional), the average number of cigarettes smoked per day increased with age. Among 15 to 17 year olds, the mean number of cigarettes smoked daily was 12, and this increased to 14 cigarettes and 15 cigarettes for 18 to 19 and 20 to 24 year olds respectively.

Similarly, gender differences emerged in the number of cigarettes youth smokers smoked per day with the exception of the 18 to 19 year old males \(^{14}\). On average, males smoked a greater number of cigarettes than females did, except for in the 18 to 19 year old age group, where there were no male smokers in the sample (See figure 2). As noted previously however, more females smoked in all of these three age groups.

\(^{13}\) The national, provincial and King’s County results are summarized and compared in Table 1, Appendix A.  
\(^{14}\) There were no male, 18 to 19 year old smokers in the sample population.  
\(^{15}\) It should be noted that two people in the 15 to 17 year category responded that they began to smoke at age 20. This obviously cannot be so. One of these respondents was male which resulted in a slightly raised mean for the males; the other did not specify sex, consequently not distorting the mean for either the male or female categories.
Figure 1. Youth Smokers: At what age did you begin to smoke? Only daily smokers were included.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 to 17 years</td>
<td>15</td>
<td>13</td>
</tr>
<tr>
<td>18 to 19 years</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>20 to 24 years</td>
<td>17</td>
<td>16</td>
</tr>
</tbody>
</table>

**AGE**
Cases weighted by SCWTPHRU

Figure 2. How many cigarettes do you smoke daily? Daily and occasional smokers were included.

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 to 17 years</td>
<td>14</td>
<td>11</td>
</tr>
<tr>
<td>18 to 19 years</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>20 to 24 years</td>
<td>19</td>
<td>12</td>
</tr>
</tbody>
</table>

**AGE**
Cases weighted by SCWTPHRU
Males smoked an average of three cigarettes more per day than females in the 15 to 17 year old age category (14 cigarettes vs. 11 cigarettes per day respectively). The largest difference in the number of cigarettes smoked per day between the genders occurred in the 20 to 24 year old category, where males smoked significantly more cigarettes than their female counterparts (P<0.005) \(^{(16)}\). Males smoked a daily average of 19 cigarettes versus 12 cigarettes for females (mean difference = 7.48).

How the household smoking environment serves to influence youth smoking habits was explored. The smoking habits of youth were examined with respect to living with a regular smoker, a regular smoker who smokes inside the house, and youth who live in a non-smoking household. The results showed that of the 151 youth who filled out the survey, a staggering 43% lived with a smoker. Over half (51%) of those who lived with a smoker, lived with a smoker who smoked inside the house.

Of youth that lived in a smoke free environment, considerably less smoked cigarettes than those who lived in homes with smokers. Only 6% of youth who lived in a non-smoking household currently smoked. On the other hand, 40% who live with a smoker, smoked either daily or occasionally (See Figure 3) and the remaining 60% were non-smokers.

**Figure 3. The smoking habits of youth living with a regular smoker.**

![Bar chart showing smoking habits of youth living with a regular smoker.]

At the present time, do you smoke cigarettes?

Cases weighted by SCWTPHRU

The youth living with regular smokers that smoke either in or outside of the house were selected and separated out from their non-smoking household peers to examine their particular smoking habits. As figure four indicates, among youth living with a regular smoker, the frequency of

\(^{(16)}\) Independent Samples T-test, equal variances assumed: N=19; df=17; Sig. (2-tailed) =0.005; 95% CI = (2.54191, 12.41047).
youth who also smoked daily or occasionally is 40%; interestingly four times as many of these youth were daily smokers rather than occasional smokers (32% vs. 8%). Selecting youth living with a smoker who smoked in the house revealed that 36% of these youth also smoked daily or occasionally, a rate very similar to that of youth living with a smoker. As mentioned in the preceding paragraph, only 6% who live in a non-smoking household, currently smoke.

Looking at this from another viewpoint, the data showed that the vast majority of youth smokers also live with a regular smoker (See Figure 4). Significantly more (p<0.001) current youth smokers lived in a home with a regular smoker (83%) than in a non-smoking household (17%), (17).

Figure 4. Youth Smokers: The smoking environments at home of youth that smoke daily or occasionally.

Both figure three and four highlight the variation in smoking habits and smoking environments. More youth smokers also live with smokers than non-smokers, and more youth who live with a smoker, smoke than those who live with a non smoker.

17 Binomial nonparametric: N=64; test proportion = 50%; Sig. (exact) = 0.000
Conclusions and Implications

King’s County Youth appear to have lower smoking rates in comparison to both provincial and national averages, see Appendix A. With the exception of 15 to 19 year old females, who exceed both the national and provincial average, the percentage of current youth smokers is relatively low in King’s County.

The gender differences in smoking prevalence were much greater in King’s County compared to Nova Scotia or Canada. Provincially an equal percentage of male and female youth smoked (27%) and nationally the genders differed by only 1% (26% vs. 27%). In King’s county nearly twice as many smokers were female than male (27% vs. 15% respectively). In fact, males of all age categories had appreciably lower smoking prevalence than their provincial and national counterparts. Seeing as there were no male smokers age 18 to 19 in the sampled population it is difficult to draw authoritative conclusions about this group, however, males aged 20 to 24 in King’s County also had much lower smoking rates than their provincial and national peers (23% vs. 34% and 31% respectively). Female youth in King’s County on the other hand matched their provincial and national peers’ and outnumbered them in the 15 to 19 year old age group by 5% and 3% respectively. Twenty to 24 year olds on the other hand, smoked less; only 1% less than national averages, but 5% less than the average for Nova Scotian females of the same age. In sum, smoking was much less pervasive in male youth from King’s County than in the province or nation and less than their female equivalents. The incidence of smoking for females in King’s county was much closer to provincial and national averages.

