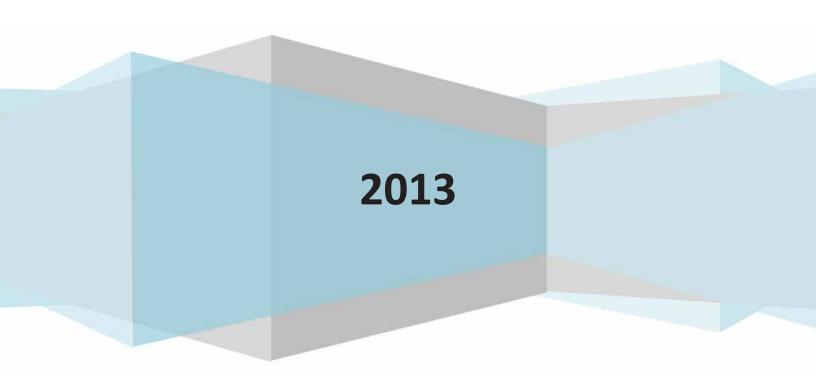
# Evaluation of Minnesota College Campus Tobacco Use Policies and Student Tobacco Use Rates



**Boynton Health Service** 

University of Minnesota

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# 1 Executive Summary

#### **OVERVIEW**

The prevalence of current tobacco use is the highest among 18–25 year-olds compared to all other adult age groups in national and statewide tobacco use surveys. 1,2 Nationally, 31.9% of 18–20 year-olds and 35.8% of 21–25 year-olds report cigarette use within the past month. Within Minnesota, the rates are lower than the national average, but still the highest among all age groups in the state with 21.8% of 18–24 year-olds reporting current cigarette use. Colleges and universities in Minnesota may have a unique opportunity to influence the tobacco use behavior among this student-aged population as nearly half (46%) of all residents earn a degree from institutes of higher education. To determine whether campus tobacco-use policies correlate with the tobacco use rates on Minnesota college campuses, the Minnesota Department of Health (MDH) sponsored an evaluation of campus tobacco-use policies and student tobacco use rates in partnership with Boynton Health Service (BHS) at the University of Minnesota.

#### **METHODS**

The policy data used in this report are from a campus tobacco-free policy assessment conducted by local public health officials through an evaluation grant from the Minnesota State Health Improvement Program (SHIP). Selected campuses (n=31) were classified as either "smoke-free or tobacco-free" or "have designated use areas." Specific elements of each campus' tobacco use policy such as communication, enforcement, and duration of the present policy as well as information about signage and ash cans in the physical environment were also noted (**Appendix A**). Tobacco use rates and demographic data for each of the 31 selected campuses were obtained from the College Student Health Survey administered during the spring 2013 semester by BHS. Tobacco use rates examined included past 12-month use, current tobacco use, daily tobacco use, quit attempts, and exposure to secondhand smoke. Associations between campus tobacco use policies and tobacco use rates were analyzed using chi-square tests as well as generalized estimating equations (GEE). The chi-square test statistic (Chi-sq) and P-values are reported from the chi-square analyses. The Odds Ratio (OR) for specific associations of interest are reported from the GEE analyses.

#### **FINDINGS**

#### Campus Tobacco Use Policies

- Among participating campuses, 12 had tobacco-free policies (38.7%) and one had a smoke-free policy (3.2%), the remaining 58.1% had designated tobacco-use areas
- Four-year institutions were more likely to have a tobacco-free or smoke-free policy (7 of 12) compared to two-year institutions (6 of 19)

#### 12-month Tobacco Use Rates

• Overall, 31.2% of students in this dataset reported that they had used tobacco within the past 12 months. The prevalence of smoking tobacco use within the past 12 months was higher than smokeless tobacco use (28.9% v. 7.8%, respectively).

- Crude rates of 12-month smoking were significantly lower on campuses with tobacco- or smoke-free policies compared to campuses with designated tobacco use areas (Chi-sq = 10.0, P-value <0.01), but this association did not hold after adjusting for gender, age, and class status.
- Age, gender, and class status were significantly associated with 12-month tobacco use rates.
   Male students were more than 6 times more likely to report use of smokeless tobacco in the past 12 months compared to female students (17.5% v. 2.6%, Chi-sq = 868.5, P-value <0.01).</li>

#### **Current Tobacco Use Rates**

- Of the students in this data set, 23.5% reported any tobacco use within the past 30 days. Approximately 1 in 5 students (21.0%) reported using smoking tobacco within the past 30 days, and 1 in 20 (5.1%) reported smokeless tobacco use during the time period.
- The reported rate of smoking tobacco use within the past 30 days was 3.6% higher for students on campuses with designated tobacco use areas compared to those with tobacco-or smoke-free policies (Chi-sq = 23.3, P-value <0.01). In contrast, the smokeless tobacco use rate was 2.0% higher for students on tobacco- or smoke-free campuses compared to those with a designated use area (Chi-sq = 25.1, P-value <0.01).
- Regardless of campus tobacco use policy, campuses with a policy that had been in place for 6 years or more had lower rates of current smoking tobacco use than those with a newer policy (Odds Ratio = 0.65, P-value = 0.07). On campuses with a designated use area policy, a stronger written policy (5 point increase in policy strength variable) was also significantly associated with lower reported rates of current tobacco use (OR = 0.95, P-value <0.01).

#### Daily Tobacco Use Rates

- In this study population, the overall daily tobacco-use rate was 10.3% and was significantly higher among students ages 25 and older compared to student ages 18–24 (18.9% v. 5.3%, respectively, Chi-sq = 576.0, P-value <0.01).
- Students on campuses with tobacco- or smoke-free policies tend to have slightly lower rates of daily tobacco use compared to campuses with designated use areas (9.0% v. 11.2%, respectively, Chi-sq = 15.3, P-value <0.01), but this association does not hold after adjusting for class status.
- Students in two-year undergraduate programs are 5 times as likely to be daily tobacco users (20.3%) than students in four-year undergraduate programs (4.1%) and those enrolled in graduate programs (3.2%) (Chi-sq = 857.4, P-value <0.01).
- On campuses with a designated tobacco use areas policy, a stronger written policy (5 point increase in policy strength variable) was associated with lower daily smoking tobacco use rates (Odds Ratio = 0.90, P-value <0.01) as well as lower daily smokeless tobacco use rates (Odds Ratio = 0.90, P-value = 0.03). This association did not hold on campuses with a tobacco- or smoke-free policy.

#### **Quit Attempts**

• Of those students that reported using tobacco within the past 12 months, 35.0% stated that they had also made at least one attempt to quit using within the past year. This percentage

- was higher among students who reported smoking within the past 30 days, with 41.7% of those students reporting at least one attempt at quitting tobacco use.
- The percentage of students that had used tobacco within the past year and made at least one attempt to quit did not appear to differ by gender, age, or class status of the student, or the type of campus tobacco-use policy.

#### Secondhand Smoke Exposure

- Overall, 34.8% of all survey respondents reported that they had been exposed to secondhand smoke while on campus. This was slightly more common in current smokers (40.4%) compared to non-smokers (34.5%) (Chi-sq = 31.4, P-value <0.01).
- A large and consistent difference was noted in the percentage of students that reported secondhand smoke exposure on campus between students on campuses with tobaccoand smoke-free polices compared to those with designated tobacco-use areas. Students on campuses with designated tobacco-use areas reported twice as much exposure to secondhand smoke on campus than those students on campuses with tobacco- or smoke-free policies (45.6% v. 21.8%, respectively, Chi-sq = 753.7, P-value <0.01).
- Although the type of institution, class status of the students, and age of the students were
  also significantly associated with secondhand smoke exposure rates on campus, the campus
  tobacco-use policy remained an important factor in the reported secondhand smoke
  exposure rate, even in the presence of the other variables.
- The presence of a tobacco-/smoke-free policy was more important in reducing student exposure to secondhand smoke on campus than the length of time that a policy had been in place. On campuses with either policy type, the strength of the written policy was not associated with a reduction in secondhand smoke exposure on campus reported by students.

#### **Enforcement of Policy**

The manner in which the enforcement of the written policy was conducted was not
associated with any of the reported tobacco use outcomes (current use of smoking or
smokeless tobacco, daily use of tobacco, or reported exposure to secondhand smoke).

#### **Provision of Cessation Services**

 While many colleges reported provision of cessation services to students, faculty, or staff on campus, few indicated that cessation services were provided to students. Since the College Student Health Survey only measures tobacco-use rates among the student population on college campuses, the impact of the provision of cessation services to faculty and staff are unlikely to affect these outcomes. Therefore, no analyses were performed examining the association between the provision of cessation services on the college campuses and the student tobacco-use rates.

# 2 Description of SHIP

The purpose of the Statewide Health Improvement Program (SHIP) is to improve the health of Minnesotans and decrease health care costs through health improvement strategies that reach whole communities. SHIP focuses its health improvement efforts on programs that decrease obesity and reduce the number of people who use tobacco or who are exposed to tobacco smoke.

The tobacco industry works hard to promote their products to young adults. Their efforts to capture the young adult market are succeeding: among adults in Minnesota, 18–24 year-olds have the highest smoking rate. College health center directors have identified smoking as a major health problem that needs to be addressed on their campuses. The college years are a crucial time when many young adults either establish or abandon tobacco use. Campuses provide an opportune setting for community-based efforts that help young adults make healthy decisions about tobacco use.

During the second iteration of SHIP funding, grantees were asked to work with Minnesota's post-secondary academic institutions within their jurisdiction to adopt and implement comprehensive tobacco-free campus policies. The adoption and implementation of comprehensive tobacco-free campus policies promotes a healthier environment for students, staff, and visitors through decreased personal tobacco use and subsequent reduced secondhand smoke exposure.

Tobacco-free campus policies prohibit the use of all tobacco products including but not limited to: cigarettes, cigars, snuff and chewing tobacco on campus. The comprehensive tobacco-free policies recommended under SHIP also encouraged the inclusion of protocols on:

- Connecting students, staff, and faculty to cessation services
- Non-acceptance of tobacco industry funding
- Eliminating tobacco industry sponsorship on campus.

## 3 Introduction

#### **TOBACCO USE AMONG COLLEGE STUDENTS**

In 1998, the state of Minnesota, 46 other states, 5 territories, and the District of Columbia reached settlement agreements with the tobacco industry that prohibited the marketing of tobacco products to minors. <sup>4,5</sup> Since the reduction in access to the youngest tobacco users, the marketing of tobacco products by tobacco companies to 18–24 year-olds has increased dramatically, with the objective of initiating new tobacco users and then transitioning them to daily users. <sup>6,7</sup> A parallel increase in smoking rates among this young adult population was noted, and presently one-third of college students report current (past-30 day) cigarette use (31.6% among 18–20 year-olds, and 34.7% among 21–25 year-olds). <sup>2,8</sup>

Young adults transitioning from high school to college have more opportunities to make personal and lifestyle decisions without parental input, and tobacco companies use the sentiments of choice, individuality, and self-expression to draw college-aged populations to their products. This marketing strategy appears to be successful as more than one in ten college smokers had their first cigarette at age 19 or older, and 28% began to smoke regularly while at college. Moreover, the academic pressures and new social networks of a college lifestyle can be overwhelming for students, leading to experimentation and subsequent addiction to tobacco products for the stress-relieving properties of nicotine.

There are 15 million college students presently in the United States, and of those, an estimated 1.7 million will die prematurely due to smoking-related illnesses. In addition to the long-term harms of tobacco use that accumulate over a college student's lifetime, immediate negative consequences from risky behaviors associated with tobacco use are also relevant to the college-aged population. For example, current tobacco use (any use within the past 30 days) is associated with higher rates of binge drinking and increased numbers of sexual partners. In

Early prevention of tobacco use among young adults is critical to reducing the number of long-term users and the subsequent negative health effects. College campuses are in a unique position to influence students' tobacco use because just as students' behavior is able to be changed toward increased tobacco use, there is also evidence of successful reduction in tobacco use among this population over time. Moreover, there is eagerness among current smokers to quit smoking, with 45.3% making at least one quit attempt within the preceding 12 months. One critical component in smoking cessation is having a supportive environment in which to quit smoking. By implementing a smoke- or tobacco-free policy, college campuses may be able to influence the tobacco use behavior of students, and reduce the substantive long-term health effects of tobacco use.

#### STATEMENT OF TASK

Across the State of Minnesota, institutions of higher education have individually been implementing smoke- and tobacco-free policies on their campuses since 2004. Presently, 49 colleges and universities in Minnesota are smoke- or tobacco-free, as well as 1,110 other

post-secondary institutions across the country.<sup>14</sup> While many institutions have established smoke- and tobacco-free campus policies, few evaluations of whether these policies are associated with reductions in student tobacco use rates. One study at Indiana and Purdue universities found that implementation of a smoke-free policy reduced current tobacco use among students, but replication in other college student populations are needed before broader conclusions can be drawn.<sup>15</sup>

In an effort to contribute to the body of knowledge on campus tobacco- use policies and corresponding student tobacco-use rates, the Minnesota Department of Health (MDH) sought to examine the potential impact of tobacco-free campus policies at Minnesota colleges and universities. Through the State Health Improvement Project (SHIP), in conjunction with Boynton Health Service (BHS), a tobacco-free policy evaluation was conducted at academic post-secondary institutions statewide. The evaluation data was then paired with information about tobacco use and exposure rates from the College Student Health Survey (CSHS) to determine whether having a smoke- or tobacco-free campus policy was associated with the outcomes of past 12-month, current, and daily tobacco use, percentage of users making a quit attempt within the past year, and secondhand smoke exposure among students on campus. Each outcome was also evaluated with respect to how long the policies had been in place, the strength of the written policy, and enforcement protocols. Age, sex, and class status of student, as well as institution type were also taken into consideration when examining the association between campus tobacco use-policy and the tobacco-use outcomes.

## 4 Methodology

#### CAMPUS TOBACCO POLICY EVALUATION

Funding through the State Health Improvement Program (SHIP) was allotted to local public health agencies to partner with college campuses in their jurisdiction to reduce tobacco-use rates among the 18–24 year old population. Prior to undertaking tobacco prevention and control measures, an evaluation of each campus' tobacco use policy was conducted. The Baseline Campus Tobacco-Free Policy Assessment (**Appendix H**) was adapted from the California Youth Advocacy Network, and was used to differentiate campuses with full smoke- and tobacco-free policies from those with designated use areas. This tool also provided information on the methods of communication of the policies, the physical campus environment, and enforcement protocols.

#### **COLLEGE STUDENT HEALTH SURVEY**

The College Student Health Survey (CSHS) (**Appendix I**), developed by Boynton Health Service, is made available to all postsecondary institutions in Minnesota annually and institutions voluntarily and independently elect to have their students participate. In 2013, a total of 44,688 undergraduate and graduate students received a survey invitation across the state, of which 13,569 completed the survey, for an overall response rate of 30.4%. As an incentive, all students who responded to the survey were entered into a drawing for gift certificates valued at \$1,000 (one), \$500 (one), and \$250 (one) at a variety of stores. In addition, all students who responded to the survey were entered into six separate drawings for an iPad mini™ and one drawing for a \$100 Amazon gift card that included just students from their school.

Randomly selected students were contacted through multiple mailings and e-mails:

- Invitation postcard
- Invitation e-mail
- Reminder postcard and multiple reminder e-mails

Survey questions pertained to several different aspects of college student health, divided into sections as follows: health insurance and health care utilization, mental health, tobacco use, alcohol use and other drug use, personal safety and financial health, nutrition and physical activity, and sexual health.

#### **CAMPUS SELECTION AND PARTICIPATION**

The 31 campuses used in this report participated in both the completion of the tobacco policy evaluation (results of evaluation provided in **Appendix B**) as well as the College Student Health Survey in 2013. This yielded 12,535 eligible survey respondents from the College Student Health Survey (demographic information provided in **Appendix C**).

#### **ANALYSIS SUMMARY**

#### **Outcomes**

The values presented in this report are the prevalence of tobacco use in the study population as described by five specific outcomes:

- 12-month tobacco use
- Current tobacco use
- Daily tobacco use
- Quit attempts
- Secondhand smoke exposure

#### **Descriptive Statistics**

Each outcome is tabulated and analyzed using chi-square analyses and Fisher's exact tests, as appropriate, across the following factors:

- Gender (Male, Female, Transgender, Other)
- Age group (18–24, 25+)
- Class status (two-year student, four-year student, graduate student)
- Campus tobacco-use policy (tobacco-/smoke-free v. designated use areas)
  - o Tobacco-free schools fully prohibited the use of tobacco on campus grounds
  - o Smoke-free schools fully prohibited the use of smoking tobacco on campus grounds
  - o Designated use area policies were defined as policies that prohibited tobacco use on certain places on campus including a specified number of feet from building entrances
- Campus tobacco use policy and Type of institution (two-year or four-year school)
- Campus tobacco use policy and Age group
- Campus tobacco use policy, Class status, and Age group
- Campus tobacco use policy, Class status, and Gender

P-values and effect sizes for the comparisons across groups are noted in the tables. A significance level of 0.01 was used for the Chi-square analyses, and Cramer's V is used for the effect size measure. Cramer's V is a value between 0 and 1 and takes into consideration both the absolute difference in measures across groups as well as accounts for the sample size used. For the purposes of this report, a moderate effect size was 0.10 and a strong effect size was 0.20.

**Note:** There was only one school that had a smoke-free tobacco use policy on its campus. To ensure that results would not be identifiable to the school from which they were obtained, the smoke-free policy was therefore combined with the tobacco-free campus policies for analyses.

#### **Regression Analyses**

Regression analyses were performed using Generalized Estimating Equations (GEE) that accounted for clustering of students within each school. These models examined the associations between policy type (tobacco-/smoke-free v. designated areas), length of policy (whether it

#### 4 Methodology

has been implemented for at least 6 years), strength of written policy (point scale from 0-100), and policy enforcement (never/rarely, sometimes, v. often/always) and the binary outcomes of whether a student:

- Was a current smoker
- Was a current smokeless tobacco user
- Was a daily smoker
- Was a daily smokeless tobacco user
- Attempted to quit smoking within the past 12-months
- Experienced secondhand smoke exposure on campus

All analyses were adjusted for age and gender of the students.

Odds ratios (OR) for the associations of each variable included in the GEE with the outcome of interest are also provided in the last column of each regression analysis table. The OR represents the relative odds of the outcome of interest in one group compared to another group. For example, all GEE analysis tables will present the OR for the outcome of interest between male and female students. If the OR is above 1, then the outcome is more common in males than females. If the OR is below 1, then the outcome is more common in females than males. An OR of 1 indicates that the odds of the outcome are the same in both groups.

The OR was calculated by exponentiation of the coefficient predicted by the model. Descriptions of statistically significant ORs are provided in the text below the GEE analysis tables. Statistical significance was determined by the Wald Chi-square test and corresponding P-value.

### 5

# Overall Campus Policy Data and Prevalence Rates

#### **DESCRIPTION OF CAMPUS POLICIES**

	Tobacco-free	Smoke-free	Designated Areas
	% (n)	% (n)	% (n)
Two-year schools	19.4%	0.0%	41.9%
	(6)	(0)	(13)
Four-year schools	19.4%	3.2%	16.2%
	(6)	(1)	(5)
Total	38.8%	3.2%	58.1%
(n=31)	(12)	(1)	(18)

Of the 31 schools participating in this evaluation, **38.8%** have tobacco-free campus policies in place on their campus, while one campus (**3.2%**) is has a smoke-free policy. The majority of all campuses in the evaluation (**58.1%**) have designated tobacco-use areas.

Designated tobacco use areas included those campuses with specific locations for tobacco use as well as campuses which required that tobacco use be a certain distance from building entrances. To ensure that no institution's specific tobacco-use rates can be identified in this evaluation, the tobacco-free and smoke-free campuses are grouped into the same category for analysis resulting in two groups of policy types: tobacco-/smoke-free campuses and campuses with designated use areas.

A full description of the specific prohibitions and characteristics of the campus tobacco-use policies is available in **Appendix A**.

#### Tobacco-free:

The use of smokeless and smoking tobacco as well as any other tobacco product is prohibited on all campus grounds

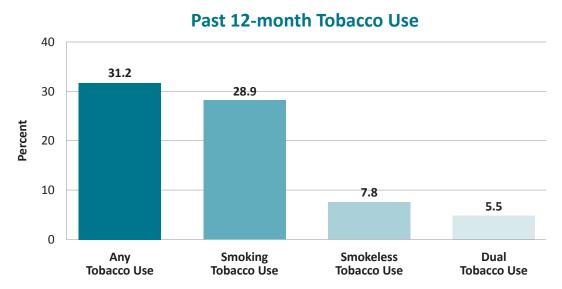
#### Smoke-free:

The use of smoking tobacco is prohibited on al campus grounds

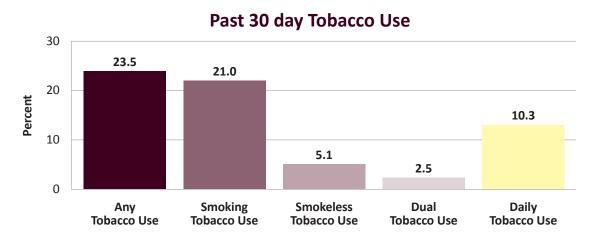
#### **Designated Use Areas:**

The use of tobacco products is prohibited in certain areas of campus and permitted in others. This includes campuses which require individuals to use tobacco products a specified distance from building entrances

#### **OVERALL PREVALENCE RATES**

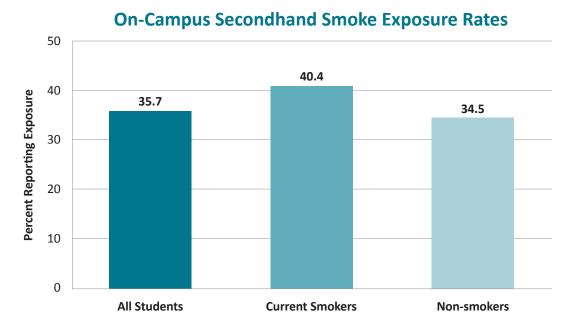


Among all 12,535 students participating in the College Student Health Survey (CSHS), **31.2**% reported using tobacco products within the past 12 months. The use of smoking tobacco was more common than the use of smokeless tobacco within the past 12 months (**28.9**% v. **7.8**%, respectively). Notably, **35.0**% of individuals who smoked within the past 12 months have made at least one attempt to quit, with an overall average of 3.8 quit attempts made over the past 12-month period.



Nearly one-fourth (23.5%) of students reported current use of tobacco products, and approximately one in ten use tobacco on a daily basis (10.3%). The percentage of students using tobacco products who made a quit attempt was higher among current smokers than those who used tobacco within the past 12-months (41.7%). Current smokers made an average of 4.0 quit attempts over the past 12-month period.

Among students who reported smoking within the past 12 months, and made at least one quit attempt during that time period, 86.4% reported still using tobacco within the past 30 days.



Students participating in the College Student Health Survey (CSHS) were asked to report their exposure to secondhand smoke outside of buildings, but on the campus grounds. Overall, **35.7%** of students reported being exposed to secondhand smoke on their campus, with current smokers reporting slightly higher rates than non-smokers (**40.4%** vs. **34.5%**, respectively, Chi-sq = 31.4, P-value <0.01).

Notably, 2.4% (303 students) of the CSHS study population reported exposure to secondhand smoke inside of buildings. Of these 303 students, 114 reported interior exposure to secondhand smoke as their only secondhand smoking exposure on campus. Analyses presented in this report surrounding secondhand smoke exposure on campus will address only exposure that occurs on the campus grounds outside of buildings as campus tobacco-/smoke-free policies are supplemental to the already existing Clean Air Act that prohibits indoor smoking.

## 6 12-month Tobacco Use

#### **SUMMARY**

- Overall, 31.2% of students in this data set reported that they had used tobacco within the past 12 months. The prevalence of smoking tobacco use within the past 12 months was higher than smokeless tobacco use (28.9% v. 7.8%, respectively).
- Crude rates of 12-month smoking were significantly lower on campuses with tobacco- or smoke-free policies compared to campuses with designated tobacco-use areas (Chi-sq = 10.0, P-value <0.01), but this association did not hold after adjusting for gender, age, and class status.
- Age, gender and class status were significantly associated with 12-month tobacco use rates. Male students were more than 6 times more likely to report use of smokeless tobacco in the past 12 months compared to female students (17.5% v. 2.6%, Chi-sq = 868.5, P-value <0.01).

