This **Smoking On Campus** report describes some of the preliminary findings of the 2005 study, Tobacco Use in a Representative Sample of Ontario Post-Secondary Students. Funded by the Ontario Tobacco Research Unit, this survey was conducted as part of the provincial government’s Smoke-Free Ontario Campaign. We are pleased to provide this report highlighting data from all participating universities. We greatly appreciate the cooperation of all Registrar Office staff and students who participated in this survey.

Please note, results presented in this report that are statistically significant (p<0.05) are marked with a ‘◊’ in the title of the graph or table. Also, please note that in some cases, table columns or rows and charts may not add to 100% due to rounding or missing data.

We do encourage schools to partner with Leave The Pack Behind on your campus (www.leavethepackbehind.org), your local public health unit and voluntary organizations to take action on the findings reported here.

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Part A: Introduction

Includes…

- The Issue
- Characteristics of the Participants
The Issue

Smoking is a Young-Adult Issue

- More than 1 in 4 young adults smoke (this is the highest smoking prevalence of all age groups).\(^1\)
- Half of young adults are in school.\(^2\)
- Experimentation with recreational drugs peaks in mid-adolescence, but the risk period for smoking onset/escalation extends into the early 20s.\(^3-5\)

Smoking is a School Issue

- Smoking initiation and escalation occurs among college/university students.\(^6-10\)
- Most post-secondary campuses in Canada are tobacco-friendly environments.\(^11\)
- Stress associated with the transition to and experiences of college/university life may magnify the risk of smoking uptake and escalation.\(^12-14\)
- All members of the school community are subject to the new Smoke-free Ontario legislation which includes the prohibition of smoking in all enclosed workplaces and public places.

Smoking is a Community/Public Health Issue

- 22% of all deaths in Canada are attributable to smoking.\(^15\) Smoking causes 4 times as many deaths as car accidents, suicide, homicide and AIDS combined.\(^16\)
- Half of all long-term smokers will die or be disabled by a smoking-related illness.\(^17\)


“A young adult is leaving childhood on his way to adulthood. He is leaving the security and regiment of high school and his home. He is taking a new job; he is going to college. He is out on his own with less support from his friends and family.... Dealing with these changes in his life will create increased levels of uncertainty, stress, and anxiety...During this stage in life, some younger adults will choose to smoke and will use smoking as a means of addressing some of these areas.”
A random sample of 9,956 full-time and part-time university and college students (3.73% of eligible students) drawn from 23 campuses (13 universities; 10 colleges) completed the on-line survey. The following table displays information on the characteristics of the participants for all surveyed universities and colleges and for all surveyed universities.

### Characteristics of the Participants

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>All Surveyed Universities &amp; Colleges</th>
<th>All Surveyed Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eligible Population</td>
<td>266,766</td>
<td>164,752</td>
</tr>
<tr>
<td>Actual Sample (N)</td>
<td>9,956</td>
<td>6,736</td>
</tr>
<tr>
<td>Response Rate</td>
<td>3.73%</td>
<td>4.10%</td>
</tr>
<tr>
<td>Gender:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>2,876 (29%)</td>
<td>1,897 (28%)</td>
</tr>
<tr>
<td>Female</td>
<td>6,857 (69%)</td>
<td>4,768 (71%)</td>
</tr>
<tr>
<td>Age:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age Range</td>
<td>16 to 87</td>
<td>16 to 87</td>
</tr>
<tr>
<td>Mean Age</td>
<td>21.14</td>
<td>21.97</td>
</tr>
<tr>
<td>Median Age</td>
<td>20.00</td>
<td>20.00</td>
</tr>
<tr>
<td>Year of Study:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 1</td>
<td>2,568 (26%)</td>
<td>1,672 (25%)</td>
</tr>
<tr>
<td>Year 2</td>
<td>2,246 (23%)</td>
<td>1,586 (24%)</td>
</tr>
<tr>
<td>Year 3</td>
<td>2,191 (22%)</td>
<td>1,985 (29%)</td>
</tr>
<tr>
<td>Year 4</td>
<td>1,283 (13%)</td>
<td>1,260 (19%)</td>
</tr>
<tr>
<td>Enrollment Status:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>8,189 (82%)</td>
<td>6,389 (95%)</td>
</tr>
<tr>
<td>Part-time</td>
<td>332 (3%)</td>
<td>287 (4%)</td>
</tr>
<tr>
<td>Student Type:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>University</td>
<td>6,736 (68%)</td>
<td></td>
</tr>
<tr>
<td>College</td>
<td>1,737 (17%)</td>
<td></td>
</tr>
</tbody>
</table>
Part B: Smoking Among University Students

Includes…

- Who Smokes?
- Students’ Perception of Themselves as Smokers
- Thinking of Quitting
Who Smokes?