As The Cost of Tobacco in Nova Scotia monograph (3) indicated stress and promoting weight loss are as key reasons why teenagers (especially girls) smoke. Understanding causal factors, considered important motivators or barriers to tobacco reduction, provides strong support for gaining additional insights into possible solutions. From the Kings County data, it is clear for example that female youth began to smoke an average of one to two years earlier than males did in King’s County, which likely contributes to the greater number of female youth who are current smokers. Although this resultant disparity may be attributed to differing developmental stages, it remains a critical consideration for the timing and implementation of gender specific, anti-smoking education strategies. Thus far, data detailing provincial or national averages on when youth began to smoke is not available for comparison.

In tandem with smoking prevalence, there are considerable inequalities in the smoking patterns of male and female youths in Kings County, similar to Nova Scotia and Canada as well. Compared to females, males smoke significantly more cigarettes; this is especially the case within the 20-24 year old category where males smoked on average seven more cigarettes per day than females. As mentioned previously, the report on Youth Access to Tobacco (7) indicates that underage males are able to purchase cigarettes much more easily than females. This makes tobacco products more accessible to them. Strengthening enforcement of tobacco reduction policies among tobacco retailers may consequently influence how many cigarettes to which male youth have access. Regular compliance checks, such as those carried out by Smoke Free King’s in 1997, would complement local smoking data in the search for measurable indicators of progress in the effort to reduce tobacco use and exposure to tobacco for our youth.
Understanding the significance of gender differences with respect to prevalence and consumption patterns is valuable to facilitators of youth tobacco reduction programs as well as school guidance counselors, policy makers, public health workers and parents. School programming and legislation are part of the Nova Scotia Tobacco Strategy that proffers to dramatically reduce the colossal health and economic cost of tobacco on the people of Nova Scotia. Communities, on the other hand, are very individual places. What is dominant in one community may not necessarily be in another. Thus, community specific information such as that available to King’s County is very valuable attaining the goals of this government initiative by providing operating groups such as Smoke Free Kings with the baseline data that they need to take appropriate action.

Of equal value to the parents of King’s County youth is information on how their own smoking habits and exposure to environmental tobacco smoke (ETS) affects the smoking habits and health of their children. All things considered, too many of King’s County youth live in a home environment where smoking is acceptable. But not only are 43% of the youth being exposed to smoking as a lifestyle habit, over half of these (22%) are also being exposed to tobacco smoke in the home.

In Nova Scotia, 24% of children age 12 to 17 are regularly exposed to ETS, and in Canada, 23% (6). Though the percentage of youth in King’s County exposed to ETS is slightly better than provincial and national averages, it remains a fact that more than one in every five youth is exposed to ETS at home. Beyond the well documented health and economic effects of tobacco (3), are the apparent links between youth living with a smoker and their smoking habits. Significantly more current smokers live with smokers than non-smokers. As mentioned on the Nova Scotia Teen Health Website (18), youth are more likely to smoke if their parents smoke as well, if they have older brothers or sisters who smoke, or if their parents do not mind them smoking. Among youth in King’s County 40% who lived with a smoker also smoked cigarettes and 83% of youth smokers, also lived with a smoker.

Understanding the connection between the home smoking environment of youth, their health and their own smoking habits is one that is critical for possibly redirecting resources towards parents to address their choice to smoke and their condoning smoking behaviour. Encouraging youth, parents and families to create non-smoking homes would benefit everybody’s health and wealth.

**Possibilities for Future Analyses**

The preceding information is a brief sample of the kinds of data analysis that can be performed using the GPI-Kings survey to measure the impact of smoking on well-being in King’s County. Further in depth examination of topics related to smoking behaviour is possible that may well bring new insights on smoking behaviour, its antecedents and its or relationships.

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18 [http://www.chebucto.ns.ca/Health/TeenHealth/smoking/home.htm](http://www.chebucto.ns.ca/Health/TeenHealth/smoking/home.htm)
Some possibilities for future analyses have already been alluded to in this report such as: Why do more female youth smoke than male? Other interesting questions include: What are the youth smoking rates while pregnant in King’s County? How soon after waking up do youth smoke their first cigarette? This is an indicator of smoking dependency. Are males or females more nicotine dependent? How do males and female smokers compare in perceived stress levels and excess body weight or eating habits? How do smoking habits and home smoking environment relate to perceived health and health? Does youth access to tobacco have bearing on youth smoking trends?

As mentioned previously, community access to the potential information contained in this survey is a top priority for the proponents of the GPI-Kings survey. Community groups and public policy makers and influencers interested in the data can arrange to work with Acadia University researchers in making beneficial use of the data available in this survey. Questions can be directed to Liesel Carlsson at 585-1123 or emailed to liesel.carlsson@acadiau.ca.

Appendix A

### Data Table

<table>
<thead>
<tr>
<th>Age</th>
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<th>Male 20 to 24</th>
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<td>27</td>
<td>20</td>
<td>27</td>
</tr>
<tr>
<td>King’s County</td>
<td>11.5</td>
<td>14.7</td>
<td>25.3</td>
<td>28.9</td>
<td>17.7</td>
<td></td>
</tr>
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