

# **Alcohol, Tobacco, and Other Drug Abuse Prevention Needs of Vermont College Students**

*Results of the 2001 Core Alcohol and Drug Survey*

**December 2002**

**Vermont Department of Health  
Division of Alcohol and Drug Abuse Programs**

# **Alcohol, Tobacco, and Other Drug Abuse Prevention Needs of Vermont College Students**

## *Results of the 2001 Core Alcohol and Drug Survey*

Prepared for the Vermont Department of Health  
and the Vermont College Alcohol Network

Prepared by

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## ► **PREFACE AND ACKNOWLEDGMENTS**

The following report was prepared for the Vermont Department of Health under a contract to the University of Vermont Department of Medical Biostatistics and is modeled on the 1999 report of the fall 1998 survey data. The 1999 report corresponds to the second of a family of six studies that were being conducted by the Research Triangle Institute titled, “Vermont Prevention Needs Assessment Studies: Alcohol and Other Drugs” and funded by the Center for Substance Abuse Prevention (CSAP) Contract No. 277-97-6005. The general structure of the report corresponds to the August 1999 Core Report describing the 1998 survey data to facilitate descriptive comparisons of the two cross-sectional surveys.

The authors wish to acknowledge the administrative and technical support of Dr. Charles Bennett of the Vermont Department of Health and of Edgardo R. Pimentel of the CORE Institute.

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### Appendix Materials:

- Percentages and statistical tests from each section of report
- Weighted and unweighted frequency distributions for all variables in Core questionnaire
- Copy of Core questionnaire

## ► EXECUTIVE SUMMARY

Alcohol and other substance abuse is a well-documented and persisting problem among students attending colleges and universities across the U.S. Very few states have collected data from college students for state-level estimates that can be used to demonstrate the need for policy changes, identify promising prevention, intervention and treatment strategies, and monitor progress towards meeting prevention goals. Although individual colleges in Vermont have conducted surveys of alcohol, tobacco, and other drug use in the past, this is the second study to collect and compile data on alcohol, tobacco, and other drug use among college students across the entire State.

Over 4,100 undergraduate students at 17 Vermont colleges participated in the Core Institute's Alcohol and Drug Survey in the fall of 2001. This survey is designed to assess the prevalence of alcohol, tobacco, and other drug use and misuse among college students, and to identify demographic, social, and psychological characteristics (also referred to as risk or protective factors) that are associated with substance use behaviors. These characteristics can and have been used to identify Vermont student population subgroups at high risk for substance abuse and related health and social problems, and to help the State and Vermont colleges to develop comprehensive, collaborative substance abuse strategies that involve colleges, communities, and state agencies.

The fall 2001 survey report represents a follow-up survey for the Vermont undergraduate student population. This fall 2001 study was conducted for the Vermont College Alcohol Network (VCAN) with technical support from the Vermont Department of Health.

This report demonstrates the continuing need for substance abuse prevention, intervention, and treatment activities focusing on the Vermont college population and for stimulating further interest in and support for using empirical information to help guide substance abuse program planning efforts. Findings in this report represent a follow-up to the initial 1998 survey and provides some indication of progress that may have been made over the elapsed time period and also highlights the linkages between an array of risk and protective factors and substance use behaviors within the Vermont college student population, the impact of college students' substance abuse on communities, and thus provides continuing support for substance abuse programs and policies designed to address these factors..

## Highlights

### *Alcohol, Tobacco, and Other Drug Use*

Alcohol use: 79% reported past-month alcohol use and 53% reported “binge” drinking (five or more alcoholic beverages on a single occasion) in the past two weeks.

Marijuana use: 38% reported past-month marijuana use, and 18% reported heavy marijuana use (10 or more days in the past month).

Tobacco use: 51% of Vermont students reported past-year tobacco use, 40% reported past-month use, and 26% of Vermont students reported heavy tobacco use (10 or more days in the past month).

Other illicit drug use: 27% of Vermont students reported past-year use of illicit drugs other than marijuana (e.g., cocaine, opiates, sedatives, hallucinogens), 14% reported past-month use, and 3% reported heavy use (10 or more days in the past month) of illicit drugs other than marijuana.

Comparisons to Northeast and national college samples: Vermont students were significantly more likely to have used marijuana in the past year and in the past month as well as heavily within the past month. Alcohol use over the past year and the past month was similar to the Northeast but higher than the national sample. Heavy alcohol use was lower than the Northeast and higher than the national sample. Tobacco use among Vermont students was similar to the Northeast and higher than the national sample. Northeast and national data was unavailable for other illicit drugs.

### *Health and Social Problems Related to Substance Use*

Vermont students reported a variety of problems that occurred the year prior to the survey due to alcohol and/or drugs: 67% had a hangover, 39% had memory loss, 37% missed a class, 34% got into an argument or fight, 30% drove while intoxicated, 20% had been in trouble with authorities and 13% were taken advantage of sexually.

### *Demographic Correlates of Substance Use*

Age: Compared to students 21 and older, students under age 21 were significantly more likely to report binge drinking in the past two weeks (57% vs. 47%) and past month use of marijuana (41% vs. 33%). Past month tobacco use was significantly less likely for students under 21 compared to students 21 and over.

Gender: Males were significantly more likely than females to report binge drinking in the past two weeks (62% vs. 46%), past month use of marijuana (47% vs. 32%) and past month use of other illicit drugs (18% vs. 10%).

Residence: Students in fraternity/sororities had the highest reported past month use of alcohol (95%) and binge drinking in the past two weeks (80%) compared to students living in other types of housing ( $\leq 83\%$ ,  $\leq 60\%$ , for past month use of alcohol and binge drinking in the past 2 weeks, respectively). However, they had the lowest reported past month tobacco use (14% vs.  $\geq 39\%$ ). Students living in residence halls had the highest reported past month use of marijuana (42%).

Family history of substance abuse: Compared to college students in the Northeast and national samples, Vermont students were significantly more likely to have a mother (9% vs. 4%, 5%) or father (21% vs. 8%, 8%) with a history of an alcohol or drug problem.

### ***Campus Environment***

Most students (89%) reported that their campus had alcohol and drug policies. However, 59% of students thought that the social atmosphere on their campus promoted alcohol use, 45% thought it promoted other drug use, 33% reported that substance use by others interrupted their studying, and 31% reported that alcohol use by others messed up their living space as well as interfered in other ways.

### ***Peer Attitudes and Substance Use Behaviors***

Perceived levels of substance use among peers were substantially higher than actual levels of substance use reported by students particularly relating to tobacco (96% vs. 51%) and marijuana use (96% vs. 52%).

### ***Attitudes Toward Alcohol, Tobacco, and Other Drug Use***

Certain behaviors were perceived to be a great health risk by more students. For example, while over 43% of the students thought that “binge” drinking poses a great health risk and 39% thought trying cocaine once or twice poses a great health risk, 10% thought the same of occasional marijuana use.

Higher levels of perceived health risk were strongly associated with lower levels of substance use. For example, among those who perceived no health risk from “binge” drinking, 82% reported “binge” drinking in the past two weeks. Conversely, among those who perceived great health risk, only 26% reported “binge” drinking. A similar relationship was observed for marijuana; 66% of those who perceived no risk from occasional marijuana use reported past month marijuana use, compared to only 3% of those who perceived great risk.

### ***Academic Performance and Extracurricular Activities***

Academic performance: A higher grade point average was strongly associated with lower levels of alcohol, marijuana, and other illicit drug use within the past month. For example, compared to students with an “A” average, students with

a “B” average or below were more likely to report alcohol use (73% vs.  $\geq 80\%$ ). Larger gradients in usage were observed for tobacco, marijuana and other illicit drugs with the “A” students reported 33%, 28% and 9% use while “D or F” students reported 64%, 64% and 43% use for tobacco, marijuana and other illicit drugs, respectively.

Volunteer work: Students who were involved in volunteer work did not report significantly lower levels of alcohol, tobacco and marijuana use. For example, 50% of students who volunteered 10 or more hours/week reported “binge” drinking in the past two weeks, compared to 52% of students who did not volunteer.

## **Recommendations**

Findings of the 2001 and the prior 1998 Core surveys support the following summary of recommendations that are based on federal and state law, current research, and emerging “best practices” in the substance abuse prevention field (Eigen, 1995; Hingson, Berson, & Dowley, 1997; Stewart, 1997).