Overall, 21% of all university students we surveyed reported they currently smoke (7% daily smokers; 14% less than daily smokers). A daily smoker is defined as a person who reports that they currently smoke, even just a puff, and reports that they have smoked every day over the past 30 days. A less than daily smoker is defined as a person who reports currently smoking, even just a puff, and reports that they have smoked either almost everyday, on some days each week, or once or twice altogether over the past 30 days.

Student Smoking Prevalence

The graphs below summarize the percentage of university students who smoke by gender, year of study, and living arrangement.
Although preliminary, these results suggest…

- 21% of the university students we surveyed currently smoke.
- More males smoke than females (23% vs. 20%, respectively).
- Students in their 2nd and 4th year of study have a higher smoking prevalence than students in other years of study (19% 1st year, 24% 2nd year, 20% 3rd year, and 23% 4th year).
- Students who live off campus, either in their family home or without parents, smoke more than students who live in a campus residence (22% vs. 23% vs. 15%, respectively).
Students’ Perception of Themselves as Smokers

We asked all students to report on their perception of themselves as a smoker at university entrance and at this time (i.e. date of survey completion). Their responses to these questions provide a more complete picture of the smoking prevalence among university students, give indications of how students internalize their own smoking behaviour, and show changes in self-perceptions over time.

Students’ Recall of Smoking Status at University Entrance

Students’ Perception of Their Smoking Status Now

Percentage of Students Who Smoke - Self-Perception Measure*

<table>
<thead>
<tr>
<th></th>
<th>Year 1</th>
<th>Year 2</th>
<th>Year 3</th>
<th>Year 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrance</td>
<td>23%</td>
<td>24%</td>
<td>23%</td>
<td>25%</td>
</tr>
<tr>
<td>Now</td>
<td>21%</td>
<td>25%</td>
<td>23%</td>
<td>24%</td>
</tr>
</tbody>
</table>

Highlights…

Although preliminary, these results suggest…

- Using the self-perception measure, 23% of the university students we surveyed smoke now (this is slightly more than previously identified using the standard ‘current smoker’ measure).
Thinking of Quitting

Quitting smoking is not an easy process for young adults, particularly when they are immersed in a tobacco friendly environment. Research has shown that many students want to quit and have attempted to quit, but most are unsuccessful in stopping smoking on their own.\(^\text{18}\)

We asked students who reported that they currently smoked, even just a puff, if they are now seriously thinking of quitting smoking. The graphs below summarize their responses by smoking status.

### Student Intention to Quit\(^*\)

<table>
<thead>
<tr>
<th>Smoking Status</th>
<th>7 days</th>
<th>8-30 days</th>
<th>Next 6 months</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily Smokers</td>
<td>15%</td>
<td>10%</td>
<td>58%</td>
<td>17%</td>
</tr>
<tr>
<td>No</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, within the next 7 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, within the next 8 to 30 days</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes, within the next 6 months</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Highlights …

Although preliminary, these results suggest…

- The majority (42%) of all less than daily smokers plan on quitting sometime within the next 6 months.
  - 17% report they will do so within the next 6 months.
  - 10% report they will do so within the next 8-30 days.
  - 15% report they will do so within the next 7 days.

- Almost all (65%) daily smokers plan on quitting sometime within the next 6 months.
  - 49% report they will do so within the next 6 months.
  - 11% report they will do so within the next 8-30 days.
  - 5% report they will do so within the next 7 days.
Part C: Campus Health Clinic

Includes…

- Are Students Being Asked & Advised About Their Smoking Behaviour?
Are Students Being Asked & Advised About Their Smoking Behaviour?

Relatively few studies have examined factors that increase cessation rates for post-secondary students, therefore it is not clear which approaches might be effective in addressing their smoking. One promising strategy for improving cessation rates is brief intervention by healthcare providers. On average, smokers are sick more often than non-smokers and may even engage in other risk-taking behaviours.\(^1\) This means, student smokers might be using the student health center or counseling centers more than non-smokers. The staff at these centers can be very useful in providing smoking cessation interventions or linking student smokers with other cessation services.

We asked all students…

Since September, have you visited your campus Student Health Care facility?