#### **Comparisons by gender**

	Male % (n)	Female % (n)	Transgender % (n)	Other % (n)	Effect Size	P-value
12-month tobacco use	39.3% (1714)	26.9% (2177)	12.5% (2)	18.2% (4)	0.13	<0.01
12-month smoking tobacco use	34.1% (1489)	26.2% (2121)	12.5% (2)	18.2% (2)	0.09	<0.01
12-month smokeless tobacco use	17.5% (761)	2.6% (212)	6.3% (1)	9.1% (2)	0.26	<0.01

Male students are most likely to have used tobacco of any type within the past year when examining tobacco use within the past 12 months by gender. The largest difference in tobacco use rates within the past 12 months is seen in the smokeless tobacco-use rates where the use rate is more than six times higher than the smokeless tobacco-use rate of females. Due to the low absolute numbers of transgender students and students who identify themselves with other genders, only students who identified themselves as male or female were included in additional analyses that considered gender as a covariate.

#### Comparisons by age group

	Ages 18-24 % (n)	Ages 25+ % (n)	Effect Size	P-value
12-month tobacco use	28.9% (2269)	35.2% (1620)	0.07	<0.01
12-month smoking tobacco use	26.5% (2084)	33.2% (1527)	0.07	<0.01
12-month smokeless tobacco use	8.9% (703)	5.9% (271)	0.06	<0.01

Tobacco use of any type (smoking or smokeless) and smoking tobacco-use rates within the past 12 months are higher in students ages 25 and older compared to those ages 18–24. However, the smokeless tobacco-use rate is higher among students 18–24 than those ages 25 and older. This suggests that past 12-month tobacco use patterns vary by age.

#### Comparisons by class status -

	Two-year Undergraduate % (n)	Four-year Undergraduate % (n)	Graduate % (n)	Other % (n)	Effect Size	P-value
12-month tobacco use	40.8% (1971)	26.6% (1572)	19.1% (276)	25.1% (81)	0.17	<0.01
12-month smoking tobacco use	38.1% (1841)	24.5% (1447)	17.7% (256)	23.2% (75)	0.17	<0.01
12-month smokeless tobacco use	8.8% (424)	7.9% (479)	4.2% (61)	7.1% (2.3)	0.05	<0.01

Students at two-year undergraduate institutions have the highest 12-month tobacco use rates for all measures of tobacco use in the past year compared to those students at four-year undergraduate institutions and those enrolled in graduate programs. Graduate students have the lowest rates of tobacco use across all past 12-month use measures. The rates of any tobacco use, smoking tobacco use and smokeless tobacco use over the past 12 months are consistently twice as high among two-year undergraduate students compared to students enrolled in graduate programs. Due to the moderate effect sizes and statistical significance of 12-month tobacco-use rate differences by class status, comparisons between schools with tobacco-/ smoke-free policies and designated use areas are also presented as stratified by class status.

#### Comparisons by campus tobacco use policy —

	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use	29.6% (2357)	32.3% (2357)	0.03	<0.01
12-month smoking tobacco use	26.6% (1386)	30.6% (2233)	0.04	<0.01
12-month smokeless tobacco use	8.8% (460)	7.1% (517)	0.03	<0.01

Rates for any tobacco use and smoking tobacco use for the past year are statistically lower on campuses with tobacco-/smoke-free policies by approximately 3–4%, but with a minimal effect size. When examining smokeless tobacco-use rates over the past 12 months, tobacco-/smoke-free campuses have marginally higher rates than campuses with designated use areas.

#### — Comparisons by campus tobacco use policy and type of institution —

TWO-YEAR SCHOOLS	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use	39.2% (585)	41.4% (1391)	0.02	0.15
12-month smoking tobacco use	35.9% (536)	39.0% (1310)	0.03	0.04
12-month smokeless tobacco use	8.5% (127)	8.8% (297)	0.01	0.71

FOUR-YEAR SCHOOLS	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use	25.8% (958)	24.5% (966)	0.02	0.20
12-month smoking tobacco use	22.9% (850)	23.4% (923)	0.04	0.58
12-month smokeless tobacco use	9.0% (333)	5.6% (220)	0.07	<0.01

The only statistically significant difference in 12-month tobacco-use rates by tobacco policy and institution type is in smokeless tobacco use at four-year schools. Campuses with tobacco-/smoke-free policies have higher rates of smokeless tobacco within the past year compared to campuses with designated use areas, with small effect sizes.

#### — Comparisons by campus tobacco use policy and age-group of students —

AGES 18-24	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use	28.8% (1007)	29.0% (1262)	0.00	0.87
12-month smoking tobacco use	25.5% (894)	27.3% (1190)	0.02	0.09
12-month smokeless tobacco use	10.4% (365)	7.8% (338)	0.05	<0.01

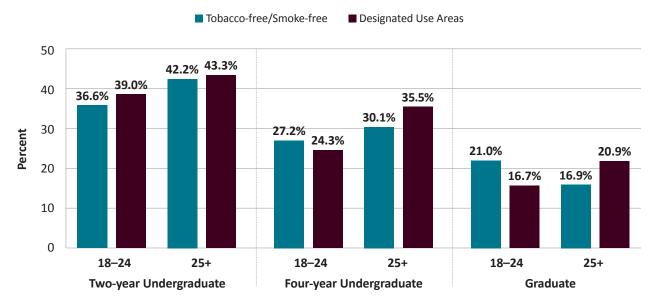
AGES 25+	Tobacco-/Smoke-free % (n)			P-value
12-month tobacco use	31.5% (530)	37.4% (1090)	0.06	<0.01
12-month smoking tobacco use	29.0% (488)	35.6% (1039)	0.07	<0.01
12-month smokeless tobacco use	5.5% (93)	6.1% (178)	0.01	0.42

The past 12-month use rate of any tobacco and smoking tobacco does not appear to significantly differ among students ages 18–24 on tobacco-/smoke-free campuses and those with designated use areas. However, the smokeless tobacco-use rate is significantly higher on tobacco-/smoke-free campuses than on campuses with designated use areas, with a minimal effect size. Among students ages 25 and older, overall 12-month tobacco use and smoking tobacco use within the past year significantly differ by campus tobacco-use policy. On campuses with a tobacco-/smoke-free policy, rates are lower by roughly 6%.

#### Comparisons by campus tobacco policy, class status, and age-group —

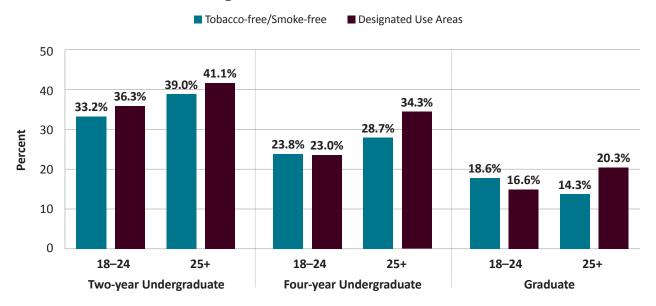
Note: Corresponding contingency tables for the following graphs are available in Appendix C.

#### **Any Tobacco Use in Past 12 Months**



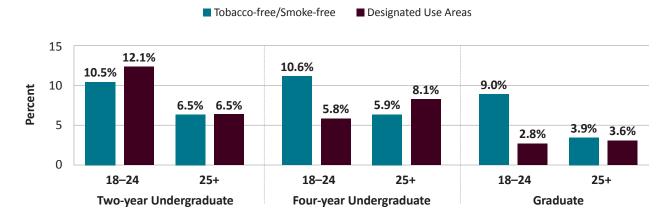
No significant differences in overall tobacco use in the past 12 months were seen by campus tobacco policy type when considering the class status and age of respondents. Tobacco use in the past 12 months is consistently higher among students in two-year undergraduate programs than four-year or graduate programs, as well as higher among students age 25 or older in two-year and four-year undergraduate programs than their 18–24 year-old counterparts.

#### **Smoking Tobacco Use in Past 12 Months**



Smoking tobacco use within the past 12 months was higher among students age 25 or older on campuses with designated tobacco-use areas compared to those with tobacco-/smoke-free campus policies. For graduate students ages 25 and older, this difference was statistically significant.

#### **Smokeless Tobacco Use in Past 12 Months**



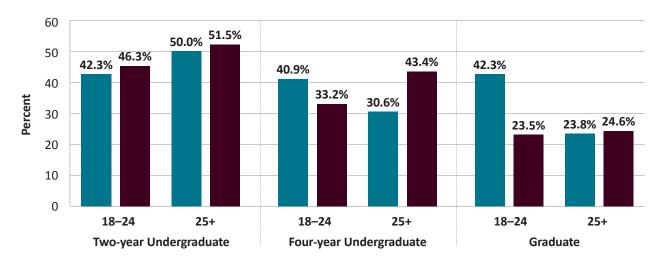
Among 18–24 year old students in four-year undergraduate and graduate programs, the smokeless tobacco-use rate in the past 12 months is higher for students on campuses with tobacco-/smoke-free policies than those with designated use areas. This difference is statistically significant with moderate effect sizes.

# Comparisons by campus tobacco policy, type of institution, age group, and gender

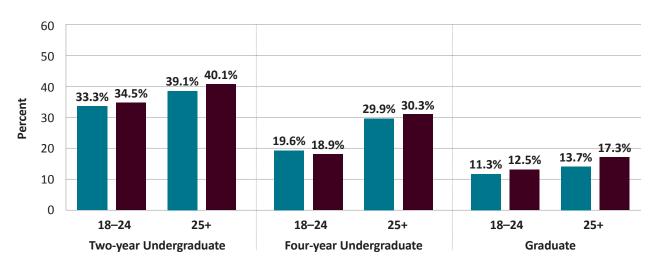
#### **Any Tobacco Use in Past 12 Months**

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



#### **FEMALES:**

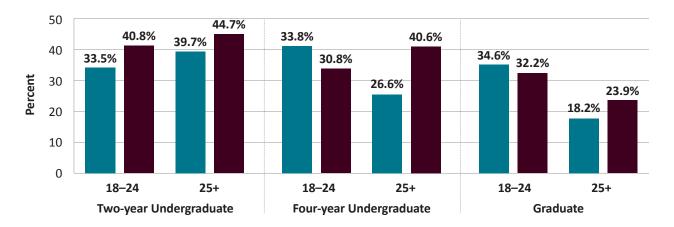


The only statistically significant difference in overall tobacco use within the past 12 months is among 18–24 year old male students in four-year undergraduate programs. Students in this category are more likely to have used tobacco within the past 12 months if they are on a campus with a tobacco-/smoke-free policy than a campus with designated use areas. The tobacco use rates among males are consistently higher than the past 12 month use rates among females.

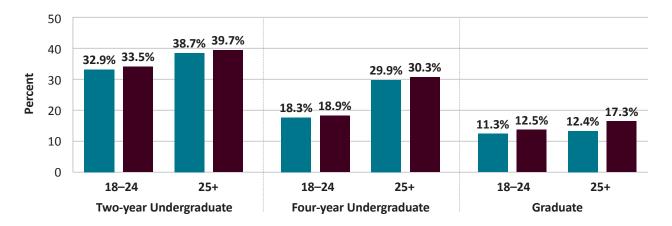
#### **Smoking Tobacco Use in Past 12 Months**

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



#### **FEMALES:**

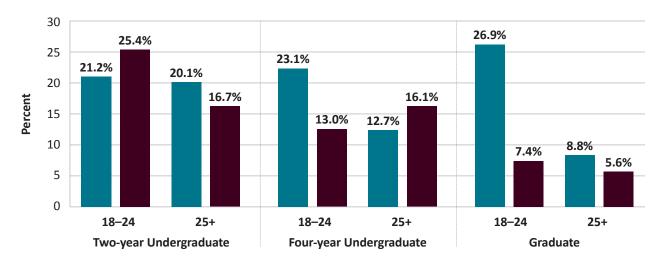


The smoking tobacco use rate is not statistically different among students on campuses with tobacco-/smoke-free policies and those with designated use areas with the exception of male students in four-year undergraduate campuses over the age of 25. This comparison of smoking tobacco use within the past 12 months has a moderate effect size.

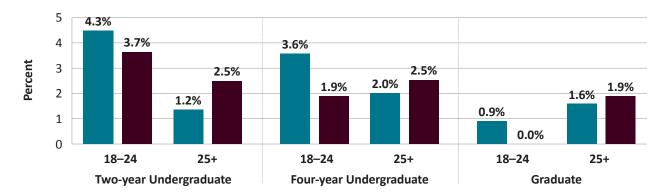
#### **Smokeless Tobacco Use in Past 12 Months**

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



#### **FEMALES:**



The statistically significant differences in smokeless tobacco use over the past 12 months are confined to 18–24 year old students. The smokeless tobacco use rate is higher among 18–24 year old males and females in four-year undergraduate programs on campuses with tobacco-/ smoke-free policies than on those with designated use areas. This difference is also seen in male graduate students ages 18–24.

# **7**Current Tobacco Use

#### **SUMMARY**

- Of the students in this data set, 23.5% reported any tobacco use within the past 30 days. Approximately 1 in 5 students (21.0%) reported using smoking tobacco within the past 30 days, and 1 in 20 (5.1%) reported smokeless tobacco use during the time period.
- The reported rate of smoking tobacco use within the past 30 days was 3.6% higher for students on campuses with designated tobacco-use areas compared to those with tobacco-or smoke-free policies (Chi-sq = 23.3, P-value <0.01). In contrast, the smokeless tobacco use rate was 2.0% higher for students on tobacco- or smoke-free campuses compared to those with a designated use area (Chi-sq=25.1, P-value <0.01).

#### Comparisons by gender -

	Male % (n)	Female % (n)	Transgender % (n)	Other % (n)	Effect Size	P-value
Current tobacco use	29.9% (1303)	20.2% (1635)	6.3% (1)	9.1% (2)	0.11	<0.01
Current smoking tobacco use	23.7% (1033)	19.6% (1591)	6.3% (1)	9.1% (2)	0.05	<0.01
Current smokeless tobacco use	12.2% (530)	1.3% (107)	0.0%	9.1% (2)	0.24	<0.01

Current tobacco use of any type is highest among male students, which holds when tobacco use is stratified by smoking tobacco use and smokeless tobacco use. The largest difference between male students and other genders is noted when comparing current smokeless tobacco-use rates and dual tobacco-use rates. Males report using smokeless tobacco at nearly 10 times the rate of female students. Due to the low absolute numbers of transgender students and students who identify themselves with other genders who report using tobacco within the past 30 days, more detailed comparisons were restricted to students who identified themselves as either male or female.

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	Ages 18–24 % (n)	Ages 25+ % (n)	Effect Size	P-value
Current tobacco use	19.9% (1564)	29.9% (1372)	0.11	<0.01
Current smoking tobacco use	17.0% (1339)	27.9% (1285)	0.13	<0.01
Current smokeless tobacco use	5.8% (457)	3.9% (180)	0.04	<0.01

Current tobacco use overall and smoking tobacco use is significantly higher in students over the age of 25 compared to those ages 18–24. In contrast to the smoking tobacco rates, smokeless tobacco use is more common in 18–24 year-old students than students over the age of 25. This suggests that age will be a required variable to adjust for in analyses concerning current tobacco use rates.

#### Comparisons by class status -

	Two-year Undergraduate % (n)	Four-year Undergraduate % (n)	Graduate % (n)	Other % (n)	Effect Size	P-value
Current tobacco use	34.5% (1664)	17.6% (1040)	12.4% (179)	18.6% (60)	0.21	<0.01
Current smoking tobacco use	31.4% (1519)	15.2% (899)	11.1% (160)	15.8% (51)	0.21	<0.01
Current smokeless tobacco use	5.9% (286)	5.1% (300)	2.6% (38)	4.6% (15)	0.05	<0.01

For all measures of current tobacco use, two-year undergraduate students have higher rates of engaging in that behavior than four-year undergraduate students. The difference is most distinguishable when comparing any tobacco use in the past 30 days and smoking tobacco use in the past 30 days where two-year undergraduate schools have twice the use rate of four-year undergraduate students. Graduate students consistently have the lowest rates of any tobacco use, smoking tobacco use, and smokeless tobacco use within the past 30 days. Students not classified as enrolled in a two-year or four-year undergraduate academic program have similar rates to four-year undergraduate students. The moderate effect sizes and statistical significance suggest additional comparisons of current tobacco-use rates should include an adjustment for the academic program in which the students are enrolled.

#### Comparisons by campus tobacco use policy —

	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Current tobacco use	22.4% (1169)	24.3% (1774)	0.02	0.02
Current smoking tobacco use	18.9% (986)	22.5% (1643)	0.04	<0.01
Current smokeless tobacco use	6.3% (327)	4.3% (312)	0.05	<0.01

Reported current tobacco-use rates and current smoking tobacco-use rates are slightly higher on campuses with designated tobacco-use areas compared to campuses with a full tobacco- or smoke-free policy. The reverse appears to be true when looking at current smokeless tobacco use, as the rate is approximately 2% higher on campuses with tobacco-free/smoke-free policies than those with designated use areas. The small effect sizes suggest that these differences are negligible.

#### Comparisons by type of institution and tobacco policy type —

TWO-YEAR SCHOOLS	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Current tobacco use	33.2% (495)	35.0% (1174)	0.02	0.23
Current smoking tobacco use	29.3% (437)	32.3% (1087)	0.03	0.03
Current smokeless tobacco use	6.4% (96)	5.7% (190)	0.02	0.29

FOUR-YEAR SCHOOLS	Tobacco-/Smoke-free	Designated Areas	Effect Size	P-value
FOOR-YEAR SCHOOLS	% (n)	Designated Areas % (n)	Effect Size	P-value
Current tobacco use	18.1% (674)	15.2% (600)	0.04	<0.01
Current smoking tobacco use	14.8% (549)	14.1% (556)	0.01	0.40
Current smokeless tobacco use	6.2% (231)	3.1% (122)	0.07	<0.01

Students at two-year campuses report higher rates of current tobacco use, current smoking tobacco use, and current smokeless tobacco use compared to students on four-year campuses. However, within each institution type, the most noticeable differences between schools with tobacco-free/smoke-free policies and those with designated use areas are seen in four-year schools where current tobacco use is reportedly 3% lower in schools with tobacco-/smoke-free policies compared to those with designated use areas. The smokeless tobacco-use rate is twice as high on four-year campuses with a tobacco- or smoke-free ban compared to those with designated use areas.

#### — Comparisons by campus tobacco use policy and age group of students —

AGES 18-24	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Current tobacco use	20.4% (714)	19.5% (850)	0.01	0.31
Current smoking tobacco use	16.3% (571)	17.6% (786)	0.02	0.13
12-month smokeless tobacco use	7.3% (257)	4.6% (200)	0.06	<0.01

AGES 25+	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Current tobacco use	26.9% (452)	31.6% (920)	0.05	<0.01
Current smoking tobacco use	24.6% (414)	29.9% (871)	0.06	<0.01
Current smokeless tobacco use	4.0% (68)	3.9% (112)	0.01	0.75

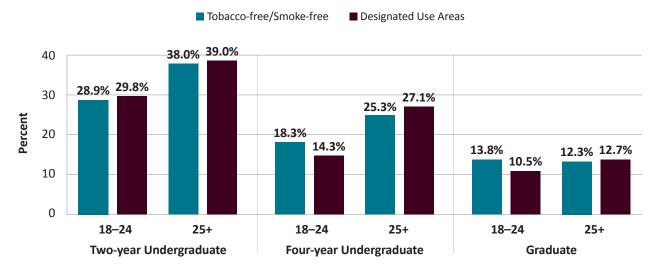
For students ages 18–24, a tobacco-free /smoke-free policy on their campus does not appear to contribute to different rates of current tobacco use or current smoking tobacco use compared to campuses with designated use areas. The current smokeless tobacco-use rate is nearly twice as high for students age 18–24 on tobacco- or smoke-free campuses compared to those on campuses with designated use areas.

Among students ages 25 and older, the smokeless tobacco-use rate does not seem to be influenced by the campus tobacco-use policy. But a noticeable difference in current tobacco use and current smoking tobacco use does exist between campuses with a tobacco-/smoke-free policy and those with only designated use areas among students ages 25 and older. The effect sizes are small, but statistically significant.

#### Comparisons by campus tobacco policy, class status, and age-group —

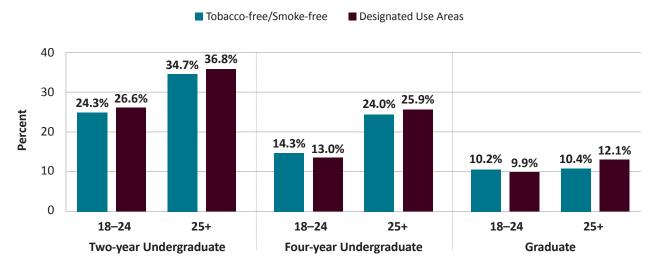
Note: Corresponding contingency tables for the following graphs are available in **Appendix D**.

#### **Any Tobacco Use in Past 30 Days**



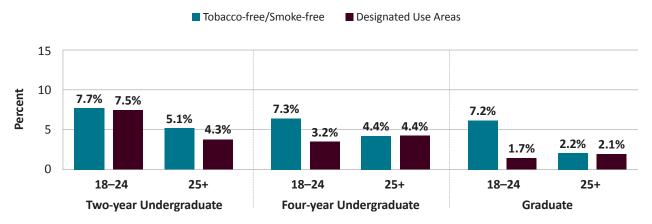
An examination of tobacco use within types of enrollment and age groups yields no significant difference in current tobacco use on campuses with and without tobacco- or smoke-free policies. However, specific sub-populations have noticeably higher rates of tobacco use than other groups of students. Across both age group categories, the tobacco-use rate is lower on four-year campuses than two-year campuses, and lower among graduate students than undergraduate students on four-year campuses.

#### **Smoking Tobacco Use in Past 30 Days**



As with the overall tobacco-use rates, smoking tobacco-use rates are lower among four-year undergraduate students compared to students enrolled in two-year undergraduate programs. The lowest smoking tobacco-use rates are among graduate students. However, the current smoking tobacco-use rate for each age group within each type of program does not significantly differ by whether the institution has a tobacco-/smoke-free policy or designated use areas.

#### **Smokeless Tobacco Use in Past 30 Days**



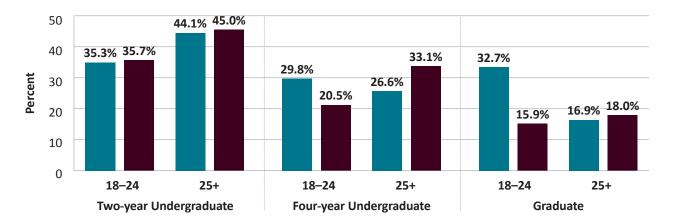
Significant differences were noted in smokeless tobacco-use rates between campuses with tobacco-/smoke-free policies and those with designated use areas. Across all comparisons, lower rates of smokeless tobacco use in the past 30 days were noted on campuses with designated use areas compared to campuses with tobacco-/smoke-free policies. This difference was most noticeable on four-year campuses among 18–24 year-old undergraduate and graduate students.

# Comparisons by campus tobacco policy, class status, - age group, and gender

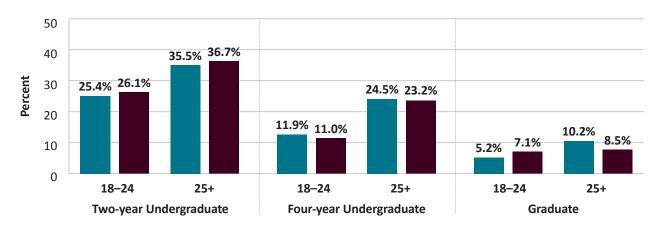
#### **Any Tobacco Use in Past 30 Days**

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



#### **FEMALES:**



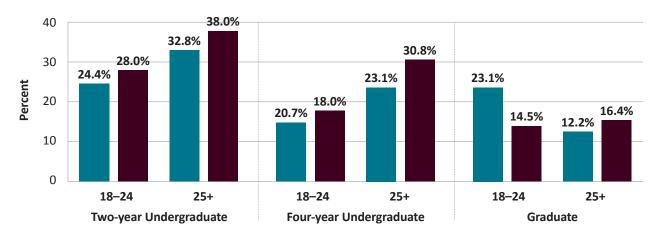
Current tobacco use of any type is higher across all age groups and academic programs in males compared to females on tobacco-/smoke-free campuses and campuses with designated use areas. No significant differences in current tobacco use are noted for males or females in any age group or academic program across the two ban types.