All colleges should annually distribute educational and treatment information regarding alcohol and other drugs to all students, faculty, and staff. All colleges should have a representative actively participating in VCAN. They should also conduct a biennial review of the alcohol and drug policies and prevention, intervention, and treatment programs. Policy and disciplinary procedures should be appropriate, enforce consequences, educate, and include assistance and referral for assessment and treatment. Consider implementing a social norms marketing campaign on campus in order to increase academic performance and student retention.

### ***Effective Programs***

Current research indicates that effective prevention programs: are based on a formal campus needs assessment; have clear goals and measurable objectives; include comprehensive student representation and collaboration with local communities and organizations; provide sustained support and recognition for student prevention, intervention, and treatment efforts; have a high visible level of administrative support; and are easily accessible with a central location for services.

Campus programs should use multiple strategies that include: environmental scans (what messages are present in the student environment that promote use), social marketing, and curriculum infusion (integrating substance abuse prevention into regular course work). They should include a focus on reducing the accessibility of alcohol and other drugs, and on reducing alcohol and tobacco promotion and on increasing drug-free activities.

### ***Employee Education and Training***

Comprehensive alcohol, tobacco and other drug education should be provided to all staff and faculty. A collaborative training model should be created which includes the use of local, regional, and national consultants available to all colleges on a statewide basis.

### ***Staffing/Community Resources***

Colleges should provide staffing for prevention efforts that is based on the needs assessment of each college. Prevention

specialists and certified alcohol counselor services should be available to college students either on campus or via referral agreements with treatment providers in the local community. Colleges should also have strong working relationships with local and State law enforcement, prevention professionals, treatment providers, and local substance abuse prevention coalitions and recovery groups.

### ***Evaluation and Assessment***

To assure effective programming, each college should conduct an assessment, such as the statewide Core survey, every two years to determine alcohol, tobacco and other drug use prevalence and attitudes. Colleges should evaluate these assessment results and other pertinent data such as discipline records, incidence of vandalism, sexual assault, violence, treatment referrals, etc.

## ► INTRODUCTION

This report was prepared using survey data collected from over 4,100 Vermont undergraduate students attending college in the fall of 2001. The fall 2001 survey utilized a short and a long set of survey forms. This was in contrast to the earlier fall 1998 survey that utilized only the long form. The survey results have been organized into eight sections. The first section describes the demographic composition and background characteristics of the sample. The second section presents findings regarding the prevalence of alcohol, tobacco, and other drug use in the Vermont college student population. The next six sections examine various consequences and correlates of alcohol, tobacco, and other drug use. The data items for the short and long survey forms were as follows:

	Short Form	Long Form
• Demographics	x	
• Alcohol, Smoking and Other Drug Use	x	
• Health and Social Problems Related to Substance Use	x	x
• Demographics Correlates of Substance Use	x	
• Campus Environment	x	x
• Peer Attitudes and Substance Use Behaviors	x	x
• Attitudes Toward Alcohol, Tobacco, and Other Drug Use	x	x
• Academic Performance and Extracurricular Activities	x	x

Findings presented in this report reveal the statistical association between self-reported substance use patterns and various risk and protective factors among the Vermont undergraduate college student population. These observations can provide support for the need for prevention and cessation programs as well as school-based policies designed to address these factors.

## ► METHODOLOGY

Twenty Vermont colleges administered the Core Alcohol and Drug Survey: 19 in the fall of 2001 and 1 in the spring of 2002. Seven of the colleges administered the long form, two colleges administered the short form and ten colleges administered some long and some short Forms. The long form is a four page survey and the short form is a two page survey that corresponds to the first two pages of the long form. The Core survey instrument was developed by the Core Institute at Southern Illinois University and has been administered to national samples of college students. This pencil-and-paper survey is completed anonymously by students and optically scanned by the Core Institute to generate summary reports for colleges and raw data files for additional analysis.

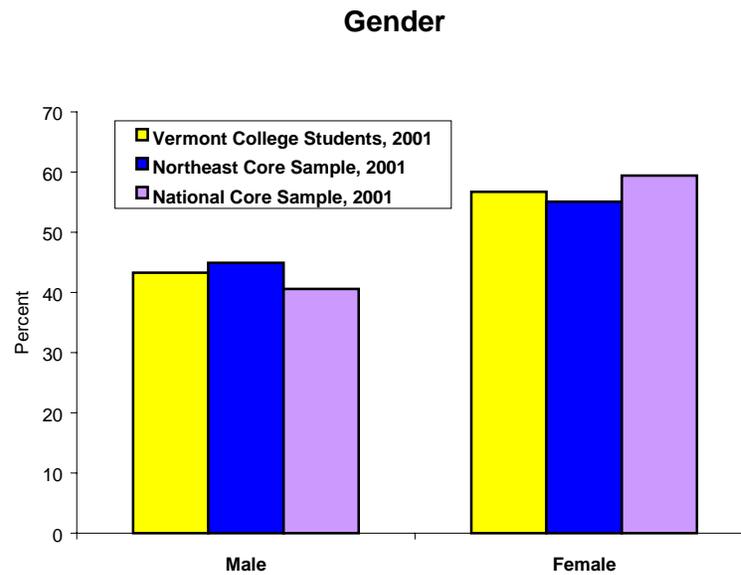
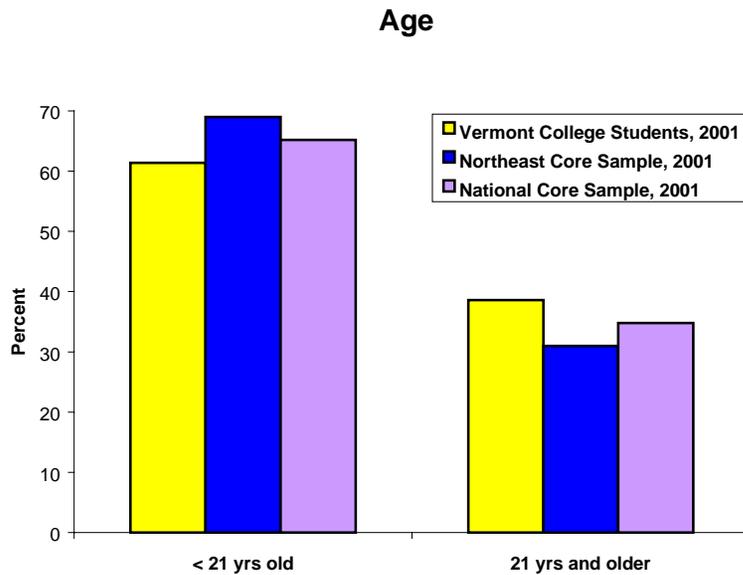
Each participating college received instructions from the Vermont Department of Health and the Vermont College Alcohol Network (VCAN) regarding appropriate methods for administering the survey. A variety of methods were used by participating colleges (e.g., mailed surveys with follow-up post cards, classroom administration), depending on the characteristics of their respective student populations and resources available to pay for survey administration. Of approximately 7400 students who were randomly selected and invited to participate in the survey, 4,667 (63%) completed Core survey questionnaires, and these were sent to the Core Institute by each participating college.

The Core Institute mailed a summary report to each participating college, and the aggregated raw data were sent to The University of Vermont Department of Medical Biostatistics for Statewide data analysis. The statewide analysis was limited to undergraduate students only. Demographic information provided by students and by each of the colleges was used to develop sample weights so that the demographic composition of the sample would reflect the composition of Vermont's college undergraduate student population. One school was excluded from the analysis due to a very low response rate. Another was excluded since it did not have any undergraduate students and a third was excluded because the college failed to provide the demographic information needed to compute the sample weights. Sample weights could not be calculated for respondents who did not answer survey questions regarding their classification and gender. These exclusions reduced the effective sample size for data analysis to 3707 and 1630, respectively, for the short form items and long form items.