<table>
<thead>
<tr>
<th>All Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

Of those students who visited their campus Student Health Care facility since September, we asked…

1. Did a health professional at your campus’s Student Health Care facility ask you whether you use tobacco?

<table>
<thead>
<tr>
<th>All Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

2. Did the health professional(s) at your campus Student Health Facility advise you to quit?

* Some students who gave this response were identified as smokers. Other research has also shown that smokers dissemble when asked by a doctor if they smoke.
Although preliminary, these results suggest…

- 32% of the university students we surveyed visited their campus Student Health Care Facility since September 2005.
  - Of these students, almost half (46%) were asked by a health professional whether or not they used tobacco, and 6% (out of 16% who smoked and answered this question) were advised to quit smoking.
Part D: Policy

Includes …

- Knowledge of & Compliance with Campus Smoking Restrictions
- Knowledge of & Compliance with Campus Residence Smoking Restrictions
Most post-secondary campuses in Canada are tobacco-friendly environments. For example, a 2004 study of 35 post-secondary institutions across Canada found that every university and half of all colleges reported participating in some form of tobacco marketing over the past year.\textsuperscript{11}

The insular nature of post-secondary institutions provides a unique opportunity to implement leading-edge tobacco control policies, while influencing a key group of young adults. Unfortunately, effective tobacco control strategies that have helped reduce smoking prevalence and rates in the general community have not been consistently applied to campus communities. Nonetheless, policies restricting or banning tobacco use, sales and advertising, are absent or ill-defined on most post-secondary campuses.

Understanding students’ knowledge of and compliance with existing campus tobacco control policies may provide a starting point to further improve campus policy efforts. With this in mind, we asked all students…

\textbf{Are there smoking regulations that restrict outdoor smoking at your school?}

<table>
<thead>
<tr>
<th>All Universities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

\textbf{Senate approved policy regulating outdoor smoking exits at….*}

<table>
<thead>
<tr>
<th>Institution</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brock University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Lakehead University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Laurentian University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Nipissing University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ontario College of Art &amp; Design</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>Queens University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Trent University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>University of Waterloo</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>University of Western Ontario</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>University of Windsor</td>
<td></td>
<td>✓</td>
</tr>
<tr>
<td>University of Ontario Institute of Technology</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>York University</td>
<td></td>
<td>✓</td>
</tr>
</tbody>
</table>

*Info obtained from university websites as of June 1st, 2006.
Of those who reported there are outdoor smoking restrictions at their campus, we asked...

**Do you follow these regulations?**

![Bar chart showing compliance with outdoor smoking regulations by smoking frequency.]

- **All Universities**
  - **Never**
    - <Daily Smoker>: 7
    - Daily Smoker: 17
  - **Sometimes**
    - <Daily Smoker>: 61
    - Daily Smoker: 55
  - **Always**
    - <Daily Smoker>: 32

Although preliminary, these results suggest...

- Over half (57%) of students report there are **outdoor** smoking regulations at their school.
- 7% of less than daily smokers never comply with the campus outdoor smoking restrictions. 
  - 32% sometimes comply
- 17% of **daily smokers** never comply with the campus outdoor smoking restrictions. 
  - 55% sometimes comply
Knowledge of & Compliance with Campus Residence Smoking Restrictions

During the 2005-2006 school year there were no provincial laws regulating indoor smoking in residences and policies varied across institutions.

All students who reported that they currently lived in a campus residence and were between the ages of 16-25 years (N= 1,364) were asked…

Think about your campus. In that living arrangement is indoor smoking restricted?

<table>
<thead>
<tr>
<th>Institution</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brock University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Lakehead University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Laurentian University</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Nipissing University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Ontario College of Art &amp; Design</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Queens University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Trent University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>University of Waterloo</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>University of Western Ontario</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>University of Windsor</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>University of Ontario Institute of Technology</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Wilfrid Laurier University</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>York University</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Senate approved policy regulating indoor smoking for campus residences exists at…*

*Info obtained from university websites as of June 1st, 2006.
Of those who reported that there are indoor smoking restrictions at their campus residence, we asked…

**Do you follow these restrictions?**

![Graph showing the percentage distribution of responses to the question about following indoor smoking restrictions.](image)

Again, all students who reported that they **currently lived in a campus residence** and were **between the ages of 16-25 years** (N= 1,364) were asked…

**Think about your campus residence.**
**In that living arrangement is outdoor smoking restricted?**

<table>
<thead>
<tr>
<th>All Universities</th>
<th>Yes</th>
<th>30%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No</td>
<td>70%</td>
</tr>
</tbody>
</table>

Of those who responded “Yes”, we asked…

**Do you follow these regulations?**

![Graph showing the percentage distribution of responses to the question about following outdoor smoking regulations.](image)
Although preliminary, these results suggest…

- Almost all (94%) students who live in a campus residence and are between the ages of 16-25 report there are indoor smoking regulations in their campus residence.

- 1% of less than daily smokers never comply with the indoor smoking restrictions.
  - 11% sometimes comply

- 2% of daily smokers never comply with the indoor smoking restrictions.
  - 25% sometimes comply

- Less than half (30%) of students who live in a campus residence and are between the ages of 16-25 report there are outdoor smoking regulations at their residence.

- 5% of less than daily smokers never comply with the outdoor smoking restrictions.
  - 57% sometimes comply

- 19% of daily smokers never comply with the outdoor smoking restrictions.
  - 52% sometimes comply
Part E: Cannabis & Alcohol Use

Includes...