# Comparisons by campus tobacco policy, class status, age group, and gender

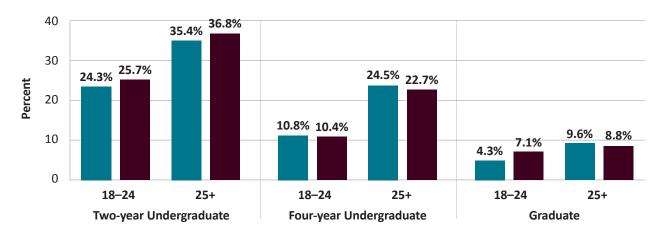
#### **Smoking Tobacco Use in Past 30 Days**

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



#### **FEMALES:**

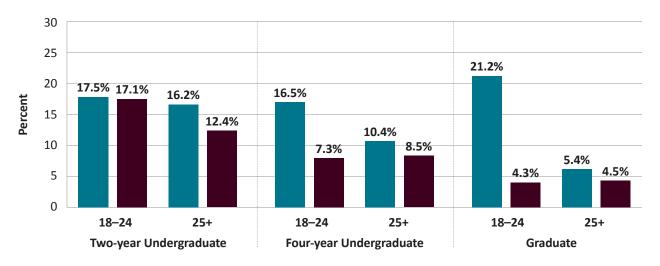


Among the 18–24 year-old students in all academic programs, males have higher current smoking tobacco-use rates than females. However, no significant differences in the current smoking tobacco-use rates were seen between tobacco-free/smoke-free campuses and campuses with designated use areas for a given age group, academic program, and gender.

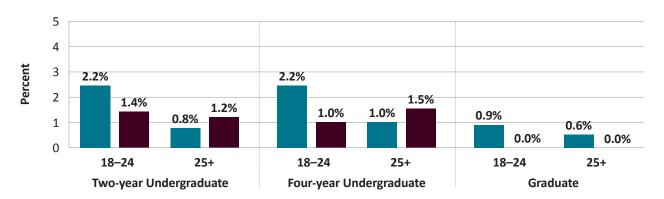
#### **Smokeless Tobacco Use in Past 30 Days**

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



#### **FEMALES:**



Current use of smokeless tobacco, in addition to being substantially higher among male students than female students, tends to be higher on campuses with tobacco-free/smoke-free policies than those with designated use areas. This is particularly true in male students ages 18–24 in four-year undergraduate and graduate programs.

## 8 Daily Tobacco Use

#### **SUMMARY**

- In this study population, the overall daily tobacco-use rate was 10.3%, and was significantly higher among students ages 25 and older compared to student ages 18–24 (18.9% v. 5.3%, respectively, Chi-sq = 576.0, P-value <0.01).
- Students on campuses with tobacco- or smoke-free policies tend to have slightly lower rates of daily tobacco use compared to campuses with designated use areas (9.0% v. 11.2%, respectively, Chi-sq = 15.3, P-value <0.01), but this association does not hold after adjusting for class status.
- Students in two-year undergraduate programs are 5 times as likely to be daily tobacco users (20.3%) than students in four-year undergraduate programs (4.1%) and those enrolled in graduate programs (3.2%, Chi-sq = 857.4, P-value <0.01).

#### Comparisons by gender -

	Male % (n)	Female % (n)	Transgender % (n)	Other % (n)	Effect Size	P-value
Daily tobacco use	10.9% (477)	9.9% (806)	0.0%	9.1% (2)	0.02	0.18

No statistically significant difference in daily tobacco use rate was observed across genders in this population.

#### **Comparisons by age group**

	Ages 18–24	Ages 25+	Effect Size	P-value
	% (n)	% (n)	% (n)	% (n)
Daily tobacco use	5.3% (418)	18.9% (866)	0.22	<0.01

As with previous 12-month and past 30 day tobacco use rates, students ages 25 and older report significantly higher rates of daily tobacco use compared to students ages 18–24.

#### Comparisons by class status -

	Two-year Undergraduate % (n)	Four-year Undergraduate % (n)	Graduate % (n)	Other % (n)	Effect Size	P-value
Daily tobacco use	20.3% (980)	4.1% (244)	3.2% (46)	5.0% (16)	0.26	<0.01

Two-year undergraduate students report significantly higher rates of daily tobacco use compared to four-year undergraduate and graduate students. The rate is between 4 and 6 times higher among the two-year undergraduate student population, suggesting that adjustment for class status is necessary in additional comparisons and analyses.

#### Comparisons by campus tobacco use policy —

	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Daily tobacco use	9.0% (470)	11.2% (816)	0.04	<0.01

As was noted in the current tobacco use comparisons, the daily tobacco-use rate is approximately 2% lower for students on campuses with tobacco-/smoke-free policies compared to those on campuses with designated tobacco use areas. This difference is statistically significant with a small effect size.

#### Comparisons by campus tobacco use policy and type of institution -

TWO-YEAR SCHOOLS	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Daily tobacco use	19.1% (285)	20.7% (696)	0.02	0.20

FOUR-YEAR SCHOOLS	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Daily tobacco use	5.0% (185)	3.0% (120)	0.05	<0.01

No difference was noted in the daily tobacco-use rate among students at two-year schools with tobacco-free/smoke-free policies and those with designated use areas. However, a small difference was noted among students on four-year campuses, with a slightly higher rate of daily tobacco use existing on campuses with tobacco- or smoke-free policies compared to those with designated use areas.

#### — Comparisons by campus tobacco use policy and age group of students —

AGES 18-24	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Daily tobacco use	5.3% (184)	5.4% (234)	0.00	0.83

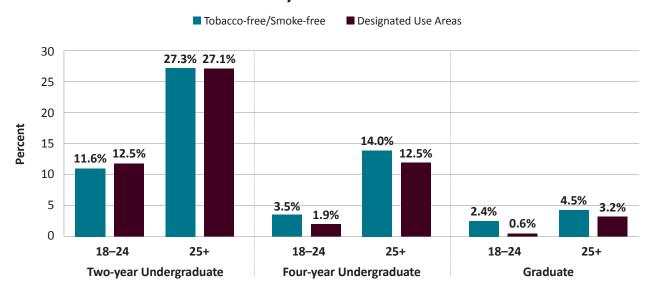
AGES 25+	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Daily tobacco use	16.9% (285)	20.0% (581)	0.04	0.01

No difference in the daily tobacco-use rate was noted among students ages 18–24 on tobacco-/smoke-free campuses compared to those on campuses with designated use areas. Among students ages 25 and older, the daily tobacco- use rate is lower on campuses with a tobacco- or smoke-free policy compared to those with designated use areas, with a minimal effect size.

## Comparisons by campus tobacco policy, type of institution, and age group

Note: Corresponding contingency tables for the following graphs are available in **Appendix E**.

#### **Daily Tobacco Use**



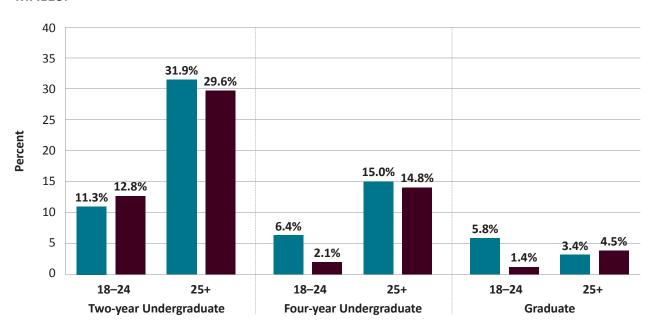
The only significant difference in daily tobacco use by policy type was among four-year undergraduate students ages 18–24. Students reported higher daily tobacco-use rates on campuses with a tobacco- or smoke-free policy compared to those with designated use areas. However, the effect size of this difference was small.

#### Comparisons by campus tobacco policy, type of institution, age group, and gender

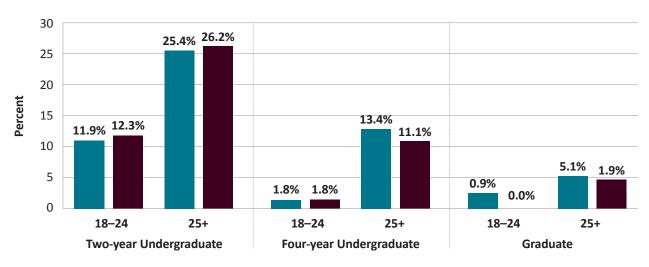
#### **Daily Tobacco Use**



#### **MALES:**



#### **FEMALES:**



The most significant difference in daily tobacco use was noted among male students ages 18–24 in four-year undergraduate programs. Those students on campuses with tobacco-/smoke-free policies had higher rates of daily tobacco use than those on campuses with designated use policies. However, the effect size of this difference was small. Again, the highest daily use rates were among students ages 25 and older in two-year undergraduate programs.

### 9 Quit Attempts

#### **SUMMARY**

- Of those students that reported using tobacco within the past 12 months, 35.0% stated they had also made at least one attempt to quit using within the past year. This percentage was higher among students who reported smoking within the past 30 days, with 41.7% of those students reporting at least one attempt at quitting tobacco use.
- The percentage of students that had used tobacco within the past year and made at least one attempt to quit did not appear to differ by gender, age, or class status of the student, or the type of campus tobacco-use policy.

Notes: Among 12-month smokers (n = 3,619), 35.0% said they had made a quit attempt, 32.1% said they had not, and 32.9% said that wasn't applicable because they weren't smokers. The average number of quit attempts among 12-month users that had made at least one attempt was 3.8 attempts within the past 12 months. There were 1,101 individuals in the study who reported smoking within the past 12 months but not within the past 30 days.

There were several inconsistencies in the way students responded to these questions such as reporting that they had attempted to quit smoking within the past 12 months, but selected "0" for their number of quit attempts, and vice versa. This inconsistency was less noticeable among 30-day smokers (n = 2,629), among whom 41.7% reported making a quit attempt, 40.7% did not make an attempt, and 17.6% said that quit attempts were not applicable because they were not smokers. The group used for the following analysis is only those students who smoked within the past 30 days and reported that they either had, or had not made a quit attempt within the past year (n = 2,165).

#### **Comparisons by gender**

	Male	Female	Transgender	Other	Effect Size	P-value
Attempted to quit % (n)	48.2% (376)	51.8% (716)	100.0% (1)	N/A	0.04	0.17
Mean number of attempts (range)	4.6 (1-99)	3.7 (1-99)	N/A	4.0 (N/A)	0.00	0.34

No statistically significant differences were noted by gender with respect to the percent of current smokers who attempted to quit within the past year, or the number of quit attempts made within the past 12 months given that a current smoker made at least one quit attempt.

#### Comparisons by age group —

	Ages 18–24	Ages 25+	Effect Size	P-value
Attempted to quit % (n)	50.8% (494)	50.3% (597)	0.01	0.83
Mean number of attempts (range)	4.8 (1-99)	3.3 (1-99)	0.01	0.01

No statistically significant difference was noted in the percentage of current smokers that attempted to quit smoking within the past year by age group. The difference in the mean number of quit attempts between students ages 18 to 24 and those ages 25 and older was statistically significant (mean = 4.8, standard deviation = 13.3 and mean = 3.3, standard deviation = 6.5, respectively), but with a very small effect size.

#### Comparisons by class status -

	Two-year Undergraduate	Four-year Undergraduate	Graduate	Other	Effect Size	P-value
Attempted to quit % (n)	51.4% (712)	48.5% (306)	48.7% (55)	61.1% (22)	0.04	0.36
Mean number of attempts (range)	3.7 (1-99)	4.8 (1-99)	2.8 (1-20)	3.1 (1-10)	0.00	0.30

There does not appear to be an association between the class status of current smokers and whether they made a quit attempt within the past year. There was also no statistically significant difference in the number of quit attempts made within the past year by current smokers given that they made at least one quit attempt when examined by class status.

#### Comparisons by campus tobacco-use policy —

	Tobacco-/Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	49.6% (387)	51.1% (708)	0.01	0.50
Mean number of attempts (range)	4.3 (1-99)	3.8 (1-99)	0.00	0.46

Whether a campus has a tobacco-/smoke-free policy or designated areas for tobacco use does not appear to influence whether current smokers on that campus made an attempt to quit smoking within the past year, or the average number of quit attempts made by current smokers that made at least one quit attempt.

#### Comparisons by campus tobacco-use policy and type of institution ——

TWO-YEAR SCHOOLS	Tobacco-/Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	49.2% (190)	52.4% (526)	0.02	0.29
Mean number of attempts (range)	4.0 (1-99)	3.6 (1-99)	0.00	0.57

FOUR-YEAR SCHOOLS	Tobacco-/Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	50.0% (197)	47.8% (182)	0.03	0.54
Mean number of attempts (range)	4.5 (1-99)	4.3 (1-99)	0.00	0.89

The percentage of current smokers that attempted to quit within the past year does not vary by tobacco-use policy when stratified by whether the campus is a two- or four-year school. The number of quit attempts within the past year by students who are current smokers also does not differ by policy type or whether the school is a two- or four-year campus.

#### Comparisons by campus tobacco-use policy and age group of students

AGES 18-24	Tobacco-/Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	49.6% (199)	51.6% (295)	0.02	0.55
Mean number of attempts (range)	5.2 (1-99)	4.5 (1-99)	0.00	0.52

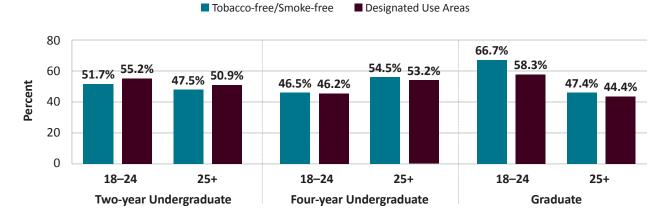
AGES 25+	Tobacco-/Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	49.5% (187)	50.7% (410)	0.01	0.70
Mean number of attempts (range)	3.3 (1-60)	3.4 (1-99)	0.00	0.93

Although 18–24 year-old current smokers report slightly higher mean numbers of quit attempts within the past 12 months compared to current smokers ages 25 and older, the tobacco-use policy of their respective campuses does not appear to influence the percentage of current smokers that make a quit attempt, or the average number of attempts made within the past year by a given age group.

## Comparisons by campus tobacco policy, type of institution, and age group

Note: Corresponding contingency tables for the following graphs are available in **Appendix E**.

## Percent of Current Smokers who attempted to quit within the past year



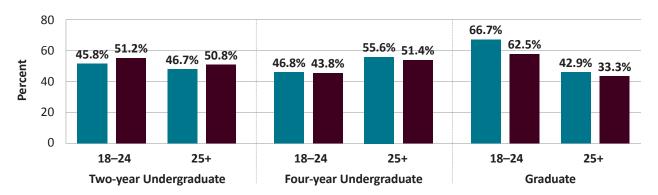
There were no statistically significant differences noted in the percentage of current smokers that attempted to quit smoking within the past 12 months by campus tobacco-use policy after stratifying by age and class status.

#### Comparisons by campus tobacco policy, type of institution, age group, and gender

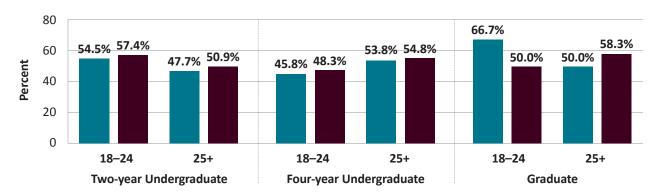
## Percent of Current Smokers who attempted to quit within the past year

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



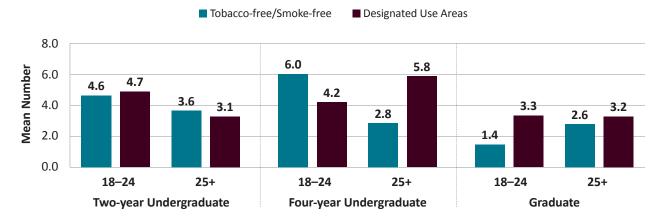
#### **FEMALES:**



After also accounting for gender, there were still no statistically significant differences noted in the percentage of current smokers that attempted to quit smoking within the past 12 months by campus tobacco-use policy after stratifying by age and class status.

## Comparisons by campus tobacco policy, type of institution, and age group

## Mean Number of Quit Attempts among current smokers who attempted to quit within the past year



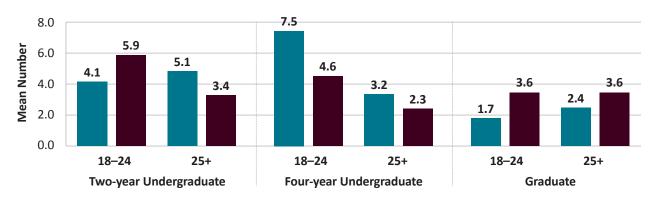
As with the percentage of quit attempts within the past year, there were no statistically significant differences noted in the average number of quit attempts among current smokers that attempted to quit smoking within the past 12 months by campus tobacco-use policy after stratifying by age and class status. However, 18–24 year-old current smokers on both two- and four-year undergraduate campuses report the highest mean number of quit attempts within the past 12 months.

#### Comparisons by campus tobacco policy, type of institution, age group, and gender

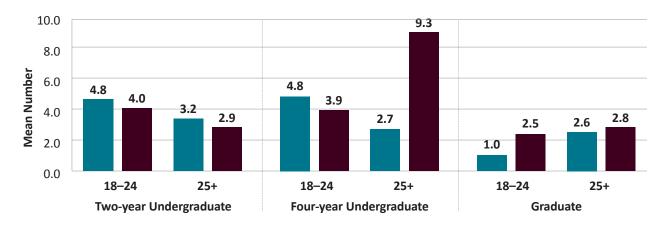
## Mean Number of Quit Attempts among current smokers who attempted to quit within the past year

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



#### **FEMALES:**



No significant differences were noted in the average number of quit attempts made by current smokers within the past 12 months given that they had made a quit attempt after stratifying by age, class status, and gender. Male current smokers do appear to have reported slightly higher mean numbers of quit attempts across most of these strata compared to female current smokers.

## 10 Secondhand Smoke Exposure

#### SECONDHAND SMOKE EXPOSURE

- Overall, 34.8% of all survey respondents reported they had been exposed to secondhand smoke while on campus. This was slightly more common in current smokers (40.4%) compared to non-smokers (34.5%) (Chi-sq = 31.4, P-value <0.01).
- A large and consistent difference was noted in the percentage of students that reported secondhand smoke exposure on campus between students on campuses with tobacco-free and smoke-free polices compared to those with designated tobacco use areas. Students on campuses with designated tobacco-use areas reported twice as much exposure to secondhand smoke on campus than those students on campuses with tobacco- or smoke-free policies (45.6% v. 21.8%, respectively, Chi-sq = 753.7, P-value <0.01).
- Although the type of institution, class status of the students, and age of the students were also significantly associated with secondhand smoke exposure rates on campus, the campus tobacco-use policy remained an important factor in the reported secondhand smoke exposure rate, even in the presence of the other variables.

#### **Comparisons by gender**

	Male % (n)	Female % (n)	Transgender % (n)	Other % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (All Students)	35.8% (1568)	35.6% (2886)	31.3% (5)	50.0% (11)	0.01	0.54
Exposure to secondhand smoke on campus (Non-smokers)	33.2% (1106)	35.1% (2284)	33.3% (5)	50.0% (10)	0.02	0.14
Exposure to secondhand smoke on campus (Smokers)	44.2% (457)	37.8% (602)	* (1)	* (2)	0.01	0.01

<sup>\* =</sup> insufficient data

No statistically significant difference in exposure to secondhand smoke was observed across genders among all students or among non-smokers. Male smokers report higher rates of secondhand smoke exposure on campus than female smokers.

#### Comparisons by age group -

	Ages 18-24 % (n)	Ages 25+ % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (All Students)	41.7% (3284)	25.4% (1168)	0.17	<0.01
Exposure to secondhand smoke on campus (Non-smokers)	41.1% (2683)	21.4% (710)	0.20	<0.01
Exposure to secondhand smoke on campus (Smokers)	44.9% (601)	35.6% (458)	0.09	<0.01

Students ages 18–24 report significantly higher rates of exposure to secondhand smoke on campus compared to students ages 25 and older. This difference is statistically significant with a moderate effect size. The secondhand exposure rate is higher among smokers compared to non-smokers for both those aged 18–24 and 25 and older.

#### Comparisons by class status —

	Two-year Undergraduate % (n)	Four-year Undergraduate % (n)	Graduate % (n)	Other % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (All Students)	29.4% (1420)	43.1% (2550)	25.9% (375)	37.7% (125)	0.15	<0.01
Exposure to secondhand smoke on campus (Non-smokers)	24.6% (814)	43.1% (2164)	26.1% (335)	35.3% (96)	0.19	<0.01
Exposure to secondhand smoke on campus (Smokers)	39.9% (606)	42.9% (386)	25.0% (40)	56.9% (29)	0.10	<0.01

Students in four-year undergraduate programs also report significantly higher rates of exposure to secondhand smoke on campus compared to students in two-year undergraduate and graduate programs. This difference is statistically significant with a moderate effect size.

#### Comparisons by campus tobacco-use policy —

	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (All Students)	21.8% (1135)	45.6% (3335)	0.25	<0.01
Exposure to secondhand smoke on campus (Non-smokers)	21.1% (890)	44.5% (2519)	0.24	<0.01
Exposure to secondhand smoke on campus (Smokers)	24.8% (245)	49.7% (816)	0.25	<0.01

The rates of exposure to secondhand smoke are twice as high on campuses with designated tobacco-use areas compared to campuses with tobacco- or smoke-free policies. These differences are observed among the whole student population as well as among only non-smokers with moderate effect sizes and strong statistical significance.

#### — Comparisons by campus tobacco use policy and type of institution —

TWO-YEAR SCHOOLS	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (All Students)	15.4% (230)	35.5% (1195)	0.20	<0.01
Exposure to secondhand smoke on campus (Non-smokers)	12.3% (130)	30.2% (687)	0.19	<0.01
Exposure to secondhand smoke on campus (Smokers)	22.9% (100)	46.7% (508)	0.22	<0.01

FOUR-YEAR SCHOOLS	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (All Students)	24.3% (905)	54.1% (2140)	0.31	<0.01
Exposure to secondhand smoke on campus (Non-smokers)	24.0% (760)	54.0% (1832)	0.31	<0.01
Exposure to secondhand smoke on campus (Smokers)	26.4% (145)	55.4% (308)	0.30	0.02

Students at both two-year and four-year institutions report 2 times the rate of exposure to secondhand smoke on campuses with designated tobacco-use areas compared to those with tobacco-/smoke-free policies. These differences are strongly significant with notable effect sizes.

#### Comparisons by campus tobacco use policy and age group of students

AGES 18-24	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (All Students)	26.2% (917)	54.2% (2367)	0.28	<0.01
Exposure to secondhand smoke on campus (Non-smokers)	25.5% (748)	53.8% (1935)	0.29	<0.01
Exposure to secondhand smoke on campus (Smokers)	29.6% (169)	56.3% (432)	0.27	<0.01

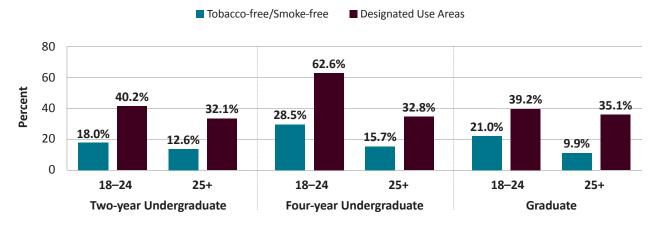
AGES 25+	Tobacco-/Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (All Students)	12.6% (213)	32.8% (955)	0.22	<0.01
Exposure to secondhand smoke on campus (Non-smokers)	10.8% (137)	28.0% (573)	0.21	<0.01
Exposure to secondhand smoke on campus (Smokers)	18.4% (76)	43.9% (382)	0.25	<0.01

Among all students, as well as among non-smokers in particular, a significant difference is seen in secondhand smoke exposure on campuses with tobacco-/smoke-free policies compared to those with designated use areas. Although the secondhand exposure is higher among 18–24 year-olds on campuses with either type of tobacco-use policy, the large effect sizes suggest that tobacco-free/smoke-free campus policies are associated with significantly lower rates of secondhand smoke exposure.