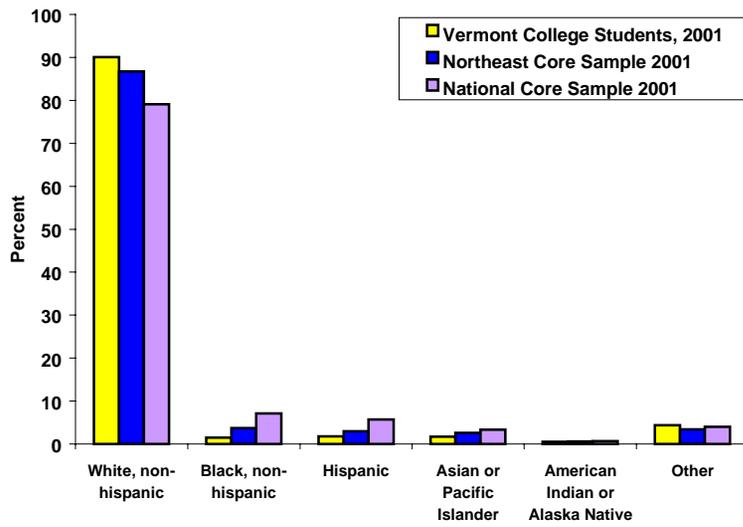
This report includes results of weighted descriptive analyses, including univariate distributions and crosstabulations to demonstrate relationships between risk or protective factors and substance use behaviors. Demographic characteristics and prevalence rates of substance use in the Vermont sample are compared with corresponding results from Northeast (2001) and national (2001) samples of students who participated in the Core survey. Regional and national statistics were provided by the Core Institute. Analysis results are illustrated in bar graphs accompanied by summary statements. Statistical tests were conducted using SUDAAN statistical software to identify differences or associations that are statistically significant and therefore unlikely to have occurred by chance. Statistically significant relationships are noted in the summary statements. Readers should bear in mind that some of the associations depicted could be influenced by other variables not taken into account, such as age, gender, and type of college attended. A more comprehensive analysis would require adjustment of these factors as covariates.

## ► DEMOGRAPHIC CHARACTERISTICS

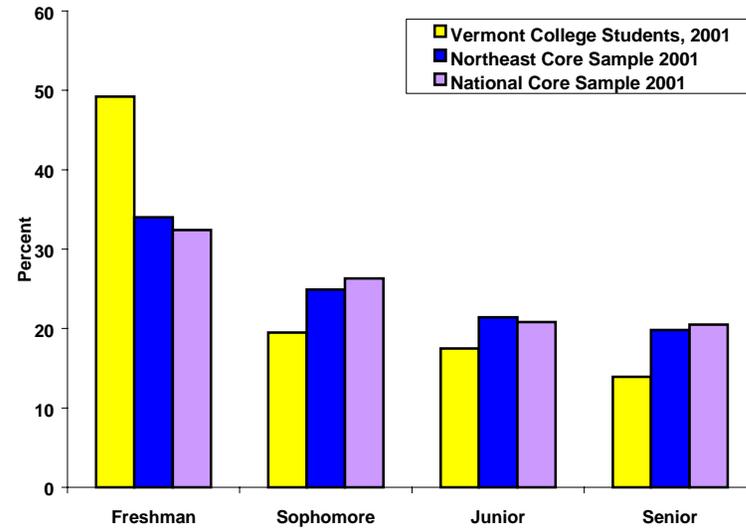
Students were asked to indicate their age, gender, race/ethnicity, place of residence, year in school and type of housing. Vermont students differed significantly from Northeast and national student samples with respect to all of these variables. A smaller percentage of Vermont students were under the age of 21 (61% vs. 69%,65%), and a larger percentage of Vermont students were non-Hispanic white (90% vs. 87%,79%). About half of the Vermont students (49%) were freshman, significantly greater than both the Northeast sample and national sample (34%,32%) A smaller percentage of Vermont students were living on campus (57% vs. 71%,65%) The percentage of Vermont students that were male (43.3%) was similar to the Northeast sample (44.9%) but significantly larger than the national sample (40.6%)



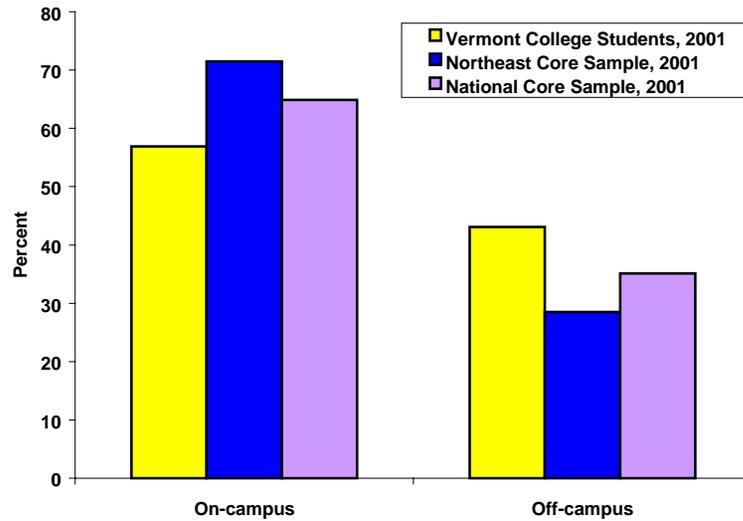
**Race/Ethnicity**



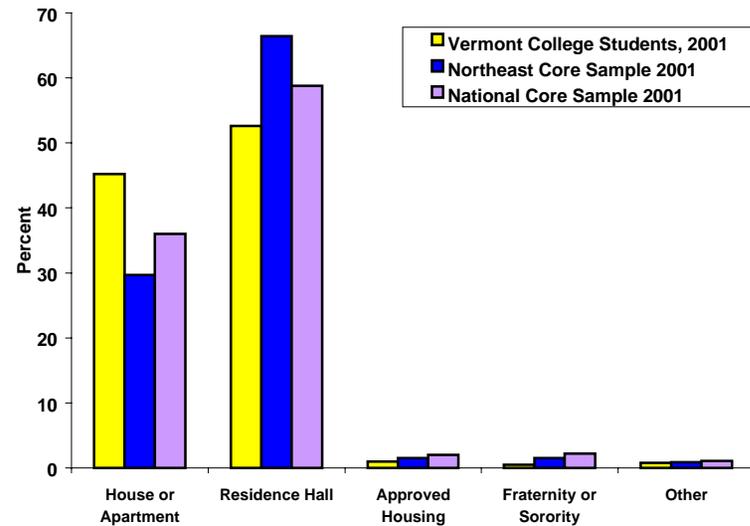
**Year in School**



**On- or Off- Campus Residence**



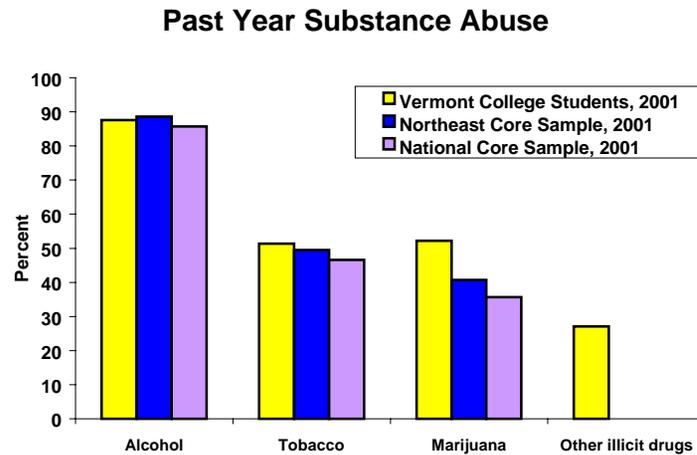
**Type of Housing**



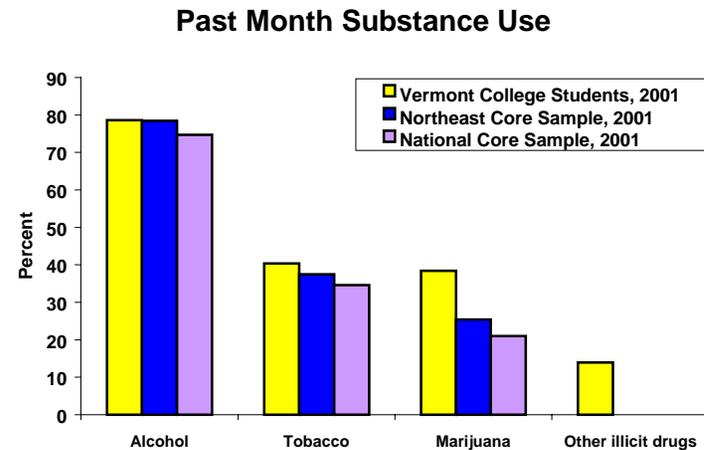
## ▶ ALCOHOL, TOBACCO, AND OTHER DRUG USE

Students were asked about their use of alcohol, tobacco, marijuana, and other drugs in the past year and past month. “Binge” drinking was assessed by asking students whether they had consumed five or more consecutive alcoholic beverages at least once in the previous two weeks. Students who reported using tobacco, marijuana, or other drugs on at least 10 days in the previous month were classified as heavy users of these substances.