- Past 30-day Prevalence of Cannabis Use
- Past 30-day Prevalence of Alcohol Use
Past 30-day Prevalence of Cannabis Use

The transitional stage of young adulthood is conducive not only to elevated tobacco use, but to other health-risk behaviours, including illicit drug use and heavy drinking. These risky health behaviours are usually linked together.\textsuperscript{19} In the 1998 Canadian Campus Survey, it was found that cannabis use was by far the most widely used illicit drug on university campuses.\textsuperscript{20}

We asked all students…

\textbf{In the past 30 days, how often did you use cannabis?}

\begin{table}[h]
\centering
\begin{tabular}{|c|c|}
\hline
\textbf{Cannabis Prevalence (%)} & \textbf{All Universities} \\
\hline
Not at all & 75 \\
Once or twice altogether & 15 \\
On some days each week & 6 \\
Almost everyday & 2 \\
Everyday & 2 \\
\hline
\end{tabular}
\end{table}

Overall, 17% of non-smokers, 53% of less than daily smokers and 52% of daily smokers report cannabis use in the past 30 days.\textsuperscript{*}

\textbf{Highlights …}

Although preliminary, these results suggest…

- Among the university students we surveyed
  - 21% smoke cigarettes; 25% use cannabis
  - 7% smoke cigarettes daily; 2% use cannabis daily

- A higher proportion of students who smoke, also use cannabis.
Past 30-day Prevalence of Alcohol Use

Extensive alcohol use and abuse on university campuses has been documented in much research. This relatively high level of use, in part, reflects the predominant population of 18 to 24-year olds, amongst whom such use is especially prevalent.

The co-occurrence of alcohol and cigarette smoking has also been well documented. For example, a study of 140 American post-secondary institutions found that high-risk behaviours (including alcohol use) were the strongest predictors of student smoking. Tobacco companies promote the link between drinking and smoking by spending millions of dollars on bar promotions and sponsorship for special campus events. In fact, a 2004 study found that, among 22 universities and 13 colleges from across Canada, 18% of universities and 7% of colleges held a tobacco industry sponsored bar night or event on campus within the past year.

We asked all students…

**In the past 30 days, how often did you consume alcohol?**

Overall, 78% of non-smokers, 95% of less than daily smokers and 91% of daily smokers report alcohol use in the past 30 days.

**Highlights …**

Although preliminary, these results suggest…

- 81% of the university students we surveyed reported they have consumed alcohol sometime within the past 30 days.
  - 2% drink alcohol almost everyday

- A higher proportion of students who smoke, also drink alcohol.
Appendix 1: Survey Methodology

Purpose

The overall objective of this survey is to build understanding regarding the patterns of tobacco use among Ontario post-secondary students, and identify environmental, psychosocial and contextual factors that may impact smoking uptake, escalation and cessation in this cohort.

Methods

- Colleges and universities were randomly selected from Eastern, Western, Northern, and Central regions (schools that were military, religious, bilingual or publicly-funded were excluded). In each region, back-up schools were also selected in case an identified school declined to participate.

- In total, 35 institutions were invited to participate.
  - 15 universities were invited and of these 2 declined. Of the 13 participating universities, 3 were from the Eastern region of Ontario, 5 were from the Western region, 3 were the Northern region, and 2 were from the Central region.
  - 20 colleges were invited to participate and of these 10 declined. Of the participating 10 colleges, 4 were from the Eastern region of Ontario, 4 were from the Western region, and 2 were the Northern region.

- All full-time and part-time college students and undergraduate university students (N=266,766) at these schools were eligible to participate.

- This study was reviewed and received ethics clearance from each school’s Research Ethics Board. All protocols were adhered to.

- Through the Registrar’s Office at each of the participating institutions, an email was sent to all students. The email invited students to participate in the on-line survey and provided a link to access the research website.

- Students who chose to link to the survey website completed the on-line questionnaire.

- After completing the survey, a thank you letter was generated and participants clicked a link to enter a draw for a 1-in-10 chance to win a $10 gift certificate.

- Data were collected from November 2005 to January 2006.
Survey Questions

Survey questions addressed the following topics:

- Demographic characteristics (e.g., age, family composition, living arrangements, ethnicity, education to date, etc.);
- Past and current smoking and quitting behaviours (e.g., age of smoking onset, typical amount and frequency of tobacco consumption, number of quit attempts, intentions to quit, etc.);
- Social correlates of smoking (e.g., places, people and circumstances associated with tobacco use);
- Social attachment (e.g., attachment to high school and to post-secondary social networks; etc.);
- Other drug use (i.e., typical amount and frequency of marijuana and alcohol consumption); and
- Perceptions of smoking related policies in their environment.

Please visit www.youthvoice.ca in August 2006 for recommendations based on the study findings.