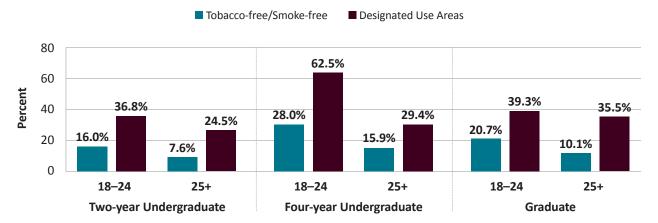
## Comparisons by campus tobacco policy, type of institution, and age group

Note: Corresponding contingency tables for the following graphs are available in **Appendix F**.

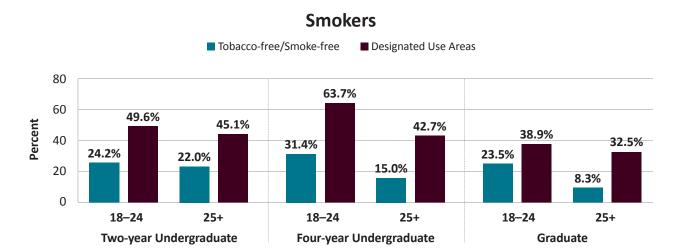
#### **All Students**



#### **Non-Smokers**



## Comparisons by campus tobacco policy, type of institution, and age group



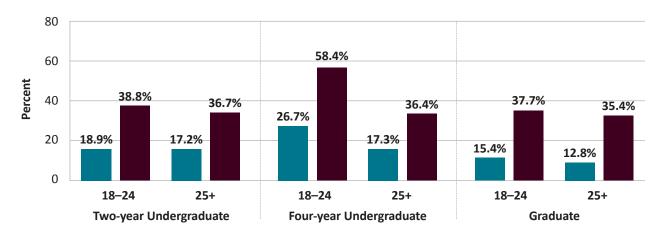
Students on campuses with designated tobacco-use areas reported exposure to secondhand smoke at 2–3 times the rate of students on campuses with tobacco- or smoke-free policies. This trend was consistent across two-year undergraduate, four-year undergraduate and graduate students, both accounting for the whole student population and when stratified by smokers and non-smokers. These differences by campus tobacco-use policy are strongly significant with large effect sizes.

## Comparisons by campus tobacco policy, class status, – age group, and gender

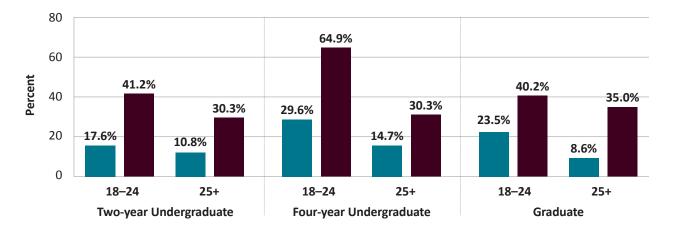
#### **All Students**

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



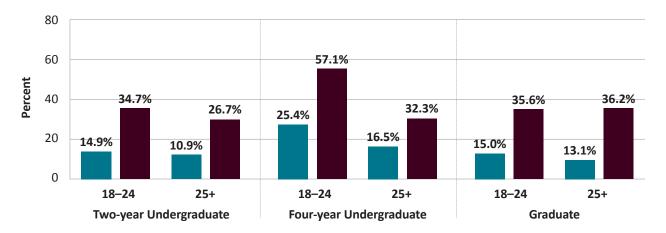
#### **FEMALES:**



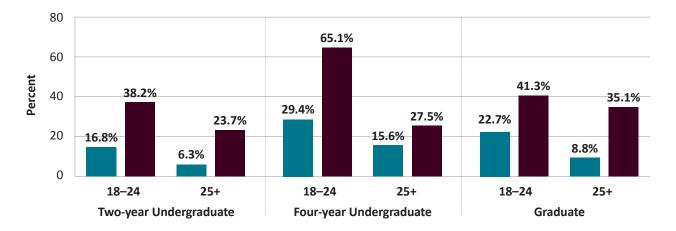
#### **Non-smokers**

■ Tobacco-free/Smoke-free ■ Designated Use Areas

#### **MALES:**



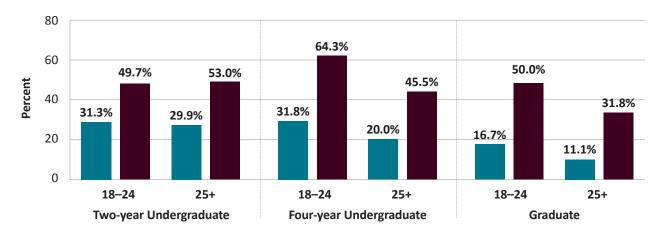
#### **FEMALES:**



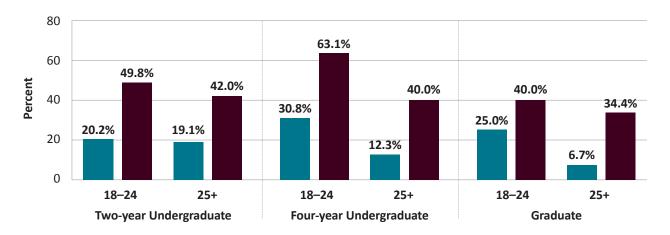
#### **Smokers**



#### **MALES:**



#### **FEMALES:**



When stratified by gender, the differences in secondhand smoke exposure still hold among campuses with tobacco-free/smoke-free policies and those with designated tobacco-use areas. These differences are statistically significant with strong effect sizes and are consistent across class status.

## 11 Regression Analyses: Summary

#### **30 DAY SMOKING TOBACCO**

- Students are more likely to have reported using smoking tobacco within the past 30 days on campuses that have a designated area policy versus students enrolled at schools that have a tobacco- or smoke- free policy
- On campuses which have a designated area policy, a stronger written policy was associated with less likelihood of using smoking tobacco within the past 30 days.

#### **DAILY SMOKING TOBACCO**

• On campuses which have a designated area policy, a stronger written policy was associated with less likelihood of using smoking tobacco on a daily basis.

#### **30 DAY SMOKELESS TOBACCO**

- Students were less likely to use smokeless tobacco in the past 30 days if the campus tobacco policy has been in place for 6 or more years.
- On campuses which have a designated area policy, a stronger written policy was associated with less likelihood of using smokeless tobacco within the past 30 days.

#### **DAILY SMOKELESS TOBACCO**

• On campuses which have a designated area policy, a stronger written policy was associated with less likelihood of using smokeless tobacco on a daily basis.

#### SECONDHAND SMOKE EXPOSURE ON CAMPUS (OUTSIDE)

- Students were more likely to report exposure to secondhand smoke on campus (outside) when the campus had a designated area policy versus a tobacco-or smoke-free policy.
- Students were more likely to report exposure to secondhand smoke when the campus tobacco policy has been in place for 6 or more years versus less than 6 years.
- On campuses with a designated area policy, students were more likely to report exposure to secondhand smoke on campus when the written policy was stronger.

#### **ENFORCEMENT OF POLICY**

• Level of enforcement was not associated with any of the outcomes (30-day use smoking or smokeless tobacco, daily use of smoking or smokeless tobacco or reported exposure to secondhand smoke).

#### 12

### Regression Analyses: Type of Policy and Length of Policy

**Table 1.** Generalized estimating equation analysis of 30-day smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ²	df	P-value	Odds Ratio
Constant	858	.1328	(-1.118,598)	41.722	1	.000	NA
Policy Type							
Designated Area Policy	.473	.2135	(0.055,.892)	4.915	1	.027	1.605
Tobacco- or Smoke- free Policy	Ref						
Length of Policy							
6 or more years	424	.2362	(887,.039)	3.218	1	.073	0.654
Less than 6 years	Ref						
Gender							
Female	269	.0746	(415,122)	12.968	1	.000	0.502
Male	Ref						
Age Categories							
18–24 year-olds	633	.1064	(842,425)	35.442	1	.000	0.531
25 years or older	Ref						

Students were 60.5% more likely to have used smoking tobacco within the past 30 days on campuses with a designated area policy compared to students who are enrolled on campuses with a tobacco- or smoke-free policy in place after controlling for length policy, gender, and age.

Controlling for type of policy, gender, and age, the length of policy did not reach statistical significance and was therefore not associated with using smoking tobacco in the past 30 days.

Compared to male students, female students were 49.8% less likely to have used smoking tobacco in the past 30 days after controlling for type of policy, length policy, and age.

Students 18–24 years of age were 46.9% less likely to have used smoking tobacco within the past 30 days compared to students 25 years of age or older after controlling for type of policy, length policy, and gender.

#### Model:

Predicted logit (smoking tobacco past 30 days) = -.858 + (.473)\*Policy Type + (-.424)\*Length of Policy + (-.269)\*Gender + (-.633)\*Age category

According to the model, the log odds of a student using smoking tobacco within the past 30 days is positively associated with the campus having a designated area policy versus a tobacco-free or smoke-free policy and negatively associated with being female and younger in age.

**Table 2.** Generalized estimating equation analysis of daily smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ²	df	P-value	Odds Ratio
Constant	-1.841	.2311	(-2.294,-1.388)	63.434	1	.000	NA
Policy Type							
Designated Area Policy	.620	.3270	(021,1.260)	3.590	1	.058	1.859
Tobacco- or Smoke- free Policy	Ref						
Length of Policy							
6 or more years	575	.3752	(-1.311,.160)	2.352	1	.125	0.563
Less than 6 years	Ref						
Gender							
Female	.238	.0860	(.070,.407)	7.675	1	.006	1.269
Male	Ref						
Age Categories							
18–24 year-olds	-1.553	.1244	(-1.797,-1.309)	155.882	1	.000	0.212
25 years or older	Ref						

Controlling for length of policy, gender, and age, the type of policy did not reach statistical significance and was therefore not associated with using smoking tobacco daily.

Length of policy, after controlling for type of policy, gender, and age, did not reach statistical significance and was therefore not associated with using smoking tobacco on a daily basis.

Female students were 26.9% more likely to have used smoking tobacco on a daily basis compared to male students after controlling for type of policy, length of policy, and age.

Students 18–24 years of age were 78.8% less likely to have used smoking tobacco daily compared to students 25 years of age or older after controlling for type of policy, length of policy, and gender.

#### Model:

Predicted logit (daily use of smoking tobacco) = -1.841 + (.620)\*Policy Type + (-.575)\*Length of Policy + (.238)\*Gender + (-1.553)\*Age category.

According to the model, the log odds of a student using smoking tobacco on a daily basis are positively associated with being female and negatively with being younger in age.

**Table 3.** Generalized estimating equation analysis of 30-day smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ <sup>2</sup>	df	P-value	Odds Ratio
Constant	-1.937	.1312	(-2.194,-1.680)	218.038	1	.000	NA
Policy Type							
Designated Area Policy	.011	.1907	(363,.385)	.003	1	.954	1.011
Tobacco- or Smoke- free Policy	Ref						
Length of Policy							
6 or more years	610	.2387	(-1.078,143)	6.542	1	.011	0.543
Less than 6 years	Ref						
Gender							
Female	-2.329	.1196	(-2.564,-2.095)	379.346	1	.000	0.097
Male	Ref						
Age Categories							
18–24 year-olds	.306	.1266	(.058,.554)	5.844	1	.016	1.358
25 years or older	Ref						

Controlling for length of policy, gender, and age, the type of policy did not reach statistical significance and was therefore not associated with using smokeless tobacco within the past 30 days.

Students were 45.7% less likely to have used smokeless tobacco within the past 30 days on campuses with a policy that has been in place for 6 or more years compared to campuses with policies less than 6 years old after controlling for type of policy, gender, and age.

Female students were 90.3% less likely to have used smokeless tobacco in the past 30 days compared to male students after adjusting for type of policy, length of policy, and age.

Relative to students 25 years of age or older, students 18–24 years of age were 35.8% more likely to have used smokeless tobacco within the past 30 days when controlled for policy type, policy length, and gender.

#### Model:

Predicted logit (smokeless tobacco past 30 days) = -1.937 + (.011)\*Policy Type + (-.610)\*Length of Policy + (-2.329)\*Gender + (.306)\*Age category.

According to the model, the log odds of a student using smokeless tobacco within the past 30 days is positively associated with the student being younger in age and negatively associated with being female.

**Table 4.** Generalized estimating equation analysis of daily smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-2.749	.1800	(-3.102,-2.396)	233.313	1	.000	NA
Policy Type							
Designated Area Policy	.172	.3844	(581,.925)	.200	1	.654	1.188
Tobacco- or Smoke- free Policy	Ref						
Length of Policy							
6 or more years	767	.5132	(-1.773,.239)	2.235	1	.135	0.464
Less than 6 years	Ref						
Gender							
Female	-3.368	.2752	(-3.908,-2.829)	149.800	1	.000	0.034
Male	Ref						
Age Categories							
18–24 year-olds	471	.2253	(912,029)	4.369	1	.037	0.624
25 years or older	Ref						

Controlling for length of policy, gender, and age, the type of policy did not reach statistical significance and was therefore not associated with using smokeless tobacco daily.

Length of policy, after controlling for type of policy, gender, and age, did not reach statistical significance and was therefore not associated with using smokeless tobacco on a daily basis.

Compared to male students, female students were 96.6% less likely to have used smokeless tobacco on a daily basis after controlling for policy type, length of policy, and age.

Students 18–24 years of age were 37.6% less likely than students 25 years of age or older to have used smokeless tobacco daily after adjustment for type of policy, policy length, and gender.

#### Model:

Predicted logit (daily use of smokeless tobacco) = -2.749 + (.172)\*Policy Type + (-.767)\*Length of Policy + (-3.368)\*Gender + (-.471)\*Age category.

According to the model, the log odds of a student using smokeless tobacco on a daily basis are negatively associated being female and younger in age.

**Table 5.** Generalized estimating equation analysis of attempted to quit smoking within the past 12 months among current smoking tobacco users adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ <sup>2</sup>	df	P-value	Odds Ratio
Constant	130	.1052	(336,.076)	1.521	1	.217	NA
Policy Type							
Designated Area Policy	.082	.0955	(106,.269)	.730	1	.393	1.085
Tobacco- or Smoke- free Policy	Ref						
Length of Policy							
6 or more years	028	.0900	(204,.148)	.097	1	.755	0.972
Less than 6 years	Ref						
Gender							
Female	.145	.0935	(038,.329)	2.416	1	.120	1.156
Male	Ref						
Age Categories							
18–24 year-olds	.036	.0766	(114,.186)	.223	1	.637	1.037
25 years or older	Ref						

There were no predictors within the model which achieved a level of statistical significance.

#### Model:

Predicted logit (making a quit attempt) = -.130 + (.082)\*Policy Type + (-.028)\*Length of Policy + (.145)\*Gender + (.036)\*Age category.

**Table 6.** Generalized estimating equation analysis of secondhand smoke exposure on campus (outside) among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ <sup>2</sup>	df	P-value	Odds Ratio
Constant	-2.016	.2311	(-2.469,-1.563)	76.047	1	.000	NA
Policy Type							
Designated Area Policy	.878	.2435	(.401,1.355)	13.009	1	.000	2.406
Tobacco- or Smoke- free Policy	Ref						
Length of Policy							
6 or more years	.442	.1839	(.082,.802)	5.777	1	.016	1.556
Less than 6 years	Ref						
Gender							
Female	.046	.0609	(073,.165)	.572	1	.449	1.047
Male	Ref						
Age Categories							
18–24 year-olds	.879	.1050	(.673,1.084)	70.037	1	.000	2.408
25 years or older	Ref						

Students were 141% more likely to report being exposed to secondhand smoke (outside) on campuses with a designated area policy compared to students enrolled on campuses with a tobacco-free or smoke-free policy in place after controlling for length of policy, gender, and age.

Students were 55.6% more likely to report being exposed to secondhand smoke (outside) on campuses with a policy in place for 6 or more years after adjustment for policy type, gender, and age.

Controlling for type of policy, length of policy and age, gender did not reach statistical significance and was therefore not associated with secondhand smoke exposure on campus (outside).

Students 18–24 years of age were 141% more likely to report being exposed to secondhand smoke on campus (outside), compared to students 25 years of age or older adjusting for type of policy, length of policy, and gender.

#### Model:

Predicted logit (exposure to secondhand smoke on campus: outside) = -2.016 + (.878)\*Policy Type + (.442)\*Length of Policy + (.046)\*Gender + (.879)\*Age category.

According to the model, the log odds of a student reporting being exposed to secondhand on campus (outside) is positively associated with being enrolled on a campus having a designated area policy, on a campus where the policy has been in place 6 or more years, and being younger in age.

#### 13

## Regression Analyses: Strength of Written Policy (Designated Areas)

**Table 1.** Generalized estimating equation analysis of 30-day smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	.389	.1998	(002,.781)	3.795	1	.050	NA
Strength of Written Policy							
Strength (Total Points)	056	.0151	(086,027)	13.879	1	.000	.945
Gender							
Female	279	.0866	(449,109)	10.375	1	.001	0.757
Male	Ref						
Age Categories							
18–24 year-olds	507	.1555	(812,202)	10.621	1	.001	0.602
25 years or older	Ref						

On campuses with a designated area policy, for every 5-point increase in the strength of the written policy students were 5.5% less likely to report using smoking tobacco within the past 30 days after adjustment for gender and age.

Compared to male students, female students were 24.3% less likely to have used smoking tobacco in the past 30 days after controlling for strength of written policy and age.

After controlling for strength of written policy and gender, students 18–24 years of age were 39.8% less likely to have used smoking tobacco within the past 30 days, compared to students 25 years of age or older.

#### Model:

Predicted logit (smoking tobacco past 30 days) = .389 + (-.056)\*Strength of policy + (-.279)\*Gender + (-.507)\*Age category.

According to the model, the log odds of a student using smoking tobacco within the past 30 days on a campus with a designated area policy is negatively associated with the written policy and included more elements, including being female and younger in age.

**Table 2.** Generalized estimating equation analysis of daily smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	.345	.5366	(706,1.397)	.414	1	.520	NA
Strength of Written Policy							
Strength (Total Points)	110	.0381	(184,035)	8.312	1	.004	.896
Gender							
Female	.207	.1042	(.003,.411)	3.948	1	.047	1.230
Male	Ref						
Age Categories							
18–24 year-olds	-1.268	.1723	(-1.605,930)	54.133	1	.000	.282
25 years or older	Ref						

On campuses with a designated area policy for every 5-point increase in the strength of the written policy students were 10.4% less likely to report using smoking tobacco on a daily basis after adjustment for gender and age.

Compared to male students, female students were 23.0% more likely to report daily use of smoking tobacco, adjusting for strength of written policy and age.

Students 18–24 years of age were 71.8% less likely to have used smoking tobacco daily compared to students 25 years of age of older, controlling for strength of written policy and gender.

#### Model:

Predicted logit of (daily use of smoking tobacco) = .345 + (-.110)\* Strength of policy + (.207)\*Gender + (-1.268)\*Age category.

According to the model, the log odds of a student using smoking tobacco daily on a campus with a designated area policy is negatively associated with a stronger written policy and being younger in age. For daily tobacco use the model showed a positive association with being female.

**Table 3.** Generalized estimating equation analysis of 30-day smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-1.110	.3438	(-1.784,437)	10.435	1	.001	NA
Strength of Written Policy							
Strength (Total Points)	060	.0187	(096,023)	10.179	1	.001	.942
Gender							
Female	-2.384	.1935	(-2.763,-2.004)	151.699	1	.000	.092
Male	Ref						
Age Categories							
18–24 year-olds	.279	.1807	(075,.633)	2.379	1	.123	1.321
25 years or older	Ref						

On campuses with a designated area policy for every 5-point increase in the strength of the written policy students were 5.8% less likely to report using smokeless tobacco within the past 30 days after controlling for age and gender.

Compared to male students, female students were 90.8% less likely to have used smokeless tobacco in the past 30 days after adjusting for strength of written policy and age.

Controlling for strength of written policy and gender, age did not reach statistical significance and therefore was not associated with using smokeless tobacco within the past 30 days.

#### Model:

Predicted logit (smokeless tobacco past 30 days) = -1.110 + (-.060)\*Strength of policy + (-2.384)\*Gender + (.279)\*Age category.

According to the model, the log odds of a student using smokeless tobacco within the past 30 days on a campus with a designated area policy is negatively associated with a stronger written policy and being female, and positively associated with being 18–24 years of age compared to 25 years of age or older.

**Table 4.** Generalized estimating equation analysis of daily smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-1.080	.7382	(-2.526,.367)	10.435	1	.144	NA
Strength of Written Policy							
Strength (Total Points)	180	.0494	(205,011)	10.179	1	.029	.898
Gender							
Female	-3.552	.4265	(-4.388,-2.716)	151.699	1	.000	.029
Male	Ref						
Age Categories							
18–24 year-olds	377	.2744	(915,.160)	2.379	1	.169	.686
25 years or older	Ref						

On campuses with a designated area policy for every 5-point increase in the strength of the written policy students were 10.2% less likely to report using smokeless tobacco on a daily basis after adjusting for gender and age.

Compared to male students, female students were 2.9% less likely to report daily use of smokeless tobacco on a daily basis, controlling for strength of written policy and age.

Controlling for strength of written policy and gender, age did not reach statistical significance and therefore was not associated with daily use of smokeless tobacco.

#### Model:

Predicted logit (daily use of Smoking tobacco) = -1.080 + (-.180)\* Strength of policy + (-3.552)\*Gender + (-.377)\*Age category.

According to the model, the log odds of a student using smokeless tobacco daily on a campus with a designated area policy is negatively associated with a stronger written policy, being female and younger in age.

**Table 5.** Generalized estimating equation analysis secondhand smoke exposure on campus (outside) among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-1.451	.3053	(-2.049,853)	22.585	1	.000	NA
Strength of Written Policy							
Strength (Total Points)	.032	.0146	(.004,.061)	4.891	1	.027	1.033
Gender							
Female	.092	.0759	(057,.241)	1.474	1	.225	1.097
Male	Ref						
Age Categories							
18–24 year-olds	.764	.1554	(.460,1.069)	24.186	1	.000	2.147
25 years or older	Ref						

On campuses with a designated area policy for every 5-point increase in the strength of the written policy students were 3.3% more likely to report being exposed to secondhand smoke (outside) on campuses after adjustment for gender and age.

After controlling for strength of written policy and age, gender did not reach statistical significance and therefore not associated with reported exposure to secondhand smoke on campus (outside).

Students 18–24 years of age were 114.7% more likely to report being exposed to secondhand smoke on campus (outside) compared to students 25 years of age or older after controlling for strength of written policy and gender.

#### Model:

Predicted logit (exposure to secondhand smoke on campus: outside) = -1.451 + (.032)\* Strength of policy + (.092)\*Gender + (.764)\*Age category.

According to the model, the log odds of a student reporting being exposed to secondhand on campus (outside) is positively associated with being enrolled on a campus having a designated area policy compared to a student enrolled at a campus with a tobacco-or smoke-free policy and with being female and younger in age.

# 14 Strength of Written Policy (Tobacco-/Smoke-free)

**Table 1.** Generalized estimating equation analysis of 30-day smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-1.019	.4317	(-1.865,172)	5.567	1	.018	NA
Strength of Written Policy							
Strength (Total Points)	.002	.0063	(011,.014)	.057	1	.811	1.002
Gender							
Female	319	.1327	(579,059)	5.774	1	.016	0.727
Male	Ref						
Age Categories							
18–24 year-olds	523	.1256	(769,277)	17.372	1	.000	0.593
25 years or older	Ref						

After adjustment for gender and age, strength of the written policy did not achieve a level of statistical significance and therefore is not associated with use of smoking tobacco within the past 30 days.

Compared to male students, female students were 27.3% less likely to have used smoking tobacco in the past 30 days after controlling for strength of written policy and age.

Students 18–24 years of age were 40.7% less likely to have used smoking tobacco within the past 30 days compared to students 25 years or age of older after adjusting for strength of written policy and gender.

#### Model:

Predicted logit (smoking tobacco past 30 days) = -1.019 + (.002)\*Strength of policy + (-.319)\*Gender + (-.523)\*Age category.

According to the model, the log odds of a student using smoking tobacco within the past 30 days on a campus with a tobacco- or smoke-free policy is negatively associated with being female and younger in age. Strength of policy did not achieve statistical significance.

**Table 2.** Generalized estimating equation analysis daily of smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-2.628	1.0546	(-4.695,561)	6.208	1	.013	NA
Strength of Written Policy							
Strength (Total Points)	.011	.0134	(016,.037)	.635	1	.426	1.011
Gender							
Female	.178	.0953	(009,.364)	3.467	1	.063	1.194
Male	Ref						
Age Categories							
18–24 year-olds	-1.490	.1345	(-1.753,-1.226)	122.738	1	.000	.225
25 years or older	Ref						

After adjustment for gender and age, strength of the written policy did not achieve a level of statistical significance and therefore is not associated with daily use of smoking tobacco.