- Past-Year Substance Use.** Compared to students in the Northeast and national samples, significantly larger percentages of Vermont students reported past year marijuana use (52% vs. 41%,36%). The prevalence of past-year tobacco use and alcohol use among Vermont students, were both similar to the Northeast sample but significantly higher than the national sample (51% vs. 49%,47% for tobacco) and (88% vs. 89%,86% for alcohol). Twenty seven percent of Vermont students reported past-year use of illicit drugs other than marijuana. Past year illicit drug use was not available for the Northeast and national samples.

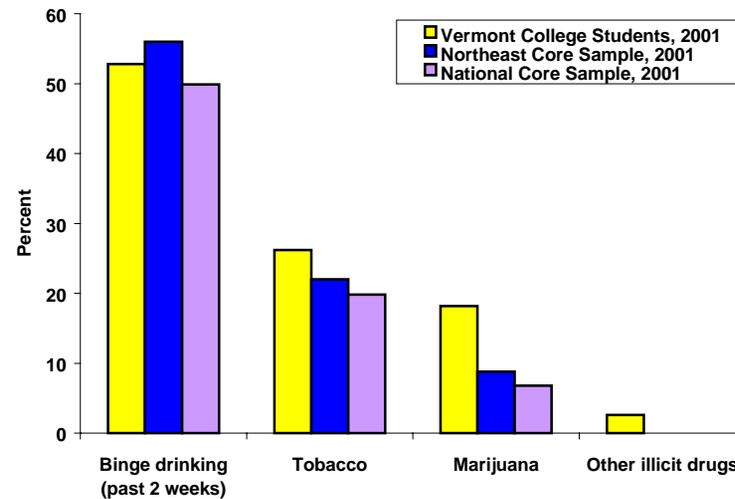


- Past-Month Substance Use.** Compared to students in the Northeast and national samples, significantly larger percentages of Vermont students reported past-month tobacco use (40% vs. 37%,35%) and marijuana use (38% vs. 25%,21%). The prevalence of past-month alcohol use was 79% among Vermont students, similar to the Northeast sample (78%), but significantly higher than the national sample (75%). Fourteen percent of Vermont students reported past-month use of illicit drugs other than marijuana. Past month illicit drug use was not available for the Northeast and national samples.



- Heavy Past-Month Substance Use.** Compared to students in the Northeast and national samples, significantly larger percentages of Vermont students reported heavy past month use of tobacco (26% vs. 22%,20%) and marijuana (18% vs. 9%,7%). The prevalence of “binge” drinking in the past two weeks was significantly lower among Vermont students (53%) compared to those in the Northeast sample (56%), but was significantly higher compared to those in the national sample (50%). Three percent of Vermont students reported heavy past-month use of illicit drugs other than marijuana. Heavy past month illicit drug use was not available for the Northeast and national samples.

**Heavy Past Month Substance Use**

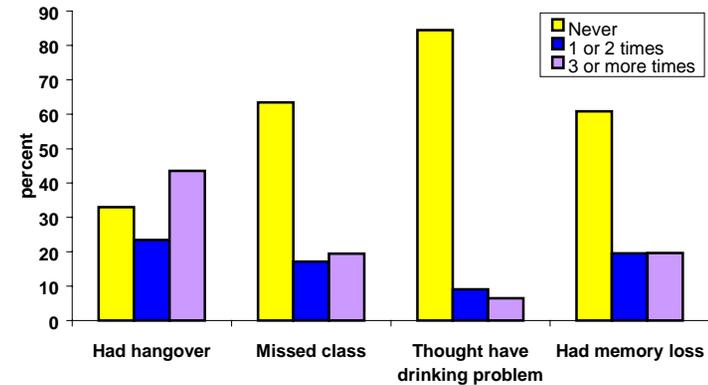


## ► HEALTH AND SOCIAL PROBLEMS RELATED TO SUBSTANCE USE

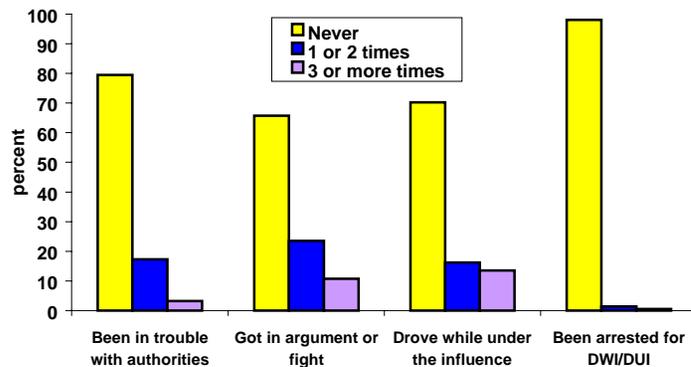
Students were asked how often they had experienced a variety of health and social problems in the past year due to alcohol or drug use. These problems demonstrate some of the health and social costs associated with substance abuse.

- Vermont students reported a variety of problems that had occurred at least once in the past year as a result of alcohol or drug use, including having a hangover (67%), missing a class (37%), having a memory loss (39%), getting into an argument or fight (34%), driving while intoxicated (30%), being in trouble with authorities (20%), being hurt or injured (20%) and being taken advantage of sexually (13%).

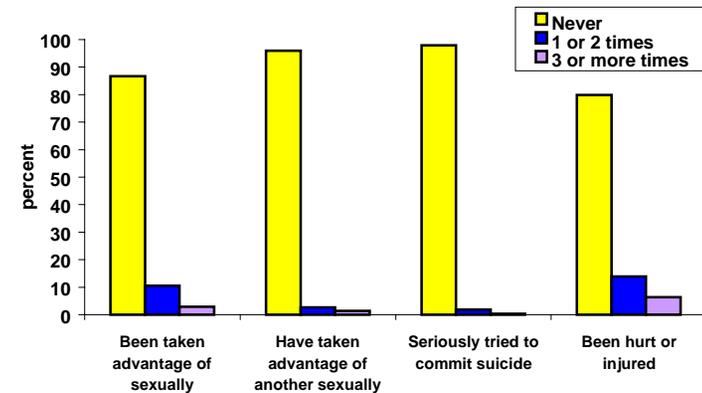
Problems Due to Past Year Alcohol or Drug Use



Problems Due to Past Year Alcohol or Drug Use

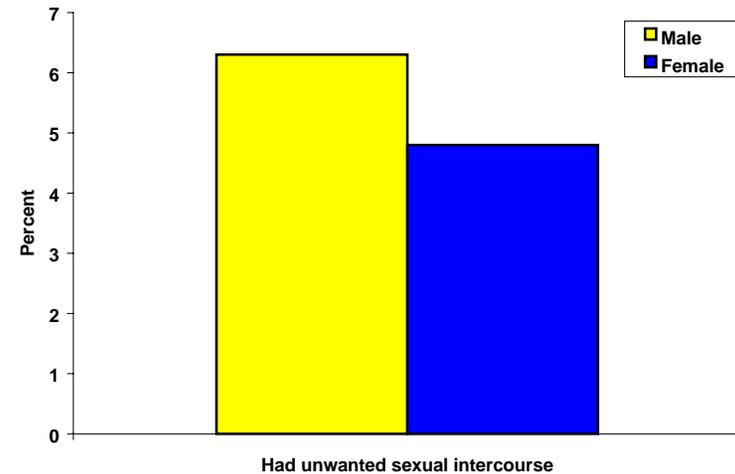


Problems Due to Past Year Alcohol or Drug Use



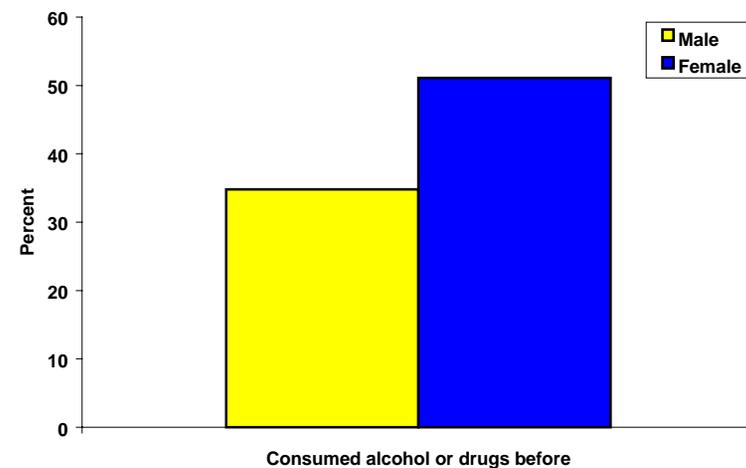
- About 5% of female students and 6% of male students reported having unwanted sexual intercourse in the past year.
- **Note:** This chart includes only subjects that completed the long form.

**Unwanted Sexual Intercourse in the Past Year by Gender**



- 51% percent of female students and 35% of male students who reported having unwanted sexual intercourse in the past month did so after using alcohol or drugs.
- **Note:** This chart includes only subjects that completed the long form.

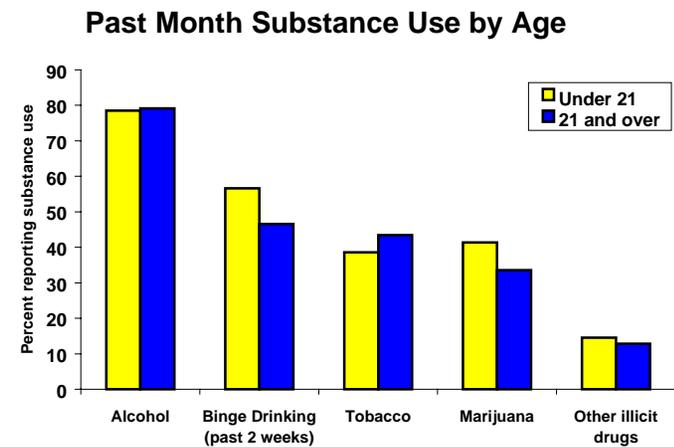
**Consumed Alcohol or Drugs Before Having Unwanted Sexual Intercourse in the Past Year by Gender**



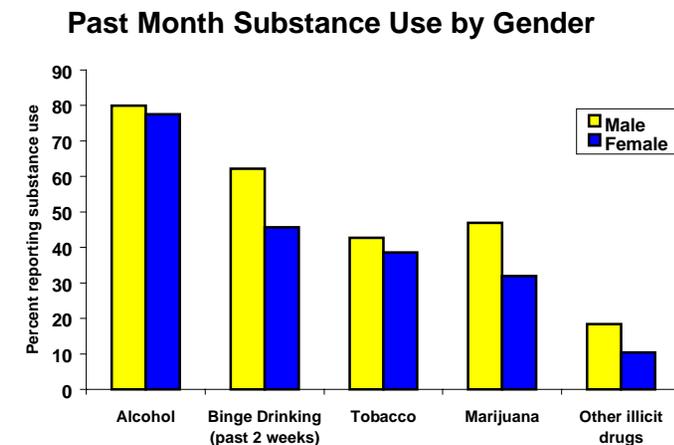
## ► DEMOGRAPHIC CORRELATES OF SUBSTANCE USE

To identify student population subgroups at high risk for alcohol, tobacco, and other drug use, bivariate analyses were conducted to examine the associations between demographic characteristics and substance use behaviors.

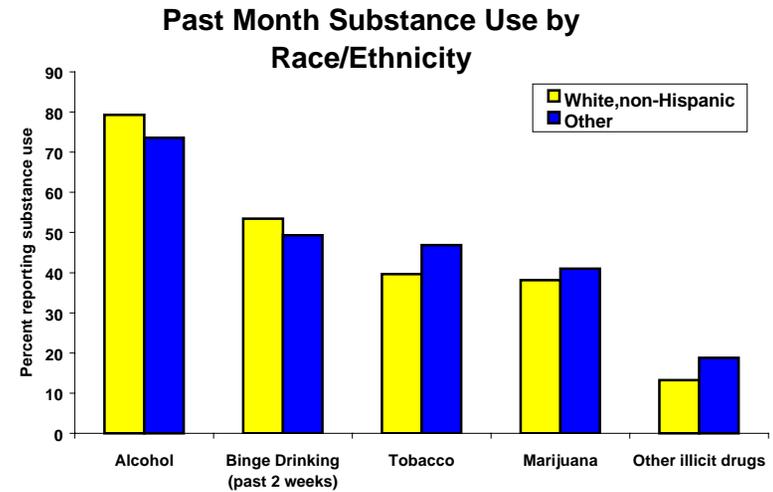
- Students under the age of 21 had significantly higher levels than students at least 21-years-old of reported binge drinking in the past two weeks (57% vs. 47%) and in reported past month use of marijuana (41% vs. 33%). Students under the age of 21 were significantly less likely to report past month use of tobacco than students age 21 and older (39% vs. 43%).



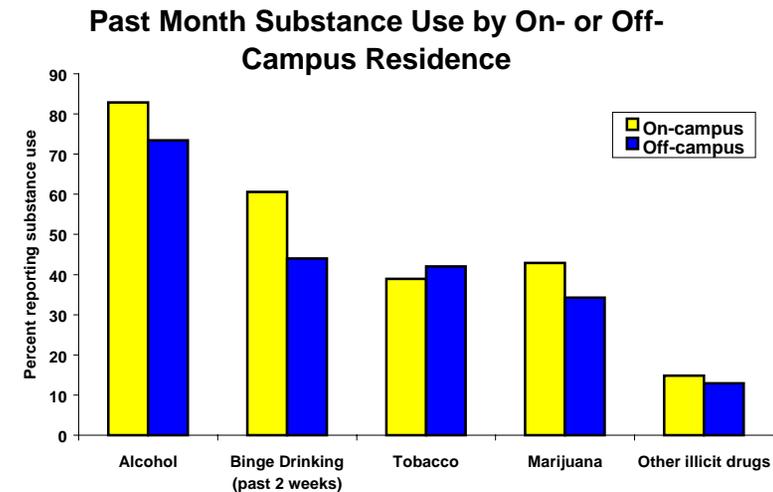
- Compared to female students, male students were significantly more likely to report binge drinking in the past two weeks (62% vs. 46%), past-month marijuana use (47% vs. 32%) and other illicit drug use in the past month (18% vs. 10%).



- Compared to non-Hispanic whites, ethnic minority students, reported significantly higher levels of past-month tobacco use (47% vs. 40%). These groups were similar with respect to past-month alcohol, marijuana and other illicit drugs use, and with respect to binge drinking in the past two weeks.

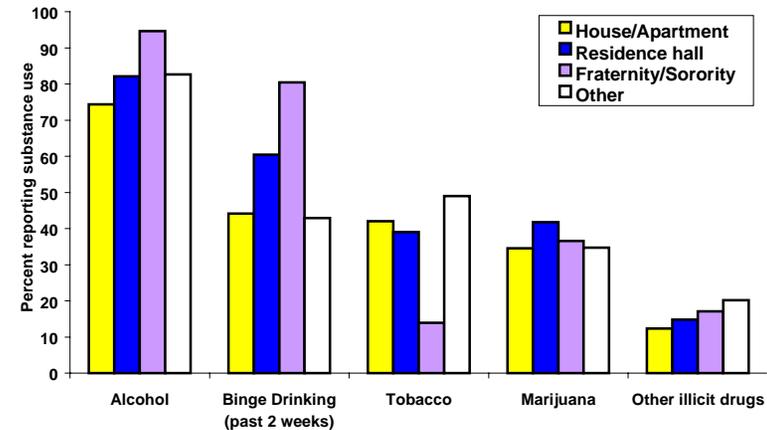


- Students living on campus were significantly more likely than students living off campus to report past-month alcohol use (83% vs. 73%), “binge” drinking in the past two weeks (61% vs. 44%), and past-month marijuana use (43% vs. 34%).