Controlling for strength of written policy and age, gender did not reach statistical significance and therefore was not associated with daily use of smoking tobacco.

Students 18–24 years of age were 77.5% less likely to have used smoking tobacco daily compared to students 25 years of age of older.

#### Model:

Predicted logit (daily use of smoking tobacco) =  $-2.628 + (.011)^*$  Strength of policy +  $(.178)^*$ Gender +  $(-1.490)^*$ Age category.

According to the model, the log odds of a student using smoking tobacco daily on a campus with a tobacco- or smoke-free policy is negatively associated with being younger in age and positively associated with being female.

**Table 3.** Generalized estimating equation analysis of 30-day smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-2.273	.2944	(-2.850,-1.696)	59.595	1	.000	NA
Strength of Written Policy							
Strength (Total Points)	.002	.0038	(006,.009)	.164	1	.686	1.002
Gender							
Female	-2.331	.1551	(-2.635,-2.027)	225.850	1	.000	.097
Male	Ref						
Age Categories							
18–24 year-olds	.587	.1587	(.276,.898)	13.704	1	.000	1.799
25 years or older	Ref						

After controlling for gender and age, strength of the written policy did not achieve a level of statistical significance and therefore is not associated with 30-day use of smokeless tobacco.

Compared to male students, female students were 9.7% less likely to have used smokeless tobacco in the past 30 days, adjusting for strength of written policy and age.

After adjusting for strength of written policy and gender, students 18–24 years of age were 79.9% more likely to have used smokeless tobacco within the past 30 days compared to students 25 years of age or older.

#### Model:

Predicted logit (smokeless tobacco past 30 days) = -2.273 + (.002)\*Strength of policy + (-2.331)\*Gender + (.587)\*Age category.

According to the model, the log odds of a student using smokeless tobacco within the past 30 days on a campus with a tobacco- or smoke-free policy is negatively associated with being female, and positively associated with being 18–24 years of age compared to 25 years of age or older.

**Table 4.** Generalized estimating equation analysis of daily smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-3.844	.7940	(-5.400,-2.287)	23.435	1	.000	NA
Strength of Written Policy							
Strength (Total Points)	.012	.0082	(004,.028)	2.273	1	0.132	1.012
Gender							
Female	-3.271	.3423	(-3.942,-2.600)	91.287	1	.000	.038
Male	Ref						
Age Categories							
18–24 year-olds	184	.3551	(880,.512)	.268	1	.604	.832
25 years or older	Ref						

After adjusting for gender and age, strength of the written policy did not achieve a level of statistical significance and therefore is not associated with daily use of smokeless tobacco.

Compared to male students, female students were 3.8% less likely to report daily use of smokeless tobacco, after controlling for strength of written policy and age.

Age did not achieve a level of statistical significance after adjusting for strength of written policy and gender and therefore is not associated with daily use of smokeless tobacco.

#### Model:

Predicted logit (daily use of smoking tobacco) = -1.080 + (-.180)\* Strength of policy + (-3.552)\*Gender + (-.377)\*Age category.

According to the model, the log odds of a student using smokeless tobacco daily on a campus with a tobacco- or smoke-free policy is negatively associated with being female and younger in age.

**Table 5.** Generalized estimating equation analysis of secondhand smoke exposure on campus (to) among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-1.768	.5449	(-2.836,700)	10.525	1	.001	NA
Strength of Written Policy							
Strength (Total Points)	003	.0078	(018,.013)	.121	1	.728	.997
Gender							
Female	.000	.0994	(195,.195)	.000	1	1.000	1.000
Male	Ref						
Age Categories							
18–24 year-olds	.868	.1737	(.527,1.208)	24.954	1	.000	2.382
25 years or older	Ref						

Strength of the written policy did not achieve a level of statistical significance after adjusting for gender and age and therefore was not associated with reported exposure to secondhand smoke on campus (outside).

After controlling for strength of written policy and age, gender did not achieve a level of statistical significance and therefore was not associated with reported exposure to secondhand smoke on campus (outside).

Students 18–24 years of age were 138.2% more likely to report being exposed to secondhand smoke on campus (outside) compared to students 25 years of age or older, adjusting for strength of written policy and gender.

#### Model:

Predicted logit (exposure secondhand smoke on campus: outside) = -1.768 + (-.003)\* Strength of policy + (.000)\*Gender + (.868)\*Age category.

According to the model, the log odds of a student reporting being exposed to secondhand on campus (outside) is positively associated with being younger in age.

## 15

# Regression Analyses: Enforcement of Policy (Designated Areas)

**Table 1.** Generalized estimating equation analysis of 30-day smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	518	.1623	(837,200)	10.200	1	.001	NA
Level of Policy Enforcement							
Never or Rarely	.044	.2364	(420,.507)	.034	1	.853	1.045
Sometimes	339	.2759	(879,.202)	1.506	1	.220	.713
Usually or Always	Ref						
Gender							
Female	269	.0938	(453,085)	8.220	1	.004	.764
Male	Ref						
Age Categories							
18–24 year-olds	673	.1837	(-1.033,313)	13.433	1	.000	.510
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore is not associated with using smoking tobacco in the past 30 days.

Compared to male students, female students were 23.6% less likely to have used smoking tobacco in the past 30 days after controlling for age and level of enforcement.

Students 18–24 years of age were 49.0% less likely to have used smoking tobacco within the past 30 days compared to students 25 years of age of older after controlling for gender and level of enforcement.

#### Model:

Predicted logit (smoking tobacco past 30 days) = -.518 + (.044)\*Level of Policy Enforcement (never or rarely) + (-.339)\*Level of Policy Enforcement (sometimes) + (-.269)\*Gender + (-.673)\*Age category.

According to the model, the log odds of a student using smoking tobacco within the past 30 days are negatively associated with being female and younger in age.

**Table 2.** Generalized estimating equation analysis daily smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ <sup>2</sup>	df	P-value	Odds Ratio
Constant	-1.282	.1554	(-1.587,977)	68.076	1	.000	NA
Level of Policy Enforcement							
Never or Rarely	033	.2345	(493,.426)	.020	1	.888	.967
Sometimes	750	.4757	(-1.683,.182)	2.489	1	.115	.472
Usually or Always	Ref						
Gender							
Female	.226	.1126	(.006,.447)	4.043	1	.044	1.254
Male	Ref						
Age Categories							
18–24 year-olds	-1.537	.2206	(-1.970,-1.105)	48.563	1	.000	.215
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore is not associated with smoking tobacco on a daily basis.

Female students were 25.4% more likely to have used smoking tobacco on a daily basis compared to male students after controlling for age and level of enforcement.

Students 18–24 years of age were 78.5% less likely to have used smoking tobacco daily compared to students 25 years of age or older after controlling for gender and level of enforcement.

#### Model:

Predicted logit (daily use of smoking tobacco) = -1.282 + (-.033)\*Level of Policy Enforcement (never or rarely) + (-.750)\*Level of Policy Enforcement (sometimes) + (.226)\*Gender + (-1.537)\*Age category.

According to the model, the log odds of a student using smoking tobacco on a daily basis are positively associated with being female and negatively associated with being younger in age.

**Table 3.** Generalized estimating equation analysis of 30-day smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ²	df	P-value	Odds Ratio
Constant	-2.530	.3267	(-3.171,-1.890)	59.974	1	.000	NA
Level of Policy Enforcement							
Never or Rarely	.581	.3613	(127,1.289)	2.586	1	.108	1.788
Sometimes	.258	.4106	(546,1.063)	.396	1	.529	1.295
Usually or Always	Ref						
Gender							
Female	-2.369	.1840	(-2.730,-2.009)	165.866	1	.000	.094
Male	Ref						
Age Categories							
18–24 year-olds	.144	.1872	(.223,.511)	.595	1	.441	1.155
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore is not associated with using smokeless tobacco in the past 30 days.

Female students were 90.6% less likely to have used smokeless tobacco in the past 30 days compared to male students after controlling for age and level of enforcement.

Controlling for gender and level of policy enforcement, age did not reach statistical significance and therefore is not associated with using smokeless tobacco in the past 30 days.

#### Model:

Predicted logit (smokeless tobacco past 30 days) = -2.530 + (.581)\*Level of Policy Enforcement (never or rarely) + (.258)\*Level of Policy Enforcement (sometimes) + (-2.369)\*Gender + (.144)\*Age category.

According to the model, the log odds of a student using smokeless tobacco within the past 30 days is positively associated with the student being younger in age and negatively associated with being female.

**Table 4.** Generalized estimating equation analysis daily smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ <sup>2</sup>	df	P-value	Odds Ratio
Constant	-3.274	.3668	(-3.992,-2.555)	79.670	1	.000	NA
Level of Policy Enforcement							
Never or Rarely	.678	.4076	(121,1.477)	2.767	1	.096	1.970
Sometimes	.093	.6372	(-1.156,1.342)	.021	1	.884	1.097
Usually or Always	Ref						
Gender							
Female	-3.527	.4202	(-4.351,-2.704)	70.462	1	.000	.029
Male	Ref						
Age Categories							
18–24 year-olds	570	.2711	(-1.101,039)	4.423	1	.035	.565
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore is not associated with smokeless tobacco on a daily basis.

Compared to male students, female students were 97.1% less likely to have used smokeless tobacco on a daily basis after controlling for age and level of enforcement.

Students 18–24 years of age were 43.5% less likely than students 25 years of age or older to have used smokeless tobacco daily after controlling for gender and level of enforcement.

#### Model:

Predicted logit (daily use of smokeless tobacco) = -3.274 + (.678)\*Level of Policy Enforcement (never or rarely) + (.093)\*Level of Policy Enforcement (sometimes) + (-3.527)\*Gender + (-.570)\*Age category.

According to the model, the log odds of a student using smokeless tobacco on a daily basis are negatively associated with being female and younger in age.

**Table 5.** Generalized estimating equation analysis of secondhand smoke exposure on campus (outside) among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ²	df	P-value	Odds Ratio
Constant	707	.2243	(-1.146,267)	9.925	1	.002	NA
Level of Policy Enforcement							
Never or Rarely	429	.2221	(864,.006)	3.735	1	.053	.651
Sometimes	016	.2682	(542,.510)	.004	1	.952	.984
Usually or Always	Ref						
Gender							
Female	.102	.0725	(040,.244)	1.993	1	.158	1.108
Male	Ref						
Age Categories							
18–24 year-olds	.840	.1268	(.592,1.089)	43.883	1	.000	2.316
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore is not associated with being exposed to secondhand smoke (outside).

Controlling for age and level of policy enforcement, gender did not reach statistical significance and therefore is not associated with being exposed to secondhand smoke (outside).

Students 18–24 years of age were 131.6% more likely to report being exposed to secondhand smoke on campus (outside) compared to students 25 years of age or older after controlling for gender and level of enforcement.

#### Model:

Predicted logit (exposure to secondhand smoke on campus: outside) = -.707 + (-.429)\*Level of Policy Enforcement (never or rarely) + (-.016)\*Level of Policy Enforcement (sometimes) + (.102)\*Gender + (.840)\*Age category.

According to the model, the log odds of a student reporting being exposed to secondhand on campus (outside) is positively associated with being younger in age.

## 16

# Regression Analyses: Enforcement of Policy (Tobacco-/Smoke-free)

**Table 1.** Generalized estimating equation analysis of 30-day smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	822	.1959	(-1.206,438)	17.628	1	.000	NA
Level of Policy Enforcement							
Never or Rarely	.257	.2101	(155,.669)	1.494	1	.222	1.293
Sometimes	306	.2164	(730,.118)	2.000	1	.157	.736
Usually or Always	Ref						
Gender							
Female	335	.1246	(580,091)	7.236	1	.007	.715
Male	Ref						
Age Categories							
18–24 year-olds	470	.1061	(678,262)	19.634	1	.000	.625
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore is not associated with using smoking tobacco in the past 30 days.

Compared to male students, female students were 26.4% less likely to have used smoking tobacco in the past 30 days after controlling for age and level of enforcement.

Students 18–24 years of age were 28.5% less likely to have used smoking tobacco within the past 30 days compared to students 25 years of age or older after controlling for gender and level of enforcement.

#### Model:

Predicted logit (smoking tobacco past 30 days) = -.822 + (.257)\*Level of Policy Enforcement (never or rarely) + (-.306)\*Level of Policy Enforcement (sometimes) + (-.335)\*Gender + (-.470)\*Age category.

According to the model, the log odds of a student using smoking tobacco within the past 30 days are negatively associated with being female and younger in age.

**Table 2.** Generalized estimating equation analysis of daily smoking tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ²	df	P-value	Odds Ratio
Constant	-1.623	.2958	(-2.202,-1.043)	30.097	1	.000	NA
Level of Policy Enforcement							
Never or Rarely	.212	.3371	(449,.872)	.395	1	.530	1.236
Sometimes	764	.3895	(-1.527,.000)	3.845	1	.050	.466
Usually or Always	Ref						
Gender							
Female	.136	.0742	(009,.281)	3.356	1	.067	1.146
Male	Ref						
Age Categories							
18–24 year-olds	-1.403	.1153	(-1.628,-1.177)	148.082	1	.000	.246
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore is not associated with smoking tobacco on a daily basis.

Controlling for level of enforcement and age, gender did not reach statistical significance and therefore is not associated with smoking tobacco on a daily basis.

Students 18–24 years of age were 75.4% less likely to have used smoking tobacco daily compared to students 25 years of age or older after controlling for gender and level of enforcement.

#### Model:

Predicted logit (daily use of smoking tobacco) = -1.623 + (.212)\*Level of Policy Enforcement (never or rarely) + (-.764)\*Level of Policy Enforcement (sometimes) + (.136)\*Gender + (-1.403)\*Age category.

According to the model, the log odds of a student using smoking tobacco on a daily basis are negatively associated with being younger in age.

**Table 3.** Generalized estimating equation analysis of 30-day smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's CI	Wald's χ²	df	P-value	Odds Ratio
Constant	-2.169	.1675	(-2.497,-1.840)	167.567	1	.000	NA
Level of Policy Enforcement							
Never or Rarely	.261	.1564	(046,.568)	2.784	1	.095	1.298
Sometimes	033	.1761	(378,.312)	.036	1	.850	.967
Usually or Always	Ref						
Gender							
Female	-2.327	.1545	(-2.629,-2.024)	226.687	1	.000	.098
Male	Ref						
Age Categories							
18–24 year-olds	.584	.1527	(.285,.884)	14.648	1	.000	1.794
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore not associated with using smokeless tobacco in the past 30 days.

Female students were 90.2% less likely to have used smokeless tobacco in the past 30 days compared to male students after controlling for age and level of enforcement.

Students 18–24 years of age were 79.4% more likely to have used smokeless tobacco in the past 30 days compared to students 25 years of age or older after controlling for gender and level of enforcement.

#### Model:

Predicted logit (smokeless tobacco past 30 days) = -2.169 + (.261)\*Level of Policy Enforcement (never or rarely) + (-.033)\*Level of Policy Enforcement (sometimes) + (-2.327)\*Gender + (.584)\*Age category.

According to the model, the log odds of a student using smokeless tobacco within the past 30 days is positively associated with the student being younger in age and negatively associated with being female.

**Table 4.** Generalized estimating equation analysis of daily smokeless tobacco use among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ <sup>2</sup>	df	P-value	Odds Ratio
Constant	-2.836	.2578	(-3.341,-2.331)	121.065	1	.000	NA
Level of Policy Enforcement							
Never or Rarely	.093	.2670	(430,.617)	.122	1	.727	1.098
Sometimes	242	.3464	(921,.437)	.489	1	.485	.785
Usually or Always	Ref						
Gender							
Female	-3.285	.3324	(-3.937,-2.634)	97.676	1	.000	.037
Male	Ref						
Age Categories							
18–24 year-olds	198	.3487	(.485,.323)	.323	1	.570	.820
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore not associated with smokeless tobacco on a daily basis.

Compared to male students, female students were 96.3% less likely to have used smokeless tobacco on a daily basis after controlling for age and level of enforcement.

Controlling for gender and level of enforcement, age did not reach statistical significance and therefore is not associated with smokeless tobacco on a daily basis.

#### Model:

Predicted logit (daily use of smokeless tobacco) = -2.836 + (.093)\*Level of Policy Enforcement (never or rarely) + (-.242)\*Level of Policy Enforcement (sometimes) + (-3.285)\*Gender + (-.198)\*Age category.

According to the model, the log odds of a student using smokeless tobacco on a daily basis are negatively associated with being female.

**Table 5.** Generalized estimating equation analysis of secondhand smoke exposure on campus (outside) among students enrolled at 31 postsecondary institutions adjusted for individual respondent characteristics.

Predictor	β	SE β	95% Wald's Cl	Wald's χ²	df	P-value	Odds Ratio
Constant	-2.184	.4142	(-2.996,-1.372)	27.799	1	.000	NA
Level of Policy Enforcement							
Never or Rarely	.509	.5010	(473,1.491)	1.031	1	.310	1.663
Sometimes	.425	.4351	(427,1.278)	.956	1	.328	1.530
Usually or Always	Ref						
Gender							
Female	.045	.0979	(147,.237)	.211	1	.646	1.046
Male	Ref						
Age Categories							
18–24 year-olds	.799	.1485	(.508,1.090)	28.977	1	.000	2.224
25 years or older	Ref						

Controlling for gender and age, the level of policy enforcement did not reach statistical significance and therefore is not associated with being exposed to secondhand smoke (outside).

Controlling for age and level of policy enforcement, gender did not reach statistical significance and therefore is not associated with being exposed to secondhand smoke (outside).

Students 18–24 years of age were 122.4% more likely to report being exposed to secondhand smoke on campus (outside) compared to students 25 years of age or older after controlling for gender and level of enforcement.

#### Model:

Predicted logit (exposure to secondhand smoke on campus: outside) = -2.184 + (.509)\*Level of Policy Enforcement (never or rarely) + (.425)\*Level of Policy Enforcement (sometimes) + (.045)\*Gender + (.799)\*Age category.

According to the model, the log odds of a student reporting being exposed to secondhand on campus (outside) is positively associated with being younger in age.

# 17 Appendices

- **A. Tobacco Policy Descriptions**
- **B. Student Demographic Data**
- C. 12-month Tobacco Use Tables
- **D. Current Tobacco Use Tables**
- **E. Daily Tobacco Use Tables**
- **F. Quit Attempt Tables**
- G. Secondhand Smoke Exposure Tables
- H. Baseline Campus Tobaccofree Policy Assessment
- I. College Student Health Survey
- J. Glossary
- K. References

## APPENDIX A-TOBACCO POLICY DESCRIPTIONS

	Tobacco-/Smoke-free (n=13)	Designated Areas (n=18)
Written Policy Characteristics (from written policy review)		
Includes explicit listing/definition of prohibited products	76.9% (10)	27.8% (5)
Covers properties owned, leased and operated by the institution	84.6% (11)	0.0% (0)
Covers vehicles owned, leased, and operated by the institution	92.3% (12)	44.4% (8)
Prohibits the sale of tobacco products on campus	53.8% (7)	0.0% (0)
Prohibits the advertising of tobacco products on campus	15.4% (2)	0.0% (0)
Enforcement protocol:		
None	30.8% (4)	88.9% (16)
Normative/Cooperative	38.5% (5)	5.6% (1)
Penalties and consequences explicitly listed	38.5% (4)	5.6% (1)
Parking lots are mentioned as prohibited use sites	15.4% (2)	0.0% (0)
Cessation resources described	38.5% (5)	11.1 (2)
Exceptions for religious, research and theatrical use included	76.9% (10)	16.7% (3)
Background/rationale for policy is included	76.9% (10)	22.2% (4)
Designated use areas clearly defined	N/A	27.8% (5)
Mean (range) number of months since most recent policy enactment	43.2 (7-90)	75.6 (7-155)
Sites Where Tobacco Use is Prohibited (from survey/interview)		
Parking lots	100.0% (13)	44.4% (8)
Outdoor sporting venues		
Prohibited use area	84.6% (11)	16.7% (3)
Not applicable	15.4% (2)	77.8% (14)
Indoor sporting venues		
Prohibited use area	84.6% (11)	72.2% (13)
Not applicable	15.4% (2)	22.2% (4)
Campus vehicles		
Prohibited use area	100.0% (13)	55.6% (10)
Not applicable	0.0% (0)	11.1% (2)
Dorms/Residence Halls (interior)		
Prohibited use area	84.6% (11)	38.9% (7)
Not applicable	15.4% (2)	61.1% (11)
Dorms/Residence Halls (exterior)		
Prohibited use area	84.6% (11)	11.1% (2)
Not applicable	15.4% (2)	61.1% (11)
Rental agreements		
Must abide by policy	100.0% (13)	16.7% (3)
Not applicable	0.0% (0)	55.6% (10)

## **APPENDIX A-TOBACCO POLICY DESCRIPTIONS**

	Tobacco-/Smoke-free (n=13)	Designated Areas (n=18)
Communication of Tobacco Use Policies		
Policies are communicated at least 3 different ways to students, faculty and staff	84.6% (11)	77.8% (14)
Among those schools that communicate the policy at least 3 different ways, the policy is communicated via		
the course catalog/schedule	36.4% (4)	7.1% (1)
the student handbook/code of conduct	100.0% (11)	100.0% (14)
registration materials	63.6% (7)	14.3% (2)
the campus newspaper	36.4% (4)	14.3% (2)
the campus website	100.0% (11)	85.7% (12)
recruitment materials	27.3% (3)	0.0% (0)
the staff handbook	81.8% (9)	85.7% (12)
additional communication methods	100.0% (11)	30.8% (4)
Campus Grounds and Enforcement		
Posted signs reflect current tobacco use policy	100.0% (13)	61.1% (11)
Ash cans are placed in appropriate areas (including not at all)	84.6% (11)	88.9% (16)
An enforcement protocol is on file for the tobacco use policy	84.6% (11)	50.0% (9)
The designated enforcement entity has been trained on the protocol	61.5% (8)	55.6% (10)
There is a mechanism in the protocol for responding to complaints	92.3% (12)	38.9% (7)
The enforcement protocol is followed		
Never	0.0% (0)	11.1% (2)
Rarely	16.7% (3)	15.4% (2)
Sometimes	38.5% (5)	38.9% (7)
Usually	38.5% (5)	37.8% (5)
Always	7.7% (1)	5.6% (1)
Campus Grounds and Enforcement		
Tobacco products are sold on campus	0.0% (0)	0.0% (0)
Staff provide self-help materials to staff, faculty, and students that want to quit using tobacco products	92.3% (12)	55.6% (10)
Staff provide on-campus counseling to staff, faculty, and students that want to quit using tobacco products	38.5% (5)	22.2% (4)
Among those that provide counseling, the counselors are trained Nicotine Dependence Counselors	25.0% (1)	20.0% (1)
Staff provide referrals to off-campus smoking cessation programs for students, staff, and faculty that want to quit using tobacco products	84.6% (11)	66.7% (12)
The campus financially supports staff, faculty, or student cessation efforts through reduced cost or free nicotine patches, medication and/or provides insurance coverage for cessation services	76.9% (10)	38.9% (7)

## **APPENDIX B - STUDENT DEMOGRAPHIC DATA**

	All Students	Two-year Schools	Four-year Schools
Age			
Average Age (years)	25.6	28.9	23.6
Age Range (years)	18-99	18-93	18-99
18–24 Years	63.1%	45.7%	74.1%
25 Years or Older	36.9%	54.3%	25.9%
Class Status			
Undergraduate—Enrolled One Year	21.2%	28.8%	16.7%
Undergraduate—Enrolled Two Years	19.6%	24.2%	16.7%
Undergraduate—Enrolled Three Years	17.8%	16.5%	18.6%
Undergraduate—Enrolled Four Years	13.4%	9.1%	16.2%
Undergraduate—Enrolled Five or More Years	10.3%	11.4%	9.6%
Master's, Graduate, or Professional Program	11.7%	0.4%	18.9%
Non-degree Seeking	5.6%	9.2%	3.3%
Unspecified	0.4%	0.3%	0.4%
Gender			
Male	34.9%	32.6%	36.3%
Female	64.8%	67.2%	63.3%
Transgender	0.1%	0.1%	0.2%
Other	0.2%	0.1%	0.2%
Unspecified	0.0%	0.0%	0.0%
Ethnic Origin			
American Indian/Alaska Native	34.9%	32.6%	36.3%
Asian/Pacific Islander	64.8%	67.2%	63.3%
Black—Not Hispanic	0.1%	0.1%	0.2%
Latino/Hispanic	0.2%	0.1%	0.2%
White—Not Hispanic (Includes Middle Eastern)	0.0%	0.0%	0.0%
Other	34.9%	32.6%	36.3%
<b>Current Relationship Status</b>			
Married or Domestic Partnership	19.5%	28.7%	13.7%
Other	80.5%	71.3%	86.3%