- There were significant associations detected between housing type and the following demographic characteristics: reported past month use of alcohol, tobacco and marijuana and binge drinking in the past two weeks. Fraternities and Sororities had the highest reported past month use of alcohol (95%) and binge drinking in the past two weeks (80%). They had the lowest reported past month tobacco use (14%). Students living in residence halls had the highest reported past month use of marijuana (42%).

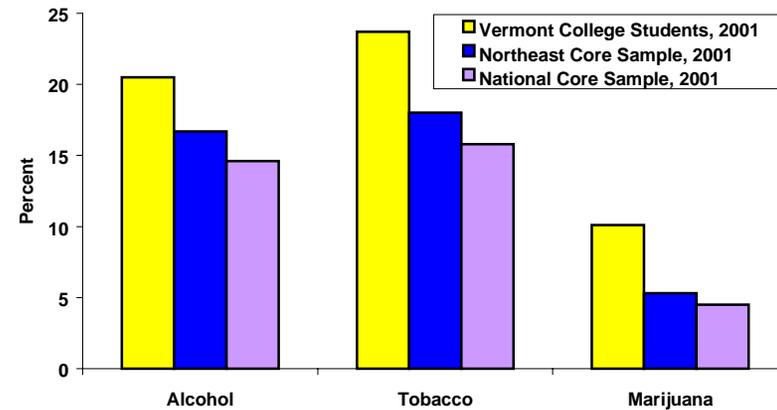
**Past Month Substance Use by Housing Type**



Other Background Characteristics. Research has demonstrated that early age of initiation and substance abuse by family members are risk factors for substance abuse among adolescents and young adults (Hawkins, Catalano, & Miller, 1992). Students were asked how old they were when they first used alcohol, tobacco, and other drugs. They also were asked whether any family members had an alcohol or drug problem.

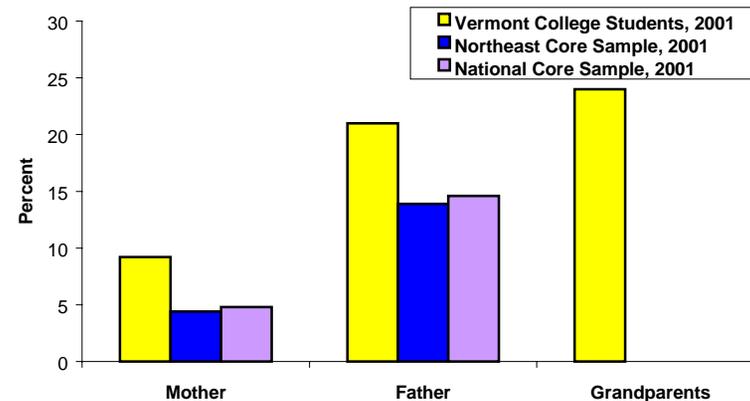
- Compared to the Northeast and the national student samples, significantly larger percentages of Vermont students had used alcohol (20% vs. 17%,15%), tobacco (24% vs. 18%,16%), and marijuana (10% vs. 8%,9%) before the age of 14.

**Substance Use Before the Age of 14**



- Compared to the Northeast and national student samples, significantly larger percentages of Vermont students reported that their mothers (9% vs. 4%,5%), or fathers (21% vs. 8%,8%) had an alcohol or drug problem. The percentage of students reporting grandparents with a history of substance abuse was not available for the Northeast and national samples.

**Family Members with a History of Substance Use Problems**

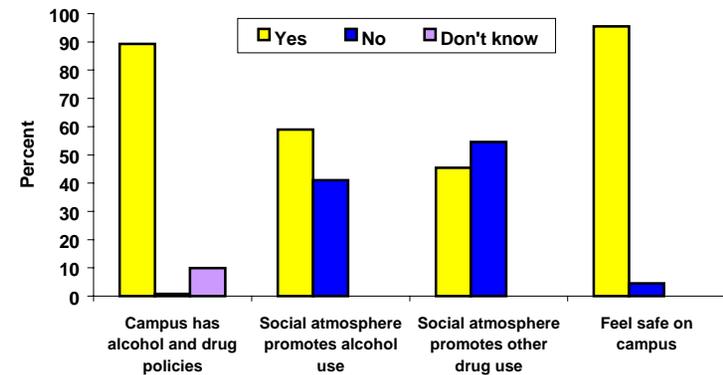


## ► CAMPUS ENVIRONMENT

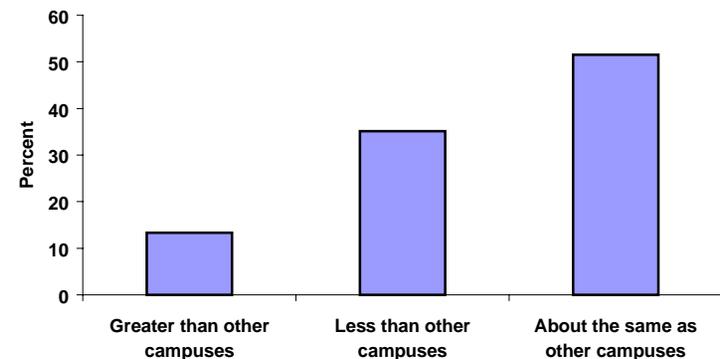
Previous research suggests that students' perceptions of the campus environment or culture may influence their substance use behaviors (Perkins & Wechsler, 1996; Perkins, 1997). To examine such perceptions among Vermont students, they were asked about their awareness of campus alcohol and drug policies, whether they thought the social atmosphere on their campus promoted alcohol and drug use, and whether they thought alcohol use on their campus differed from alcohol use on other campuses. They also were asked if and how alcohol use by other students interfered with their lifestyle, and whether they felt safe on campus.

- Among students, 89% knew that their campuses had alcohol and drug policies, yet these policies did not appear to be a deterrent for alcohol or drug use. Of the students, 59% thought that the social atmosphere on their campus promoted alcohol use, and 45% thought it promoted other drug use. Over 90% indicated that they felt safe on campus.
- **Note:** This chart includes only subjects that completed the long form, except for, "Campus has alcohol and drug policies".
- The majority of students thought that alcohol use on their campus was similar to (51%) or less than (35%) alcohol use on other campuses.
- **Note:** This chart includes only subjects that completed the long form.

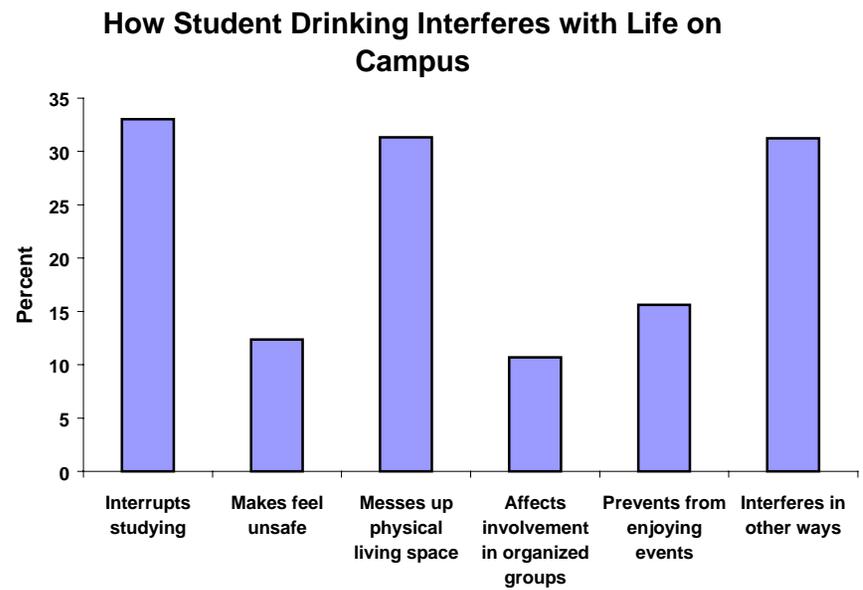
**Characteristics of Campus Environment**



**Campus' Alcohol Use Compared to Other Campuses**



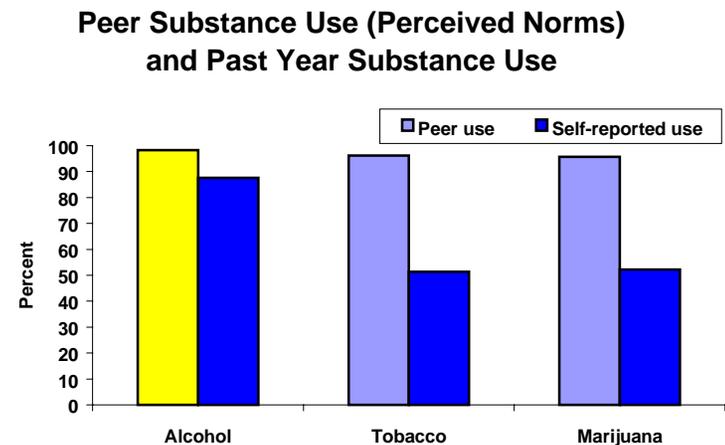
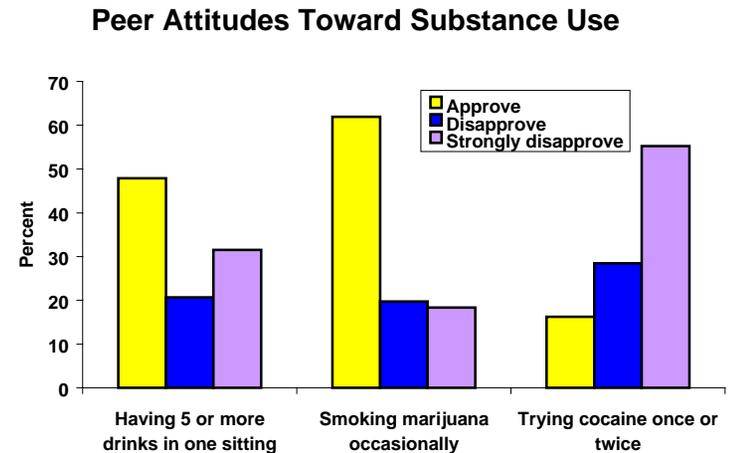
- Students reported that alcohol use by others interrupted their studying (33%), made them feel unsafe (12%), messed up their living space (31%), and prevented them from enjoying campus events (16%).
- **Note:** This chart includes only subjects that completed the long form.



## ► PEER ATTITUDES AND SUBSTANCE USE BEHAVIORS

Studies have demonstrated that students' perceptions of peer attitudes and behavior influence their own use of substances (Paschall & Flewelling, 1999; Perkins, 1997). Students were asked whether they thought their close friends approved or disapproved of alcohol, marijuana, and other drug use. They also were asked how often they thought the average student on their campus uses these substances. Perceived levels of peer substance use are compared with levels of self-reported use.

- 48% of the students thought that their close friends approved of “binge” drinking, and over 60% thought their friends approved of occasional marijuana use; 55% thought their friends strongly disapproved of experimentation with cocaine.
- **Note:** This chart includes only subjects that completed the long form.
- Perceived levels of substance use among peers were substantially higher than actual levels of substance use reported by students. At least 95% of the students thought their friends had used alcohol, tobacco, or marijuana in the past year.

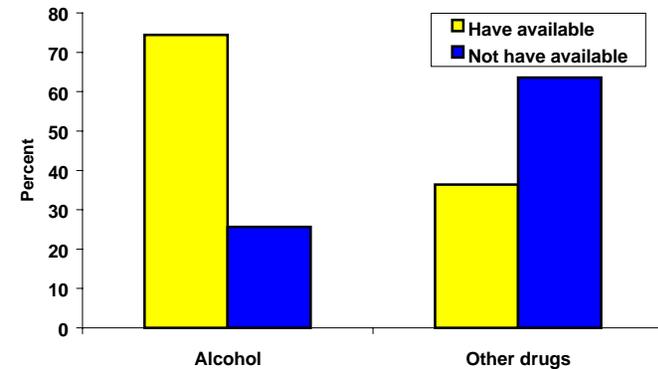


## ▶ ATTITUDES TOWARD ALCOHOL, TOBACCO, AND OTHER DRUG USE

Numerous studies have shown that favorable attitudes toward substance use are predictive of substance use behaviors (Hawkins, Catalano, & Miller, 1992). Students were asked whether they would prefer having or not having alcohol or other drugs available at parties. They also were asked about their beliefs regarding the social effects of alcohol use and health risks associated with alcohol, tobacco, marijuana, and other drug use. Attitudinal characteristics are broken out by past-month substance use and “binge” drinking.

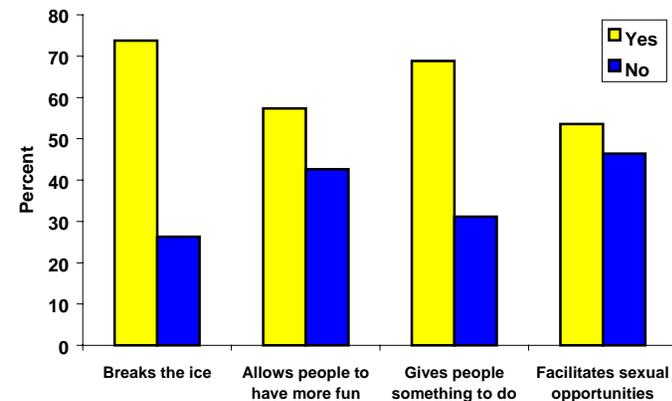
- Among students 74% indicated that they would prefer having alcoholic beverages available at parties and 64% preferred not having other drugs available at parties.

**Preference for Availability of Alcohol or Drugs at Parties**



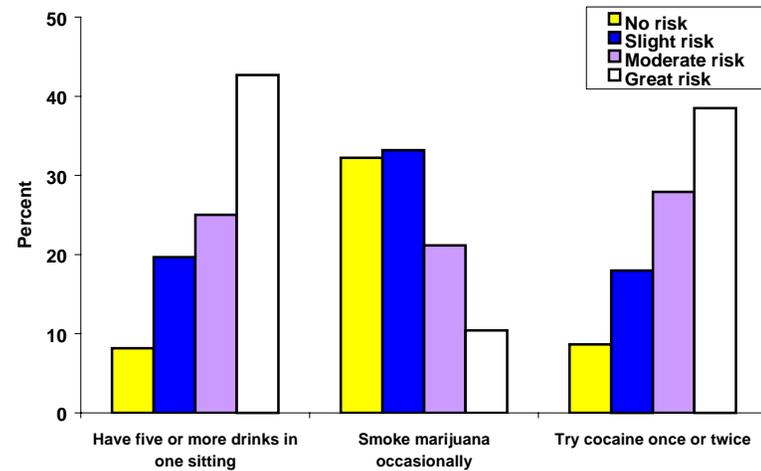
- The majority of students believed that alcohol use helps to break the ice (74%), allows people to have more fun (57%), gives people something to do (69%), and facilitates sexual opportunities (54%).
- **Note:** This chart includes only subjects that completed the long form.

**Beliefs about Effects of Alcohol**



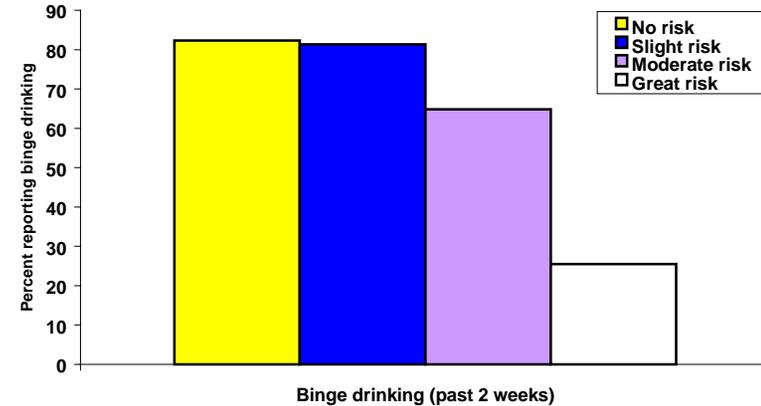
- Over 35% of the students thought that “binge” drinking and experimentation with cocaine pose a great health risk and 10% thought that marijuana use poses a great health risk.
- **Note:** This chart includes only subjects that completed the long form.