### **APPENDIX C – 12-MONTH TOBACCO USE TABLES**

Comparisons by campus tobacco policy, class status, and age group

## **Two-year Undergraduate Students**

		AGES 18-2	4		AGES 25+			
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use (any)	36.6% (280)	39.0% (562)	0.02	0.26	42.2% (304)	43.3% (825)	0.01	0.63
12-month smoking tobacco use	33.2% (254)	36.3% (523)	0.03	0.15	39.0% (281)	41.1% (783)	0.02	0.33
12-month smokeless tobacco use	10.5% (80)	12.1% (174)	0.02	0.26	6.5% (47)	6.5% (123)	0.00	0.95
12-month dual use	6.9% (53)	9.3% (134)	0.04	0.06	3.3% (24)	4.3% (81)	0.02	0.28

## **Four-year Undergraduate Students**

		AGES 18-2	4		AGES 25+			
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use (any)	27.2% (663)	24.3% (645)	0.03	0.02	30.1% (142)	35.5% (122)	0.06	0.11
12-month smoking tobacco use	23.8% (582)	23.0% (612)	0.01	0.50	28.7% (135)	34.3% (118)	0.06	0.09
12-month smokeless tobacco use	10.6% (258)	5.8% (155)	0.09	<0.01	5.9% (28)	8.1% (28)	0.04	0.22
12-month dual use	7.2% (177)	4.5% (120)	0.06	<0.01	4.4% (21)	7.0% (24)	0.06	0.12

	AGES 18-24					AGES 25+			
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	
12-month tobacco use (any)	21.0% (35)	16.7% (30)	0.06	0.34	16.9% (78)	20.9% (133)	0.05	0.10	
12-month smoking tobacco use	18.6% (31)	16.6% (30)	0.03	0.63	14.3% (66)	20.3% (129)	0.08	0.01	
12-month smokeless tobacco use	9.0% (15)	2.8% (5)	0.13	0.01	3.9% (18)	3.6% (23)	0.01	0.81	

### **APPENDIX C – 12-MONTH TOBACCO USE TABLES**

**MALES:** 

## **Two-year Undergraduate Students**

	AGES 18-24				AGES 25+			
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use (any)	42.3% (116)	46.3% (259)	0.04	0.29	50.0% (102)	51.5% (274)	0.01	0.74
12-month smoking tobacco use	33.5% (92)	40.8% (229)	0.07	0.04	39.7% (81)	44.7% (238)	0.05	0.25
12-month smokeless tobacco use	21.2% (58)	25.4% (142)	0.05	0.18	20.1% (41)	16.7% (89)	0.04	0.28

## **Four-year Undergraduate Students**

	AGES 18-24				AGES 25+			
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use (any)	40.9% (353)	33.2% (315)	0.08	<0.01	30.6% (53)	43.4% (62)	0.13	0.03
12-month smoking tobacco use	33.8% (292)	30.8% (292)	0.03	0.18	26.6% (46)	40.6% (58)	0.15	0.01
12-month smokeless tobacco use	23.1% (200)	13.0% (123)	0.13	<0.01	12.7% (22)	16.1% (23)	0.05	0.39

	AGES 18-24					AGES 25+			
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	
12-month tobacco use (any)	42.3% (22)	23.5% (16)	0.20	0.03	23.8% (35)	24.6% (66)	0.01	0.85	
12-month smoking tobacco use	34.6% (18)	23.2% (16)	0.13	0.22	18.2% (27)	23.9% (64)	0.06	0.21	
12-month smokeless tobacco use	26.9% (14)	7.4% (5)	0.27	<0.01	8.8% (13)	5.6% (15)	0.06	0.21	

### **APPENDIX C – 12-MONTH TOBACCO USE TABLES**

**FEMALES:** 

## **Two-year Undergraduate Students**

	AGES 18-24				AGES 25+			
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use (any)	33.3% (163)	34.5% (302)	0.01	0.66	39.1% (202)	40.1% (440)	0.01	0.67
12-month smoking tobacco use	32.9% (161)	33.5% (293)	0.01	0.83	38.7% (200)	39.7% (544)	0.01	0.68
12-month smokeless tobacco use	4.3% (21)	3.7% (23)	0.02	0.56	1.2% (6)	2.5% (34)	0.04	0.08

## **Four-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use (any)	19.6% (307)	19.5% (330)	0.00	0.96	29.9% (89)	30.3% (60)	0.01	0.92
12-month smoking tobacco use	18.3% (287)	18.9% (320)	0.01	0.66	29.9% (89)	30.3% (60)	0.01	0.92
12-month smokeless tobacco use	3.6% (56)	1.9% (32)	0.05	<0.01	2.0% (6)	2.5% (5)	0.02	0.70

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
12-month tobacco use (any)	11.3% (13)	12.5% (14)	0.02	0.78	13.7% (43)	17.8% (65)	0.06	0.14
12-month smoking tobacco use	11.3% (13)	12.5% (14)	0.02	0.78	12.4% (39)	17.3% (63)	0.07	0.08
12-month smokeless tobacco use	0.9% (1)	0.0% (0)	0.07	1.0	1.6% (5)	1.9% (7)	0.01	0.75

### **APPENDIX D - CURRENT TOBACCO USE TABLES**

Comparisons by campus tobacco policy, type of institution and program, and age group

## **Two-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	28.9% (221)	29.8% (429)	0.01	0.65	38.0% (273)	39.0% (741)	0.01	0.64
30-day smoking tobacco use	24.3% (186)	26.6% (383)	0.03	0.24	34.7% (250)	36.8% (700)	0.02	0.32
30-day smokeless tobacco use	7.7% (59)	7.5% (108)	0.00	0.86	5.1% (37)	4.3% (82)	0.02	0.36

### **Four-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	18.3% (447)	14.3% (381)	0.05	<0.01	25.3% (119)	27.1% (93)	0.02	0.55
30-day smoking tobacco use	14.3% (350	13.0% (347)	0.02	0.18	24.0% (113)	25.9% (89)	0.02	0.54
30-day smokeless tobacco use	7.3% (178)	3.2% (86)	0.10	<0.01	4.4% (21)	4.4% (15)	0.00	0.96

		AGES 18-24				AGES 25+	,	
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	13.8% (23)	10.5% (19)	0.05	0.35	12.3% (57)	12.7% (80)	0.01	0.87
30-day smoking tobacco use	10.2% (17)	9.9% (18)	0.00	0.94	10.4% (48)	12.1% (77)	0.03	0.37
30-day smokeless tobacco use	7.2% (12)	1.7% (3)	0.14	<0.01	2.2% (10)	2.1% (13)	0.00	0.91

### **APPENDIX D - CURRENT TOBACCO USE TABLES**

Comparisons by campus tobacco policy, type of institution and program, and age group and gender

#### **MALES:**

## **Two-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	35.3% (97)	35.7% (200)	0.00	0.92	55.9% (114)	45.0% (239)	0.01	0.83
30-day smoking tobacco use	24.4% (67)	28.0% (157)	0.04	0.28	32.8% (67)	38.0% (202)	0.05	0.20
30-day smokeless tobacco use	17.5% (48)	17.1% (96)	0.00	0.98	16.2% (33)	12.4% (66)	0.05	0.18

#### **Four-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	29.8% (258)	20.5% (195)	0.11	<0.01	26.6% (46)	33.1% (47)	0.07	0.21
30-day smoking tobacco use	20.7% (179)	18.0% (171)	0.03	0.15	23.1% (40)	30.8% (44)	0.09	0.16
30-day smokeless tobacco use	16.5% (143)	7.3% (69)	0.00	0.14	10.4% (18)	8.5% (12)	0.03	0.56

		AGES 18-24				AGES 25+	,	
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	32.7% (17)	15.9% (11)	0.20	0.03	16.9% (25)	18.0% (48)	0.01	0.78
30-day smoking tobacco use	23.1% (12)	14.5% (10)	0.11	0.24	12.2% (18)	16.4% (44)	0.06	0.26
30-day smokeless tobacco use	21.2% (11)	4.3% (3)	0.00	0.26	5.4% (8)	4.5% (12)	0.02	0.68

### **APPENDIX D - CURRENT TOBACCO USE TABLES**

Comparisons by campus tobacco policy, type of institution and program, and age group and gender

#### **FEMALES:**

## **Two-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	25.4% (124)	26.1% (228)	0.01	0.78	35.5% (183)	36.7% (502)	0.01	0.63
30-day smoking tobacco use	24.3% (119)	25.7% (225)	0.02	0.58	35.4% (183)	36.8% (498)	0.01	0.69
30-day smokeless tobacco use	2.2% (11)	1.4% (12)	0.03	0.23	0.8% (4)	1.2% (16)	0.02	0.46

#### **Four-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	11.9% (187)	11.0% (186)	0.02	0.40	24.5% (73)	23.2% (46)	0.01	0.75
30-day smoking tobacco use	10.8% (169)	10.4% (176)	0.01	0.73	24.5% (73)	22.7% (45)	0.65	0.02
30-day smokeless tobacco use	2.2% (34)	1.0% (17)	0.05	0.01	1.0% (3)	1.5% (3)	0.02	0.69

		AGES 18-24				AGES 25+	,	
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
30-day tobacco use (any)	5.2% (6)	7.1% (8)	0.04	0.55	10.2% (32)	8.5% (31)	0.03	0.45
30-day smoking tobacco use	4.3% (5)	7.1% (8)	0.06	0.37	9.6% (30)	8.8% (32)	0.01	0.71
30-day smokeless tobacco use	0.9% (1)	0.0% (0)	0.07	1.0	0.6% (2)	0.0% (0)	0.06	0.22

### **APPENDIX E - DAILY TOBACCO USE TABLES**

Comparisons by campus tobacco policy, type of institution and program, and age group

		AGES 18-2	4			AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Daily Tobacco (two-year undergraduate)	11.6% (89)	12.5% (180)	0.01	0.56	27.3% (196)	27.1% (515)	0.00	0.93
Daily Tobacco (four-year undergraduate)	3.5% (85)	1.9% (50)	0.05	<0.01	14.0% (66)	12.5% (43)	0.02	0.54
Daily Tobacco (graduate)	2.4% (4)	0.6% (1)	0.20	0.08	4.5% (21)	3.2% (20)	0.04	0.26

Comparisons by campus tobacco policy, type of institution and program, and age group and gender

#### **MALES:**

		AGES 18-2	24			AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Daily Tobacco (two-year undergraduate)	11.3% (31)	12.8% (72)	0.02	0.52	31.9% (65)	29.6% (157)	0.02	0.54
Daily Tobacco (four-year undergraduate)	6.4% (55)	2.1% (20)	0.11	<0.01	15.0% (26)	14.8% (21)	0.00	0.95
Daily Tobacco (graduate)	5.8% (3)	1.4% (1)	0.12	0.19	3.4% (5)	4.5% (12)	0.03	0.58

### **FEMALES:**

		AGES 18-2	24			AGES 25+		
	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Daily Tobacco (two-year undergraduate)	11.9% (58)	12.3% (108)	0.01	0.80	25.4% (131)	26.2% (358)	0.01	0.74
Daily Tobacco (four-year undergraduate)	1.8% (29)	1.8% (30)	0.00	0.87	13.4% (40)	11.1% (22)	0.03	0.45
Daily Tobacco (graduate)	0.9% (1)	0.0% (0)	1.0	0.07	5.1% (16)	1.9% (7)	0.09	0.02

## **APPENDIX F – QUIT ATTEMPTS TABLES**

Comparisons by campus tobacco policy, type of institution and program, and age group

## **Two-year Undergraduate Students**

		AGES 18–24				AGES 25+		
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	51.7% (77)	55.2% (180)	0.03	0.47	47.5% (112)	50.9% (343)	0.03	0.36
Mean number of attempts (range)	4.6 (1-99)	4.7 (1-99)	0.00	0.94	3.6 (1-60)	3.1 (1-50)	0.00	0.30

## **Four-year Undergraduate Students**

		AGES 18-2	4			AGES 25+	,	
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	46.5% (107)	46.2% (103)	0.01	0.94	54.5% (55)	53.2% (41)	0.01	0.87
Mean number of attempts (range)	6.0 (1-99)	4.2 (1-99)	0.00	0.35	2.8 (1-20)	5.8 (1-99)	0.02	0.15

		AGES 18-24				AGES 25+		
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	66.7% (6)	58.3% (7)	0.09	0.70	47.4% (18)	44.4% (24)	0.03	0.78
Mean number of attempts (range)	1.4 (1-2)	3.3 (1-8)	0.21	0.13	2.6 (1-9)	3.2 (1-20)	0.01	0.54

## **APPENDIX F – QUIT ATTEMPTS TABLES**

Comparisons by campus tobacco policy, type of institution and program, age group and gender

#### **MALES:**

## **Two-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	45.8% (22)	51.2% (62)	0.05	0.53	46.7% (28)	50.8% (97)	0.04	0.58
Mean number of attempts (range)	4.1 (1-19)	5.9 (1-99)	0.00	0.60	5.1 (1-60)	3.4 (1-50)	0.01	0.28

## **Four-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	46.8% (52)	43.8% (46)	0.03	0.65	55.6% (20)	51.4% (18)	0.01	0.87
Mean number of attempts (range)	7.5 (1-99)	4.6 (1-99)	0.01	0.41	3.2 (1-20)	2.3 (1-10)	0.02	0.36

		AGES 18-24				AGES 25+		
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	66.7% (4)	62.5% (5)	0.04	0.87	42.9% (6)	33.3% (10)	0.09	0.54
Mean number of attempts (range)	1.7 (1-2)	3.6 (1-8)	0.16	0.32	2.4 (1-5)	3.6 (1-20)	0.02	0.64

## **APPENDIX F – QUIT ATTEMPTS TABLES**

Comparisons by campus tobacco policy, type of institution and program, age group and gender

#### **FEMALES:**

## **Two-year Undergraduate Students**

	AGES 18–24					AGES 25+		
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	54.5% (55)	57.4% (117)	0.03	0.63	47.7% (84)	50.9% (246)	0.03	0.47
Mean number of attempts (range)	4.8 (1-99)	4.0 (1-99)	0.00	0.65	3.2 (1-30)	2.9 (1-50)	0.00	0.62

## **Four-year Undergraduate Students**

	AGES 18-24					AGES 25+		
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	45.8% (54)	48.3% (57)	0.03	0.70	53.8% (35)	54.8% (23)	0.01	0.93
Mean number of attempts (range)	4.8 (1-99)	3.9 (1-90)	0.00	0.69	2.7 (1-16)	9.3 (1-99)	0.06	0.06

		AGES 18-24				AGES 25+		
	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value	Tobacco-/ Smoke-free	Designated Areas	Effect Size	P-value
Attempted to quit % (n)	66.7% (2)	50.0% (2)	0.17	1.0	50.0% (12)	58.3% (14)	0.08	0.56
Mean number of attempts (range)	1.0 N/A	2.5 (2-3)	0.82	0.10	2.6 (1-9)	2.8 (1-5)	0.00	0.82

## **APPENDIX G – SECONDHAND SMOKE EXPOSURE**

Comparisons by campus tobacco policy, type of institution and program, and age-group

Two-year		AGES 18-2	.4			AGES 25+	ı	
Undergraduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	18.9% (52)	38.8% (218)	0.20	<0.01	17.2% (35)	36.7% (195)	0.19	<0.01
Exposure to secondhand smoke on campus (non-smokers)	14.9% (31)	34.7% (140)	0.21	<0.01	10.9% (15)	26.7% (88)	0.17	<0.01
Exposure to secondhand smoke on campus (smokers)	24.2% (45)	49.6% (190)	0.24	<0.01	22.0% (55)	45.1% (316)	0.21	<0.01

Four-year	AGES 18-24				AGES 25+			
Undergraduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	26.7% (231)	58.4% (555)	0.32	<0.01	17.3% (30)	36.4% (52)	0.22	<0.01
Exposure to secondhand smoke on campus (non-smokers)	25.4% (174)	57.1% (445)	0.32	<0.01	16.5% (22)	32.3% (32)	0.19	<0.01
Exposure to secondhand smoke on campus (smokers)	31.4% (110)	63.7% (221)	0.32	<0.01	15.0% (17)	42.7% (38)	0.31	<0.01

	AGES 18-24				AGES 25+			
Graduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	15.4% (8)	37.7% (26)	0.26	<0.01	12.8% (19)	35.4% (95)	0.24	<0.01
Exposure to secondhand smoke on campus (non-smokers)	15.0% (6)	35.6% (21)	0.23	<0.01	13.1% (17)	36.2% (81)	0.25	<0.01
Exposure to secondhand smoke on campus (smokers)	23.5% (4)	38.9% (7)	0.17	<0.01	8.3% (4)	32.5% (25)	0.28	<0.01

## **APPENDIX G – SECONDHAND SMOKE EXPOSURE**

Comparisons by campus tobacco policy, type of institution and program, and age-group, and gender

### **MALES:**

Two-year	AGES 18-24				AGES 25+			
Undergraduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	18.9% (52)	38.8% (218)	0.20	<0.01	17.2% (35)	36.7% (195)	0.19	<0.01
Exposure to secondhand smoke on campus (non-smokers)	14.9% (31)	34.7% (140)	0.21	<0.01	10.9% (15)	26.7% (88)	0.17	<0.01
Exposure to secondhand smoke on campus (smokers)	31.3% (21)	49.7% (78)	0.17	0.01	29.9% (20)	53.0% (107)	0.20	<0.01

Four-year	AGES 18-24				AGES 25+			
Undergraduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	26.7% (231)	58.4% (555)	0.32	<0.01	17.3% (30)	36.4% (52)	0.22	<0.01
Exposure to secondhand smoke on campus (non-smokers)	25.4% (174)	57.1% (445)	0.32	<0.01	16.5% (22)	32.3% (32)	0.19	<0.01
Exposure to secondhand smoke on campus (smokers)	31.8% (57)	64.3% (110)	0.33	<0.01	20.0%	45.5% (20)	0.27	0.02

	AGES 18-24				AGES 25+			
Graduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	15.4% (8)	37.7% (26)	0.26	<0.01	12.8% (19)	35.4% (95)	0.24	<0.01
Exposure to secondhand smoke on campus (non-smokers)	15.0% (6)	35.6% (21)	0.23	<0.01	13.1% (17)	36.2% (81)	0.25	<0.01
Exposure to secondhand smoke on campus (smokers)	16.7% (2)	50.0% (5)	0.36	0.17	11.1% (2)	31.8% (14)	0.22	0.12

## **APPENDIX G – SECONDHAND SMOKE EXPOSURE**

Comparisons by campus tobacco policy, type of institution and program, and age-group, and gender

### **FEMALES:**

Two-year	AGES 18-24				AGES 25+			
Undergraduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	17.6% (86)	41.2% (361)	0.24	<0.01	10.8% (56)	30.3% (415)	0.20	<0.01
Exposure to secondhand smoke on campus (non-smokers)	16.8% (62)	38.2% (249)	0.22	<0.01	6.3% (21)	23.7% (206)	0.20	<0.01
Exposure to secondhand smoke on campus (smokers)	20.2% (24)	49.8% (112)	0.29	<0.01	19.1% (35)	42.0% (209)	0.21	<0.01

Four-year	AGES 18-24				AGES 25+			
Undergraduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	29.6% (464)	64.9% (1099)	0.35	<0.01	14.7% (44)	30.3% (60)	0.19	<0.01
Exposure to secondhand smoke on campus (non-smokers)	29.4% (412)	65.1% (988)	0.36	<0.01	15.6% (35)	27.5% (42)	0.15	<0.01
Exposure to secondhand smoke on campus (smokers)	30.8% (52)	63.1% (111)	0.32	<0.01	12.3% (9)	40.0% (18)	0.32	<0.01

		AGES 18-2	.4		AGES 25+			
Graduate Students	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value	Tobacco-/ Smoke-free % (n)	Designated Areas % (n)	Effect Size	P-value
Exposure to secondhand smoke on campus (all students)	23.5% (27)	40.2% (45)	0.18	<0.01	8.6% (27)	35.0% (128)	0.31	<0.01
Exposure to secondhand smoke on campus (non-smokers)	22.7% (25)	41.3% (43)	0.20	<0.01	8.8% (25)	35.1% (117)	0.31	<0.01
Exposure to secondhand smoke on campus (smokers)	25.0% (2)	40.0% (2)	0.57	0.16	6.7% (2)	34.4% (11)	0.34	0.01

#### APPENDIX H - BASELINE CAMPUS TOBACCO-FREE POLICY ASSESSMENT

Available in PDF format: www.bhs.umn.edu/surveys/index.htm

INSTRUCTIONS: Complete this assessment for each campus with which you are collaborating. Your answers should reflect as accurately as possible the status of the policy on January 1, 2012. To ensure you have the necessary detail for completing the form, you may need to review the campus policy and other official documents, visually inspect the campus grounds, and/or interview a campus administrator.

Na	ıme	of institution:				
Ci	ty: _		County:	_		
То	baco	co Use Policies				
1.		e campus: Has a written smoke-free policy Has a written tobacco-free policy  Does not have a written policy relate	List month and year of enact	ment:		
2.	If t	he campus is smoke-free or tobacco-free, ar  All campus grounds (i.e., there are not any areas)		the policy? □ Yes	□ No	□ NA
	b. c. d. e. f.	Parking lots Outdoor sporting venues Indoor sporting venues Campus vehicles Dorms/residence halls – indoors, including areas	g students' rooms and common	☐ Yes ☐ Yes ☐ Yes ☐ Yes ☐ Yes	□ No □ No □ No □ No □ No	□ NA □ NA □ NA □ NA
	g. h.	Dorms/residence halls – outdoors, including courtyards  Rental agreements	ng balconies, entrances and	□ Yes	□ No	□ NA
	i.	Other (please specify):				

Implementation	and	Enfor	cement
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3.	Tobacco policies are communicated to students, faculty, and staff at least three different ways:  ☐ Class catalog or schedule	Yes □	No□
	☐ Student policy/conduct handbook		
	☐ Registration materials		
	☐ Campus newspaper		
	☐ Campus website		
	☐ Recruitment materials		
	☐ Staff policy handbook		
	☐ Other (please specify):		
4.	Posted signs reflect current tobacco use policy	Yes □	No□
5.	Ash cans are placed in appropriate areas (compliant with campus policy)	Yes □	No□
6.	An enforcement protocol is on file	Yes □	No□
7.	The designated enforcement entity has been trained on the enforcement protocol	Yes □	No□
8.	The enforcement protocol includes procedures for responding to complaints	Yes □	No□
9.	How often is the enforcement protocol followed?		
	□ Never		
	□ Rarely		
	□ Sometimes		
	☐ Usually		
	□ Always		

Sale of Tobacco Products		
10. Tobacco products and tobacco paraphernalia are sold on campus	Yes □	No□
Tobacco Cessation Resources		
11. Staff provide self-help materials to students, faculty or staff who want to quit using tobacco	Yes □	No□
12. Staff provide <i>on-campus</i> counseling to students, faculty or staff who want to quit using tobacco	Yes □	No□
If yes: Are the staff providing the counseling trained Nicotine Dependence Counselors?	Yes 🗆	No□
13. Staff provide referrals to <i>off-campus</i> cessation programs for students, faculty and staff who want to quit using tobacco (e.g., QUITPLAN, etc.)	Yes □	No□
<ol> <li>Campus financially supports cessation efforts of students, faculty or staff (e.g., offers low-cost or free nicotine patches and cessation medicines, provides insurance coverage for cessation services, etc.)</li> </ol>	Yes □	No□
Date completed		
Completed by		
Email		
Phone:		

This tool was adapted from the California Youth Advocacy Network

## **APPENDIX I – COLLEGE STUDENT HEALTH SURVEY**

#### **Available in PDF format:**

(http://www.bhs.umn.edu/surveys/survey-questionnaires/2013\_CollegeStudent\_HealthSurvey\_Questionnaire.pdf)

ANSWER REVIEW PAGE: 1 of 26 pages  Below are your saved responses for page 1. Please review before proceeding.  1 Other than health care services provided at your educational institution, do you have additional health insurance coverage?  Yes, through my educational institution Yes, through my parent's health insurance plan Yes, through a public program (Medicare, state program, etc.) No, I do not have health insurance Don't know  2 How many dependent children do you have? (If you have no dependent children, mark 0)  1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance? Yes No No Not applicable - I do not have dependent children Don't know  4 Does your spouse/domestic partner have health insurance coverage? Yes No No Not Applicable - I have no spouse/domestic partner Don't know  CONTINUE  REVIEW  CONTINUE Answering Survey - Page 2 EDIT Re-open Page 1 and edit your responses COMPLETE SURVEY LATER Responses will be saved NEXT - summary for Page 2	SECTIO	N: Health Care Co	overage and	Utilization					
1 Other than health care services provided at your educational institution, do you have additional health insurance coverage?  Yes, through my educational institution Yes, through my parent's health insurance plan Yes, through a public program (Medicare, state program, etc.) No, I do not have health insurance Don't know  2 How many dependent children do you have? (If you have no dependent children, mark 0)  1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance? Yes No No Not applicable - I do not have dependent children Don't know  4 Does your spouse/domestic partner have health insurance coverage? Yes No No Not Applicable - I have no spouse/domestic partner Don't know  CONTINUE  REVIEW  CONTINUE  REVIEW  CONTINUE Answering Survey - Page 2 EDIT Re-open Page 1 and edit your responses	1	You have completed 0 of 4 Items on this page							
health insurance coverage?  Yes, through my educational institution Yes, through my parent's health insurance plan Yes, through a public program (Medicare, state program, etc.) No, I do not have health insurance Don't know  2 How many dependent children do you have? (If you have no dependent children, mark 0)  1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance? Yes No Not applicable - I do not have dependent children Don't know  4 Does your spouse/domestic partner have health insurance coverage? Yes No Not Applicable - I have no spouse/domestic partner Don't know  CONTINUE  REVIEW  CONTINUE  CONTINUE REVIEW  CONTINUE Answering Survey - Page 2 EDIT Re-open Page 1 and edit your responses	Below are your saved responses for page 1. Please review before proceeding.								
Yes, through my educational institution Yes, through my parent's health insurance plan Yes, through another health insurance plan Yes, through a public program (Medicare, state program, etc.) No, I do not have health insurance Don't know  2 How many dependent children do you have? (If you have no dependent children, mark 0) 0 1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance? Yes No No Not applicable - I do not have dependent children Don't know  4 Does your spouse/domestic partner have health insurance coverage? Yes No No Ant Applicable - I have no spouse/domestic partner Don't know  CONTINUE  REVIEW  CONTINUE Answering Survey - Page 2 EDIT Re-open Page 1 and edit your responses  OVERALL Survey summary PREV - summary for Page 0	1 Other than health care services provided at your educational institution, do you have additional								
Yes, through my parent's health insurance plan Yes, through another health insurance plan Yes, through a public program (Medicare, state program, etc.) No, I do not have health insurance Don't know  2 How many dependent children do you have? (If you have no dependent children, mark 0) 0 1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance? Yes No Not applicable - I do not have dependent children Don't know  4 Does your spouse/domestic partner have health insurance coverage? Yes No Not Applicable - I have no spouse/domestic partner Don't know  CONTINUE REVIEW  CONTINUE Answering Survey - Page 2 EDIT Re-open Page 1 and edit your responses PREV - summary for Page 0		-							
Yes, through another health insurance plan Yes, through a public program (Medicare, state program, etc.) No, I do not have health insurance Don't know  2 How many dependent children do you have? (If you have no dependent children, mark 0) 0 1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance? Yes No Not applicable - I do not have dependent children Don't know  4 Does your spouse/domestic partner have health insurance coverage? Yes No No Not Applicable - I have no spouse/domestic partner Don't know  CONTINUE  REVIEW  CONTINUE Answering Survey - Page 2 EDIT Re-open Page 1 and edit your responses  PREV - summary for Page 0									
Yes, through a public program (Medicare, state program, etc.)  No, I do not have health insurance  Don't know  2 How many dependent children do you have? (If you have no dependent children, mark 0)  1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance?  Yes  No  Not applicable - I do not have dependent children  Don't know  4 Does your spouse/domestic partner have health insurance coverage?  Yes  No  Not Applicable - I have no spouse/domestic partner  Don't know  CONTINUE  REVIEW  CONTINUE Answering Survey - Page 2  EDIT Re-open Page 1 and edit your responses  PREV - summary for Page 0									
No, I do not have health insurance Don't know  2 How many dependent children do you have? (If you have no dependent children, mark 0)  0 1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance? Yes No Not applicable - I do not have dependent children Don't know  4 Does your spouse/domestic partner have health insurance coverage? Yes No Not Applicable - I have no spouse/domestic partner Don't know  CONTINUE  REVIEW  CONTINUE Answering Survey - Page 2 EDIT Re-open Page 1 and edit your responses  PREV - summary for Page 0					>				
2 How many dependent children do you have? (If you have no dependent children, mark 0)  0 1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance?  Yes  No  Not applicable - I do not have dependent children  Don't know  4 Does your spouse/domestic partner have health insurance coverage?  Yes  No  Not Applicable - I have no spouse/domestic partner  Don't know  CONTINUE  REVIEW  CONTINUE Answering Survey - Page 2  EDIT Re-open Page 1 and edit your responses  OVERALL Survey summary PREV - summary for Page 0									
2 How many dependent children do you have? (If you have no dependent children, mark 0)  0 1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance?  Yes  No  Not applicable - I do not have dependent children  Don't know  4 Does your spouse/domestic partner have health insurance coverage?  Yes  No  Not Applicable - I have no spouse/domestic partner  Don't know  CONTINUE  REVIEW  CONTINUE Answering Survey - Page 2  EDIT Re-open Page 1 and edit your responses  OVERALL Survey summary PREV - summary for Page 0									
(If you have no dependent children, mark 0)  0 1 2 3 4 5 6 or More  3 Are your dependent children covered by health insurance?  Yes  No  Not applicable - I do not have dependent children  Don't know  4 Does your spouse/domestic partner have health insurance coverage?  Yes  No  Not Applicable - I have no spouse/domestic partner  Don't know  CONTINUE  REVIEW  CONTINUE  CONTINUE  REVIEW  OVERALL Survey summary PREV - summary for Page 0		Don't know							
3 Are your dependent children covered by health insurance?  Yes  No  Not applicable - I do not have dependent children  Don't know  4 Does your spouse/domestic partner have health insurance coverage?  Yes  No  Not Applicable - I have no spouse/domestic partner  Don't know  CONTINUE  REVIEW  CONTINUE  CONTINUE  REVIEW  OVERALL Survey summary PREV - summary for Page 0				re?					
Yes No Not applicable - I do not have dependent children Don't know 4 Does your spouse/domestic partner have health insurance coverage? Yes No Not Applicable - I have no spouse/domestic partner Don't know CONTINUE REVIEW CONTINUE Answering Survey - Page 2 EDIT Re-open Page 1 and edit your responses PREV - summary for Page 0	9	1	2	3	4	5	6 or More		
CONTINUE Answering Survey - Page 2  EDIT Re-open Page 1 and edit your responses  OVERALL Survey summary PREV - summary for Page 0	Yes No Not applicable - I do not have dependent children Don't know  4 Does your spouse/domestic partner have health insurance coverage? Yes No Not Applicable - I have no spouse/domestic partner								
EDIT Re-open Page 1 and edit your responses PREV - summary for Page 0		col	NTINUE			REVIEW			
EDIT Re-open Page 1 and edit your responses PREV - summary for Page 0	CONTINUE Answering Survey - Page 2				OVERALL Survey summary				
	-								

SECTION: Health Care Coverage and Utilization							
2	ANSWER REVIEW PAGE: 2 of 26 pages	You have completed 0 of 16 Items on this page					

Below are your saved responses for page 2. Please review before proceeding.									
s Please indicate when you last had the following:		Within the past 12 months		ithin 13 nths to 2 years	Within 3-5 years	6 or m		er	
Routine medical exam (a physical)		0		0	0	0	0	)	
Dental exam and cleaning		Ö		0	0	Ö		)	
Cholesterol checked		0		0	0	0		)	
Blood pressure checked		0		0	0	0		)	
Routine gynecological exam		0		$\circ$	0	0		)	
		chool Stude ealth counse ervice service		Hospital	Community clinic	нмо	I	lone - don't obtain this ervice	
Routine doctor's visit									
Dental care									
Mental health services									
Testing for sexually transmitted infections									
Treatment for sexually transmitted infections									
Testing for HIV									
Emergency care									
7 Have you had any of the following Yes immunizations?					No	No Don't Know			
Hepatitis A	0				0		0		
Hepatitis B		0			0		0		
Meningitis		0		0		0			
Flu vaccine within past 12 months		0			0	0			
Human Papillomavirus (HPV) (all three doses)		0		0			0		
CONTINUE	T	REVIEW							
CONTINUE Answering Survey - Page 3  EDIT Re-open Page 2 and edit your responses  COMPLETE SURVEY LATER Responses will be saved					OVERALL Survey summary PREV - summary for Page 1 NEXT - summary for Page 3				

SECTI		
3	SURVEY PAGE: 3 of 26 pages	You have completed 0 of 74 Items on this page

1	1.01 For each indicate wheth been diagnost lifetime.	ner you have	1.02 For each condition, indicate whether you have been diagnosed within the past 12 months.		
	Yes	No	Yes	No	
Alcohol problems	0	0	0	0	
Allergies	0	0	0	0	
Anorexia	0	0	0	0	
Anxiety	0	0	0	0	
Asthma	0	0	0	0	
Attention deficit disorder	0	0	0	0	
Bipolar disorder	0	0	0	0	
Bulimia	0	0	0	0	
Cancer	0	0	0	0	
Chlamydia	0	0	0	0	
Depression	0	0	0	0	
Diabetes (Type I)	0	0	0	0	
Diabetes (Type II)	0	0	0	0	
Drug problems (other than alcohol)	0	0	0	0	
Genital herpes	0	0	0	0	
Genital warts/Human papillomavirus (HPV)	0	0	0	0	
Gonorrhea	0	0	0	0	
Hepatitis A	0	0	0	0	
Hepatitis B	0	0	0	0	
Hepatitis C	0	0	0	0	
High blood pressure	0	0	0	0	
High cholesterol	0	0	0	0	
HIV/AIDS	0	0	0	0	
Lyme disease	0	0	0	0	
Mononucleosis	0	0	0	0	
Obesity	0	0	0	0	
Obsessive-compulsive disorder	0	0	0	0	
Panic attacks	0	0	0	0	
Post-traumatic stress disorder	0	0	0	0	
Pubic lice	0	0	0	0	
Repetitive stress injury (Carpal tunnel)	0	0	0	0	
Seasonal affective disorder	0	0	0	0	
Social phobia/Performance anxiety	0	0	0	0	

SKIP THIS PAGE - No updates will be saved. You will be taken to the OVERALL SURVEY SUMMARY PAGE.								
	SUBMIT RESPONSES - Up	dates will be saved. You	will be taken to th	e ANSWER REVIEW	W PAGE.			
Urinary tract infection		0	0	0	0			
Tubercu	osis	0	0	0	0			
Syphilis		0	0	0	0			
Strep th	roat	0	0	0	0			

SECTION: Health Status					
4	ANSWER REVIEW PAGE: 4 of 26 pages	You have completed 0 of 24 Items on this page			

2 During the past 12 months, now have the following affected your academic performance? **(please select the most serious butcome for each issue)**	I do not have this issue/Not applicable	have not been	grade on	-	Received an incomplete in the course	Dropped the course	Dropped out of school/Too a leave of absence
Alcohol use	0	0	0	0	0	0	0
Allergies	0	0	0	0	0	0	0
Chronic conditions (diabetes, asthma, etc.)	0	0	0	0	0	0	0
Concerns for troubled friend/family member	0	0	0	0	0	0	0
Orug use (other than alcohol)	0	0	0	0	0	0	0
ating disorder/problems	0	0	0	0	0	0	0
excessive computer/internet use	0	0	0	0	0	0	0
inancial difficulties	0	0	0	0	0	0	0
earning disability/Attention deficit lisorder	0	0	0	0	0	0	0
lental health issues (depression, nxiety, etc.)	0	0	0	0	0	0	0
fononucleosis	0	0	0	0	0	0	0
loved/Changed residence	0	0	0	0	0	0	0
regnancy (yours or your vartner's)	0	0	0	0	0	0	0
telationship issues	0	0	0	0	0	0	0
serious injury	0	0	0	0	0	0	0
exual assault	0	0	0	0	0	0	0
exually transmitted infection	0	0	0	0	0	0	0
leep difficulties	0	0	0	0	0	0	0
tress	0	0	0	0	0	0	0
opper respiratory infection cold/flu, sinus, strep, etc.)	0	0	0	0	0	0	0
Irinary tract infection	0	0	0	0	0	0	0

0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	5 26 27 28 29 30					
s During the past 30 days, on how many days did poor physical or mental health keep you from doing your usual activities, such as self-care, work, or recreation?						
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25	5 26 27 28 29 30					

CONTINUE	REVIEW		
CONTINUE Answering Survey - Page 5  EDIT Re-open Page 4 and edit your responses  COMPLETE SURVEY LATER Responses will be saved	OVERALL Survey summary PREV - summary for Page 3 NEXT - summary for Page 5		

SECTION: Emotional and Mental Health				
5	SURVEY PAGE: 5 of 26 pages	You have completed 0 of 7 Items on this page		

	you experienced any of the following in the past 12 months? all that apply)**
E	Getting married
	Failing a class
100	Serious physical illness of someone close to you
	Death of someone close to you
E	Being diagnosed as having a serious physical illness
	Being diagnosed as having a mental illness
10	Spouse/Partner conflict (including divorce or separation)
	Termination of a personal relationship (not including marriage)
100	Attempted suicide
E	Being put on academic probation
10	Excessive credit card debt
E	Excessive debt other than credit card
E	Being arrested
E	Being fired or laid off from a job
100	Roommate/Housemate conflict
	Parental conflict
E	Lack of health care coverage
	Issues related to sexual orientation
E	Bankruptcy
- 8	Not applicable-None of the above happened to me
2 Are v	ou currently taking medication for depression?
0	Yes
0	No
з Are y	ou currently taking medication for a mental health problem other than depression?
0	Yes
	No
4 Are y	ou currently seeing a mental health counselor/therapist?
0	Yes
0	No

stressed,	how would	e to ten, witl you rate you te number corre	ır average l	evel of stre	ss in the pa	ast 30 days		
stressed at all							Very stressed	
1	2	3 4	5	6	7	8 9	10	
0	0	0 0	0	0	0	0 6	0	
you rate	6 On a scale from one to ten, with one being ineffective and ten being effective, how would you rate your ability to manage your stress in the past 30 days?  **(Please mark appropriate number corresponding with your effectiveness in managing stress)**							
Ineffective							Very effective	
1	2	3 4	5	6	7	8 9	10	
0	0	0 0	0	0	0	0 0	0	
7 On how many of the past seven days did you get enough sleep so that you felt rested when you woke up in the morning?  0 days 1 day 2 days 3 days 4 days 5 days 6 days 7 days								
5		ONSES - Update						

SECTION: Personal Safety					
6	ANSWER REVIEW PAGE: 6 of 26 pages	You have completed 0 of 17 Items on this page			

Below are your saved responses for page 6. Please review before proceeding.							
1	our lifetime	fetime 1.02 Within the past 12 months have you:					
	Yes	No	Yes	No			
Had sexual intercourse with someone without that person's consent or against his/her will	0	0	0	0			
Touched someone sexually without that person's consent or against his/her will	0	$\circ$	0	$\circ$			
Slapped, kicked, or pushed your significant other or spouse/partner	0	0	0	0			
Threatened or "put-down" your significant other or spouse/partner	0	0	0	0			
Experienced actual or attempted sexual intercourse without your consent or against your will	0	0	0	0			
Experienced actual or attempted sexual touching without your consent or against your will	0	$\circ$	0	0			
Been slapped, kicked, or pushed by your significant other or spouse/partner	$\circ$	$\circ$	0	$\circ$			
Been hurt by threats, "put-downs", or yelling from your significant other or spouse/partner	0	0	0	0			
2 If you experienced sexual intercourse/sexual touching against your will, did you report the incident to any of the following?  **(Mark all that apply)**  Not applicable - I was not involved in any incident Health care provider (e.g. Physician, Nurse, or Therapist) Hall director or community advisor Campus sexual violence office Police Other							
☐ I did not report the incident							
CONTINUE			REVIEW				
CONTINUE Answering Survey - Page 7  EDIT Re-open Page 6 and edit your responses  COMPLETE SURVEY LATER Responses will be saved			OVERALL Survey sum REV - summary for NEXT - summary for	Page 5			

SECTI	ON: Personal Safety	
7	SURVEY PAGE: 7 of 26 pages	You have completed 0 of 4 Items on this page

please us	The following questions pertain to issues related to personal safety. When answering the questions please use the following definitions: sexual intercourse - oral, vaginal, or anal penetration; sexual touching - touching of breasts, buttocks, or genitals.					
	3 What type of injuries have you sustained during the past 12 months?  **(Mark all that apply)**					
100	Not applicable - I was not injured					
	Assaulted by another person (nonsexual)					
E	Burned by fire or a hot substance					
	Motor vehicle related					
E .	Team sports					
8	Individual sports					
100	Bicycle related					
	Falls					
100	Other					
0	attending school, do you have immediate access to firearms? Yes No					
	type of firearms do you have immediate access to? all that apply)**					
	Not Applicable - I do not have access to a firearm					
100	Handgun					
=	Rifle					
- 10	Shotgun					
- 8	Other					
**(Does	you ever carried a weapon (gun, knife, etc.) within the past 12 months? not include carrying a weapon while hunting)** Yes No					
	SUBMIT RESPONSES - Updates will be saved. You will be taken to the ANSWER REVIEW PAGE.					
	SKIP THIS PAGE - No updates will be saved. You will be taken to the OVERALL SURVEY SUMMARY					

SECTION: Personal Safety						
8	ANSWER REVIEW PAGE: 8 of 26 pages	You have completed 0 of 5 Items on this page				

Below are your saved responses for	page 8. Ple	ase revie	ew before pro	ceeding.	
7 Within the past 12 months, how often did you: **(Mark the appropriate column for each of the three questions)**	N/A (Didn't do this activity within the last 12 months)	Never	Sometimes	Most of the time	Always
Wear a helmet when you rode a bicycle?	0	0	0	0	0
Wear a helmet when you rode a motorized two-wheeled vehicle?	0	0	0	0	0
Text while driving?	0	0	0	0	0
9 Within the past 12 months have you ridden in a car with a driver who has been impaired due to alcohol consumption?  Yes  No  Don't know  10 Within the past 12 months were you in a physical fight?  Yes  No					
CONTINUE			REVIEW		
CONTINUE				NC VIC II	
CONTINUE Answering Survey - Page	9		OVERALL	Survey summa	гу
			PREV - su		e 7

SECTI	ON: Nutrition and Physical Activity	
9	SURVEY PAGE: 9 of 26 pages	You have completed 0 of 5 Items on this page

1 Your l	1 Your height in feet and inches										
1.01 Fee	et										
	3		4		5			6		7	
	0		0		0			0		0	
1.02 Inc	ches										
0	1	2	3	4	5	6	7	8	9	10	11
0	0	0	0	0	0	0	0	0	0	0	0
**(If less (1 kilogra 3 How (	Slightly underweight About the right weight Slightly overweight										
**(Mark	the most a	ppropriate		e)** ometimes		Mod	st of the ti	me		Always	
	(Never		3	Ometimes		1-103	or the ti	iiie		Always	
	SUBMIT F	RESPONS	ES - Upd	lates will b	e saved.	You will I	be taken t	o the ANS	SWER REV	IEW PAGE	. ]
	SKIP THIS PAGE - No updates will be saved. You will be taken to the OVERALL SURVEY SUMMARY PAGE.										

SECTIO	ON: Nutrition and Physical Activity	
10	ANSWER REVIEW PAGE: 10 of 26 pages	You have completed 0 of 6 Items on this page

-							
Below are your saved responses for page 10. Please review before proceeding.							
s In the past 7 days, how many hours did you spend doing the following activities?	None	Less than 1/2 hour	-, -				5 1/2+ hours
Strenuous exercise (heart beats rapidly). Examples: biking fast, aerobics, dancing, running, basketball, swimming laps, rollerblading, tennis, soccer	0	0	0	0	(	)	0
Moderate exercise (not exhausting). Examples: walking quickly, baseball, easy biking, volleyball, skateboarding, snowboarding	0	0	0	0	(	0	0
Exercises to strengthen or tone your muscles. Examples: push-ups, sit-ups, weight lifting/training	0	0	0	0	(	0	0
6 On an average day, how many hours do you spend doing the following activities?	None	Less than 1 hour	1 hour	2 hours	3 hours	4 hours	5+ hours
Watching television	0	0	0	0	0	0	0
Using a computer for something that is not for work or school work	0	0	0	0	0	0	0
Using a handheld device for something that is not for work or school work	0	0	0	0	0	0	0
CONTINUE		F	REVIEW				
CONTINUE Answering Survey - Page 11  EDIT Re-open Page 10 and edit your responses  COMPLETE SURVEY LATER Responses will be saved				OVERALL Survey summary PREV - summary for Page 9 NEXT - summary for Page 11			

11 SURVEY PAGE: 11 of 26 pages

You have completed 0 of 20 Items on this page

7 During the past 7 da times did you eat/drin following? **(Think about all the mea had from the time you got to bed. Be sure to include f home, school, restaurants, else.)**	nk the  Is and snacks you up until you went ood you ate at	I did not	1 to 3 times during the past 7 days	4 to 6 times during the past 7 days	1 time per day	2 times per day	3 times per day	4 or more times per day
100% fruit juice (Do not in Kool-Aid, sports drinks, or flavored drinks.)		0	0	0	0	0	0	0
Fruit (Do not include juice.)	)	0	0	0	0	0	0	0
Green salad		0	0	0	0	0	0	0
Potatoes (Do not include Fr potatoes, or potato chips.)		0	0	0	0	0	0	0
Carrots		0	0	0	0	0	0	0
Other vegetables (Do not in salad, potatoes, or carrots.		0	0	0	0	0	0	0
8 During the past 7 da times did you drink the **(Think about all the beve- from the time you got up u bed. Be sure to include beve- at home, school, restaurant else.)**	ne following? erages you had ntil you went to verages you drank	I did not	1 to 3 times during the past 7 days	4 to 6 times during the past 7 days	1 time per day	2 times per day	3 times per day	4 or more times per day
Can, bottle, or glass of sod Pepsi, or Sprite, etc.). (Do soda or diet pop.)		0	0	0	0	0	0	0
Can, bottle, or glass of diet (Diet Coke, Diet Pepsi, or D		0	0	0	0	0	0	0
Fruit-flavored drinks with s Hi-C, lemonade, cranberry water, etc.)		0	0	0	0	0	0	0
Sports drinks (Gatorade, Po	owerade, etc.)	0	0	0	0	0	0	0
Coffee drinks with added so mochas, Frappuccinos, Mad		0	0	0	0	0	0	0
Other sweetened beverage sweetened teas, rice drinks beverages, etc.)		0	•	0	0	0	0	0
9 In the past 7 days, o	on how many o	days did y	you eat l	oreakfast	t			
0 days 1 day	2 days	3 days	4 day	/s 5	days	6 days		lays
0 0	0	0	0		0	0	(	Ð
10 Indicate how often following in the past :	12 months:	yea	ce a Afe ar or time ess yea	sa twice	per week	Several times per week		Several times a day

at fast food meals	0	.0	Ð.	0	0	0	0	10
at at any restaurant (do not include fast ood establishments)	0	0	0	0	0	0	0	0
lse laxatives to control weight	0	0	0	0	0	6	0	10
ake diet pills	0	0	0	0	0	0	0	10
Binge eat		0	0	0	0	10	0	0
Induce vomiting to control weight		0	0	0	0	0	0	0
11 Do you regularly take a multivita	min?							
Yes								
n No								

**SKIP THIS PAGE** - No updates will be saved. You will be taken to the OVERALL SURVEY SUMMARY PAGE.

SECTIO	ON: Chemical Health	
12	ANSWER REVIEW PAGE: 12 of 26 pages	You have completed 0 of 20 Items on this page

Below are your saved responses for	page 12.	Please rev	iew before p	roceeding.		
1 During the past 12 months, how often have you used: **(Mark one for each line)**	Did not use	Once/year	6 times/year	Once/month	More than once/month	
Smoking tobacco	0	0	0	0	0	
Smokeless tobacco	0	0	0	0	0	
Alcohol (beer, wine, liquor)	0	0	0	0	0	
Marijuana (pot, hash, hash oil)	0	0	0	0	0	
Cocaine (crack, rock, freebase)	0	0	0	0	0	
Amphetamines (meth, speed)	0	0	0	0	0	
Sedatives	0	0	0	0	0	
Hallucinogens (LSD, PCP)	0	0	0	0	0	
Opiates (heroin)	0	0	0	0	0	
Inhalants (glue, solvents, gas)	0	0	0	0	0	
Ecstasy	0	0	0	0	0	
Performance enhancing steroids	0	0	0	0	0	
GHB, Rohypnol (or other club drugs)	0	0	0	0	0	
Prescription drug not prescribed for you	0	0	0	0	0	
Tobacco from a water pipe (hookah)	0	0	0	0	0	
2 During the past 30 days, on how many days did you use: **(Mark one for each line)**	0 days 1	-2 days 3-5	days 6-9 days		20-29 All 30 days days	
Smoking tobacco	0	0 (	0	0	0 0	
Smokeless tobacco	0	0 (	0	0	0 0	
Alcohol (beer, wine, liquor)	0	0 (		0	0 0	
Marijuana (pot, hash, hash oil)	0	0 (	0	0	0 0	
Tobacco from a water pipe (hookah)	0	0 (	0	0	0 0	
CONTINUE			REVIEW			
EDIT Re-open Page 12 and edit your r	CONTINUE Answering Survey - Page 13  EDIT Re-open Page 12 and edit your responses  COMPLETE SURVEY LATER Responses will be saved  OVERALL Survey summary PREV - summary for Page 11 NEXT - summary for Page 13			ge 11		

SECTI	ON: Chemical Health	
13	SURVEY PAGE: 13 of 26 pages	You have completed 0 of 4 Items on this page

3 For questions 3 - 6 a drink is defined as: a bottle of beer, a glass of wine, a shot glass of liquor, or a mixed drink	wine cooler, a
3.01 Average # of drinks you consume in a week: **Enter a number between 00 and 99 (If less than 10, mark as 09, 08, etc.)**	2 digits
4 Think back over the last two weeks. How many times have you had five or a sitting?	more drinks in
<ul> <li>I do not drink alcohol</li> </ul>	
<ul><li>None</li></ul>	
<ul><li>Once</li></ul>	
<ul><li>Twice</li></ul>	
<ul> <li>3-5 times</li> </ul>	
<ul> <li>6-9 times</li> </ul>	
<ul> <li>10 or more times</li> </ul>	
s The last time you "partied"/socialized, how many hours did you drink alcohol? State your best estimate.  **Enter a number between 00 and 99.  If you do not drink alcohol, please enter 00  If less than 10, mark as 09, 08, etc.**	2 digits
6 The last time you "partied"/socialized, how many alcoholic drinks did you have? State your best estimate. **Enter a number between 00 and 99. If you do not drink alcohol, please enter 00 If less than 10, mark as 09, 08, etc.**	2 digits
SUBMIT RESPONSES - Updates will be saved. You will be taken to the ANSWER REV	VIEW PAGE.
SKIP THIS PAGE - No updates will be saved. You will be taken to the OVERALL SUR PAGE.	VEY SUMMARY

SECTION	ON: Chemical Health	
14	ANSWER REVIEW PAGE: 14 of 26 pages	You have completed 0 of 19 Items on this page

Below are your saved responses for page 14. Please review before proceeding.						
7 Please indicate how often you have experienced the following due to your drinking or drug use during the past 12 months **(Mark one for each line)**	Never	Once	Twice	3 - 5 times	6 - 9 times	10 or more times
Had a hangover	0	0	0	0	0	0
Performed poorly on a test or important project	0	0	0	0	0	0
Been in trouble with police, residence hall, or other college authorities	0	0	0	0	0	0
Damaged property, pulled fire alarm, etc.	0	0	0	0	0	0
Got into an argument or fight	0	0	0	0	0	0
Got nauseated or vomited	0	0	0	0	0	0
Driven a car while under the influence	0	0	0	0	0	0
Missed a class	0	0	0	0	0	0
Been criticized by someone I know	0	0	0	0	0	0
Thought I might have a drinking or other drug problem	0	0	0	0	0	0
Had a memory loss	0	0	0	0	0	0
Done something I later regretted	0	0	0	0	0	0
Been arrested for DWI/DUI	0	0	0	0	0	0
Have been taken advantage of sexually	0	0	0	0	0	0
Have taken advantage of another sexually	0	0	0	0	0	0
Tried unsuccessfully to stop using	0	0	0	0	0	0
Seriously thought about suicide	0	0	0	0	0	0
Seriously tried to commit suicide	0	0	0	0	0	0
Been hurt or injured	0	0	0	0	0	0
CONTINUE				REV	IEW	
CONTINUE Answering Survey - Page 1	.5		ov	ERALL Surv	ey summar	у
EDIT Re-open Page 14 and edit your re	esponses		PR	EV - summa	ary for Page	13
COMPLETE SURVEY LATER Responses w	vill be save	d	NE	XT - summa	ary for Page	15

CONTINUE	REVIEW
CONTINUE Answering Survey - Page 15	OVERALL Survey summary
EDIT Re-open Page 14 and edit your responses	PREV - summary for Page 13
COMPLETE SURVEY LATER Responses will be saved	NEXT - summary for Page 15

SECTI	ON: Chemical Health	
15	SURVEY PAGE: 15 of 26 pages	You have completed 0 of 6 Items on this page

		_
8 Do y	ou consider yourself a smoker?	
0	Yes	
0	No	
Thurso (enter	verage number of cigarettes you smoke per weekday (Monday through digits a number between 00 and 99) smokers please enter 00. If less than 10, mark as 09, 08, etc. 1 pack=20 cigarettes)**	
(enter **(Non-	digits a number of cigarettes you smoke per weekend day (Friday h Sunday) a number between 00 and 99) smokers please enter 00. If less than 10, mark as 09, 08, etc. 1 pack=20 cigarettes)**	
	ere have you used tobacco all that apply)**	
	Not applicable - I do not use tobacco	
	On campus (inside)	
	On campus (outside)	
<b>B</b>	Residence hall (outside)	
E	Fraternity/Sorority (inside)	
	Fraternity/Sorority (outside)	
E	Bar/Restaurant (outside)	
	In a car	
E	Where I live (inside)	
	Where I live (outside)	
E	Private parties (inside)	
	Private parties (outside)	
100	Worksite (outside)	
100	Parking ramp/Garage	
100	Other (inside)	
	Other (outside)	
	ing the past 12 months, have you stopped smoking for one day or longer because ere trying to quit smoking?  Yes	
0	No No	
0	Not applicable - I do not smoke	

# 12 How many times in the past 12 months did you try to quit smoking? \*\*(Enter a number between 00 and 99 - Non-smokers and smokers who have not attempted to quit please enter 00. If less than 10, mark as 09, 08, etc.)\*\*

SUBMIT RESPONSES - Updates will be saved. You will be taken to the ANSWER REVIEW PAGE.
SKIP THIS PAGE - No updates will be saved. You will be taken to the OVERALL SURVEY SUMMARY PAGE.

SECTION	ON: Chemical Health	
16	ANSWER REVIEW PAGE: 16 of 26 pages	You have completed 0 of 4 Items on this page

Below are you	r saved respons	es for page 16. P	lease re	eview be	efore proceedi	ng.
13 In an average tobacco?	week, how many	hours are you in t	he same	room w	ith someone wh	o is smoking
0 hours	Less than 30 minutes	31 minutes - 1 hour	2 - 3	nours	4 - 6 hours	7 or more hours
14 In an average **(Mark all that ap		e you been expose	d to sec	ondhand	smoke?	
Not applic	able - I am never e	xposed to secondhan	d smoke			
On campu	s (inside)					
On campu	s (outside)					
Residence	hall (outside)					
Fraternity	/Sorority (inside)					
	/Sorority (outside)					
Bar/Resta	urant (outside)					
In a car						
Where I liv	ve (inside)					
Where I liv	ve (outside)					
Private pa	rties (inside)					
Private pa	rties (outside)					
Worksite (	(outside)					
Parking ra	mp/Garage					
Other (ins	ide)					
Other (out	tside)					
or more drinks at (One drink equals of	a sitting? one shot of alcohol, wine cooler, or a 5 , etc.)	rcentage of studen a 12-ounce can of be s-ounce glass of wine	er, a mix	ed drink o	containing 1 or 1 1	1/2 ounces of
16 If a person has you would call "9		om alcohol/drug use	e and yo	u cannot	wake them up,	how likely is it
O Very likely	,					
Somewhat	t likely					
Somewhat	t unlikely					
O Very unlik	ely					
	CONTINU	E			REVIEW	

CONTINUE Answering Survey - Page 17	OVERALL Survey summary
EDIT Re-open Page 16 and edit your responses	PREV - summary for Page 15
COMPLETE SURVEY LATER Responses will be saved	NEXT - summary for Page 17

SECTION: Chemical Health 17 SURVEY PAGE: 17 of 26 pages You have completed 0 of 2 Items on this page 17 On a scale from one to ten, with one being strongly disagree and ten being strongly agree, please indicate your opinion regarding a smoke-free or tobacco-free policy for your campus. 17.01 In my opinion, my campus should have a smoke-free policy prohibiting smoking both indoors and outdoors. applicable-My campus currently has 10 a smoke-free (Strongly (Strongly policy. Disagree) 2 3 5 Agree) 6 0 0 0 0 0 0 0 0 0 0 17.02 In my opinion, my campus should have a tobacco-free policy prohibiting any type of tobacco use both indoors and outdoors. applicable-My campus currently has а 10 tobacco-free (Strongly (Strongly policy. Disagree) 2 3 4 5 6 7 8 9 Agree) 0 0 0 0 0 0 0 0 0 0 0 SUBMIT RESPONSES - Updates will be saved. You will be taken to the ANSWER REVIEW PAGE.

SKIP THIS PAGE - No updates will be saved. You will be taken to the OVERALL SURVEY SUMMARY

PAGE.

SECTION: Sexual Health		
18	ANSWER REVIEW PAGE: 18 of 26 pages	You have completed 0 of 5 Items on this page

Below are your saved responses for page 18. Please review before proceeding.				
Have you ever been sexually active? **(Sexually active is defined as having engaged in vaginal or anal intercourse or oral sex)**				
○ Yes				
○ No				
2 Was your reason for not being sexually active because you abstinent?	were intentionally choosing to be			
Not Applicable - I have been sexually active				
○ Yes				
○ No				
3 Have you been sexually active in the past 12 months?  Yes No				
4 Describe your most recent sexual partner **(Select One)**				
Not applicable - I am not sexually active				
○ A stranger				
A casual acquaintance				
A close but not exclusive dating partner				
An exclusive dating partner				
Fiance(e), spouse, or spousal equivalent				
Other				
5 Within the past 12 months, with how many partners, if any, have you had vaginal or anal intercourse or oral sex?  (Enter a number between 00 and 99. If less than 10, mark as 09, 08, etc.)  [ not yet answered ]				
CONTINUE	REVIEW			
CONTINUE Assuration Supress Page 40	OVERALL SUBSTITUTE			
CONTINUE Answering Survey - Page 19	OVERALL Survey summary			
EDIT Re-open Page 18 and edit your responses	PREV - summary for Page 17			

CONTINUE	REVIEW	
CONTINUE Answering Survey - Page 19	OVERALL Survey summary	
EDIT Re-open Page 18 and edit your responses	PREV - summary for Page 17	
COMPLETE SURVEY LATER Responses will be saved	NEXT - summary for Page 19	

SECTION: Sexual Health			
19	SURVEY PAGE: 19 of 26 pages	You have completed 0 of 6 Items on this page	

6 Within the past 12 months, were your sexual partner(s), if any,  Not applicable - I was not sexually active					
Male					
Female					
Both male and female					
7 Did you use a condom or dental dam the last time you had	I have never had this type of encounter	Yes	No	Don't know/Can't remember	
Oral sex?					
Vaginal intercourse?	0	0	0	0	
Anal intercourse?	0	0	0	0	
8 Were you intoxicated the last time	you had vagina	or anal into	ercourse or o	oral sex?	
<ul> <li>Not applicable - I have not been sex</li> </ul>	kually active				
Yes					
No					
<ul><li>Not sure</li></ul>					
9 The last time you had vaginal inte method of pregnancy prevention? **(Mark all that apply)**	rcourse, what die	d you or you	ır partner us	e as your	
Not applicable - I have not engaged in vaginal intercourse					
Not applicable - I/we are attempting to get pregnant					
I did not use any method of pregnancy prevention					
Birth control pills					
Depo-Provera (shots)					
Intrauterine device (IUD)					
Condoms (male, female)	Condoms (male, female)				
<ul> <li>Diaphragm and spermicide</li> </ul>					
Fertility awareness (calendar, basal	Fertility awareness (calendar, basal body temperature, mucous, rhythm method)				
Withdrawal	Withdrawal				
Ortho Evra (patch)	Ortho Evra (patch)				
NuvaRing					
Emergency contraception (Plan B, "	Emergency contraception (Plan B, "morning after pill", etc.)				
Other					

100	Don't know/Can't remember
	SUBMIT RESPONSES - Updates will be saved. You will be taken to the ANSWER REVIEW PAGE.
SKIP THIS PAGE - No updates will be saved. You will be taken to the OVERALL SURVEY SUMMA PAGE.	

SECTION: Sexual Health		
20	ANSWER REVIEW PAGE: 20 of 26 pages	You have completed 0 of 6 Items on this page

Below are your saved responses for page 20. Please review before proceeding.			
10 Within the past 12 months, have you become pregnant of  Not applicable-Not sexually active  Yes  No	impregnated someone else?		
O Don't know			
11 Was this pregnancy:			
Not Applicable-Not involved in a pregnacy			
○ Intentional			
O Unintentional			
12 What was the outcome of that pregnancy?			
Not applicable - I have not been involved in a pregnancy			
Birth and parenting			
Birth and adoption			
○ Abortion			
○ Miscarriage			
Still pregnant	Still pregnant		
O Don't know			
13 Within the past 12 months, have you or your partner used "morning after pill", etc.)?	d emergency contraception (Plan B,		
Not applicable-Not sexually active			
○ Yes			
○ No			
O Don't know			
14.01 Within the past 12 months, how many times have you or your partner used emergency contraception (Plan B, "morning after pill", etc.)? (Enter a number between 00 and 99)			
(If not sexually active, please enter 00) (If less than 10, mark as 09, 08, etc.)  [ not yet answered ]			
15 Are you (or your partner) planning on getting pregnant within the next two years?			
○ Yes			
○ No			
O Unsure			
CONTINUE	REVIEW		

CONTINUE Answering Survey - Page 21	OVERALL Survey summary
EDIT Re-open Page 20 and edit your responses	PREV - summary for Page 19
COMPLETE SURVEY LATER Responses will be saved	NEXT - summary for Page 21

SECTION: Demographic Information		
21	SURVEY PAGE: 21 of 26 pages	You have completed 0 of 5 Items on this page

0	Male	
0	Female	
0	Transgender	
0	Other	
	old are you? r your age to the nearest year)**	2 digits
Wha (Mark	is your race/ethnicity? all that apply)**	
	American Indian/Alaskan Native	
10	Asian/Pacific Islander	
10	Black-Not Hispanic	
100	Latino/Hispanic	
8	White-Not Hispanic (Includes Middle Eastern)	
	Other	
Are y	ou an international student?	
0	Yes	
0	No	
colleg	many years have you been enrolled at a postsecondary institution ge/university)? r a number between 00 and 99. If less than 10, mark as 09, 08, etc.)**	2 digits
	SUBMIT RESPONSES - Updates will be saved. You will be taken to the ANSWER REVI	EW PAGE
	SKIP THIS PAGE - No updates will be saved. You will be taken to the OVERALL SURVI	EV CIIMM

SECTIO	ON: Demographic Information	
22	ANSWER REVIEW PAGE: 22 of 26 pages	You have completed 0 of 4 Items on this page

Below are your saved responses for page 22. Please re	eview before proceeding.						
6 What is your relationship status?							
Single							
Married/Domestic partner							
○ Separated							
○ Widowed							
O Divorced							
Engaged/Committed dating relationship							
7 Which of the following terms best describes you?							
Heterosexual							
○ Gay/Lesbian							
O Bisexual							
Unsure							
Enter your GPA as 3 numbers (4.00, 3.25. 2.50, 2.96, etc.)  [ not yet answered ]  9 Do you have any of the following:  **(Select all that apply)**  I have no disability or impairment  Attention deficit/hyperactivity disorder  Deaf, hard-of-hearing, or deaf blind  Learning disability (formally assessed)  Mobility impairment  Psychiatric disorder  Systemic disability (diabetes mellitus, multiple sclerosis, etc.)  Traumatic brain injury  Visual impairment (not corrected by contacts or eyeglasses)  Other							
CONTINUE	REVIEW						
CONTINUE Answering Survey - Page 23	OVERALL Survey summary						
EDIT Re-open Page 22 and edit your responses	PREV - summary for Page 21						
	NEXT - summary for Page 23						
COMPLETE SURVEY LATER Responses will be saved	NEXT - Summary for Page 25						

SECTION: Demographic Information					
23	SURVEY PAGE: 23 of 26 pages	You have completed 0 of 7 Items on this page			

10 How many hours do you spend in a typical 7-day week doing each of the following?	0 hours	1 - 5 hours	6 - 10 hours	11 - 15 hours	16 - 20 hours	21 - 25 hours	26 - 30 hours	31 - 40 hours	More than 40 hours
Preparing for class  **(studying, reading, writing, doing homework, rehearsing, and other academic activities)**	0	0	0	0	0	0	0	0	0
Working for pay on campus	0	0	0	0	0	0	0	0	0
Working for pay off campus	0	0	0	0	0	0	0	0	0
11 Over the past 12 months, how often have you engaged in any form of gard (on-line, casino, poker, slot machine, lottery, etc.)?  Never Once a year 2 - 6 times/year Once/month								ng han onc month	e per
Not applicable - I do not gamble \$1 - \$24 \$25 - \$49 \$50 - \$99 \$100 - \$249 \$250 - \$499 \$500 - \$749 \$750 - \$999 \$1,000 or more									
13 How many credits are you takin **If no credits this term please enter 00. If 14 Last month, how much total cred	less tha	an 10, m	ark as 0	1, 02, et		is, wh	at was	digits	otal
unpaid balance on all your credit ca			,	,		,			
<ul> <li>Not applicable - I do not have a creation</li> </ul>	edit card	d							
<ul> <li>None, I pay the full amount each r</li> </ul>	nonth								
o \$1 - \$99									
\$100 - \$249									
\$250 - \$499									
\$500 - \$999									
\$1,000 - \$1,999									
\$2,000 - \$2,999									

- \$3,000 \$3,999
- \$4,000 \$4,999
- \$5,000 \$5,999
- \$6,000 or more

SUBMIT RESPONSES - Updates will be saved. You will be taken to the ANSWER REVIEW PAGE.

**SKIP THIS PAGE** - No updates will be saved. You will be taken to the OVERALL SURVEY SUMMARY PAGE.

SECTIO	ON: Demographic Information	
24	ANSWER REVIEW PAGE: 24 of 26 pages	You have completed 0 of 6 Items on this page

Below are your saved responses for page 24. Please review before proceeding.										
15.01 Do you currently hold a bachelor's degree?  Yes No										
O Associate's degree/Certificate program (A.A., A.S., etc.) O Bachelor's degree (B.A., B.S., etc.) O Master's degree (M.A., M.S., M.P.H., M.B.A., etc.) O Doctoral or professional degree (J.D., M.D., Ph.D., etc.) O Not enrolled in a degree program										
17 On a scale from one to ten, with one being very unsupportive to ten being very supportive, how would you rate your relationship with the following:	Very unsupportive	2	3	4	5	6	7	8	9	Very supportive
Friends	0	0	0	0	0	0	0	0	0	0
Family	0	0	0	0	0	0	0	0	0	0
Institution Faculty	0	0	$\circ$	0	0	0	0	0	0	0
Institution Staff	0	$\circ$	0	0	0	0	0	0	0	0
CONTINUE REVIEW										
CONTINU	E						RE	/IEW		

SECTIO	N: Residence/Special Demographic	cs
25	SURVEY PAGE: 25 of 26 pages	You have completed 0 of 5 Items on this page
1 Wha	t are your living arrangements?	
0	Parent's home	
0	Rent or share rent	
0	Residence hall	
0	Fraternity/Sorority	
0	Public/Subsidized housing	
0	Own a house	
0	Other	
	se enter the 5-digit Zip Code number for re currently living.	r the address where 5 digits
з Are y	you currently or have you ever served in	n the United States Armed Forces?
0	Yes	
0	No	
4 Are	ou an Operation Iraqi Freedom and/or	Operation Enduring Freedom Veteran?
0	Yes	
0	No	
0	Not applicable-I have never served in the United	d States Armed Forces
	e serving in the United States Armed Fo nistan have you had?	orces how many deployments to Iraq or
0	Not applicable-I have not served in the United S	
0	I did not deploy to Iraq or Afganistan while serv	ing in the Armed Forces
0	1 deployment	
0	2 deployments	
0	3 deployments	
0	4 deployments	
0	5 or more deployments	
	SUBMIT RESPONSES - Updates will be saved	You will be taken to the ANSWER REVIEW PAGE.
	SKIP THIS PAGE - No updates will be saved.  PAGE.	You will be taken to the OVERALL SURVEY SUMMARY

SECTION: Residence/Special Demographics							
26	ANSWER REVIEW PAGE: 26 of 26 pages	You have completed 0 of 7 Items on this page					

Below are your sa	ved re	sponses	for pag	e 26. Please re	view befo	re procee	ding.	
6 What is the highest level of education your parents, step-parents or guardians completed?	Did not finish high school	_	Attended college but did not complete degree	Completed an associate's degree/certificate program (A.A., A.S., etc.)	Completed a bachelor's degree (B.A., B.S., etc.)	Completed a master's degree (M.A., M.S., M.P.H., M.B.A., etc.)	Completed a doctoral or professional degree (J.D., M.D., Ph.D., etc.)	I prefer not to answer or I do not know
MALE Parent, Step-Parent or Guardian	0	0	0	0	0	0	0	0
FEMALE Parent, Step-Parent or Guardian	0	0	0	0	0	0	0	0
Step-Parent or								
O Don't know								

10 Are you dependent on your parents/guardians for financial  O Yes  No	support?
11 How many online courses are you taking this term?  None Some All	
CONTINUE	REVIEW
EDIT Re-open Page 26 and edit your responses  COMPLETE SURVEY LATER Responses will be saved	OVERALL Survey summary PREV - summary for Page 25 NEXT - Overall summary

#### APPENDIX J - GLOSSARY

**Current Tobacco Use:** Reported use of smoking or smokeless tobacco within the past 30 days

**Current Smoking Tobacco Use:** Reported use of smoking or tobacco within the past 30 days

**Current Smokeless Tobacco Use:** Reported use of smokeless tobacco within the past 30 days

Daily Tobacco Use: Reported use of smoking or smokeless tobacco on a daily basis

**Designated Use Areas:** Sites at which individuals may use tobacco products on campus. On campuses with designated use areas, the use of tobacco products is prohibited in certain areas of campus and permitted in others. This includes campuses which require individuals to use tobacco products a specified distance from building entrances.

Non-smoker: Individual who did not report smoking tobacco use within the past 30 days

**Odds Ratio:** Relative odds of the outcome of interest in one group compared to another group

**On-campus secondhand smoke exposure:** Reported exposure to secondhand smoke inside campus buildings or outside on campus grounds

Past 12-month Tobacco Use: Reported use of smoking or smokeless tobacco within the past year

Past 12-month Smoking Tobacco Use: Reported use of smoking tobacco within the past year

Past 12-month Smokeless Tobacco Use: Reported use of smokeless tobacco within the past year

**Quit attempt:** An effort by a current or past 12-month smoker to stop smoking and who successfully avoided smoking for a day or longer.

**Smoker:** Reported smoking tobacco use within past 30 days

**Smoke-free:** The use of smoking tobacco is prohibited on all campus grounds

**Tobacco-free:** The use of smoking and smokeless tobacco as well as any other tobacco product is prohibited on all campus grounds.

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