**Perceived Health Risk of Substance Use**

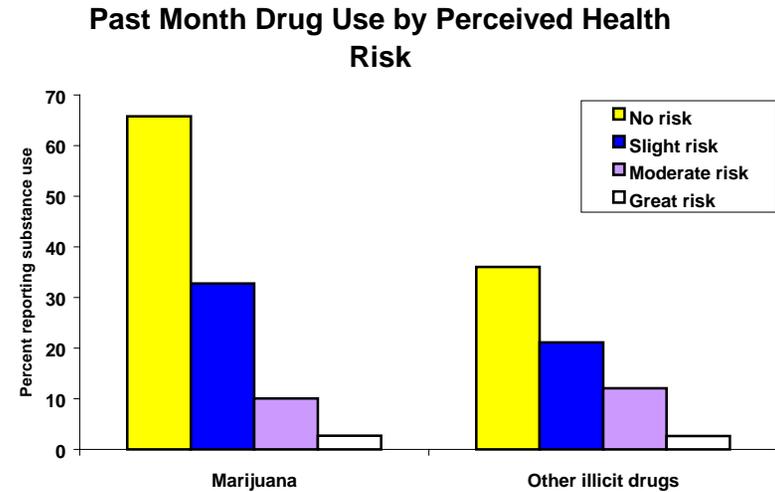


- Eighty-two percent of students who thought that “binge” drinking poses no health risk reported “binge” drinking in the past two weeks, compared to 25% of students who thought that “binge” drinking poses a great health risk.
- **Note:** This chart includes only subjects that completed the long form.

**Binge Drinking by Perceived Health Risk of Binge Drinking**



- Students who thought that occasional marijuana use poses a great health risk were much less likely to report past-month marijuana use (3%) than students who thought marijuana use poses a slight risk (33%) or no risk (66%). Similarly, students who thought that experimentation with cocaine poses no health risk were more likely to report past-month use of other illicit drugs (36%), compared to students who thought experimentation with cocaine poses a moderate (12%) or great (3%) health risk.
- **Note:** This chart includes only subjects that completed the long form.

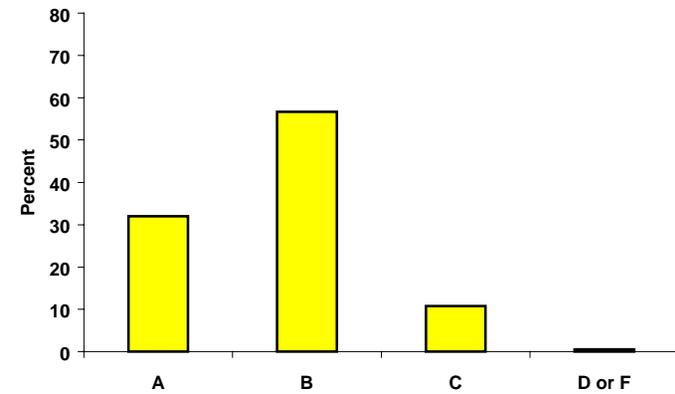


## ► ACADEMIC PERFORMANCE AND EXTRACURRICULAR ACTIVITIES

Numerous studies have shown that students' academic performance is likely to suffer as a result of alcohol and other drug abuse (e.g., Wechsler et al., 1998). Conversely, academic performance and involvement in extracurricular activities such as religion and community service may reduce students' risk for alcohol and other drug abuse (Paschall & Flewelling, 1999). Students were asked about their grade point average and their level of involvement in various types of extracurricular activities, such as volunteer work on or off campus. Academic performance and volunteer work are broken out by past-month substance use and "binge" drinking.

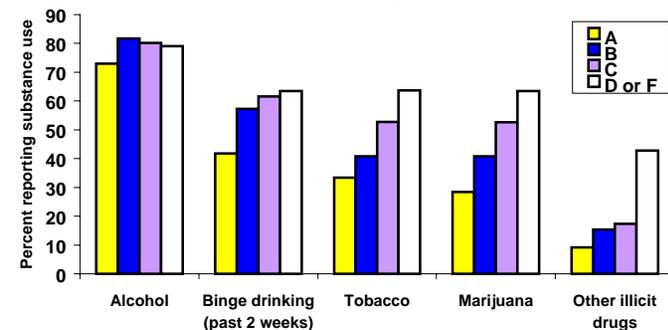
- Among students, 89% reported a grade point average of B or better.

**Grade Point Average**

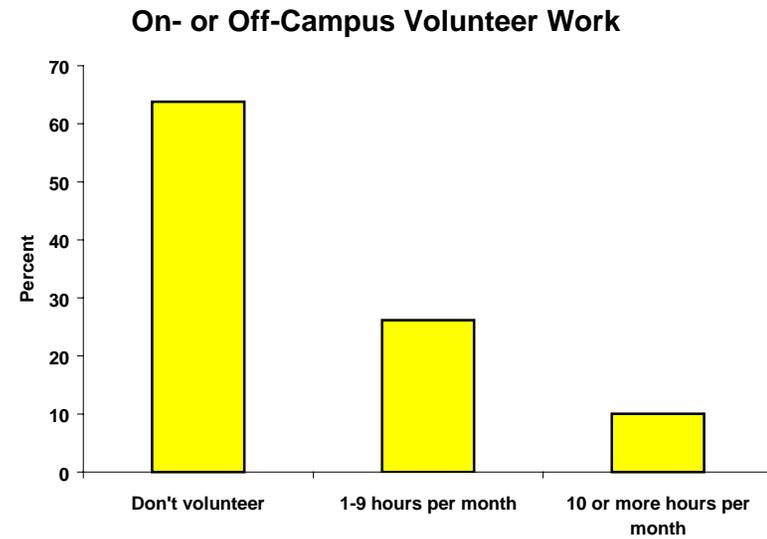


- A higher grade point average was strongly associated with lower levels of alcohol, tobacco, marijuana, and other illicit drug use. Compared to students with an "A" average, students with a "B" average or less were more likely to report alcohol use (73% vs.  $\geq 80\%$ ) and binge drinking (42% vs.  $\geq 57\%$ ). For both tobacco and marijuana, the percent of reported use steadily increased from 33% and 28%, respectively, for students with an "A" average to 64% for students with a "D or F" average.

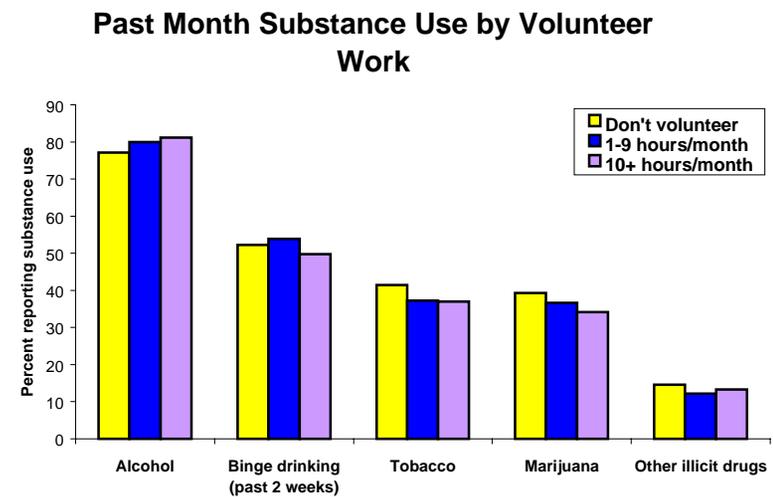
**Past Month Substance Use by Grade Point Average**



- The majority (64%) of students were not involved in any type of volunteer work, 40% were involved in music and other performing arts activities and less than 40% were involved in other extracurricular activities such as intramural sports, social fraternities or sororities, religious or interfaith groups, or student media activities.



- There were no significant associations detected between substance use and involvement with volunteer work.



## ► SUMMARY AND CONCLUSIONS

Results of the 2001 Core survey demonstrate the continuing need for alcohol, tobacco, and other drug abuse prevention services on Vermont college campuses and in surrounding communities. Over half of the students reported “binge” drinking (5 or more consecutive alcoholic beverages) at least once in the past two weeks; 26% reported heavy tobacco use in the past month; 18% reported using marijuana at least 10 days in the past month; and 3% reported using other illicit drugs at least 10 days in the past month. These prevalence estimates for tobacco and marijuana use among Vermont students (26% and 18%) were significantly higher than both national (20% and 7%) and Northeast regional (22% and 9%) estimates. Interestingly, prevalence estimates for “binge” drinking among Vermont students (53%) were significantly higher than national estimates (50%) although significantly lower than Northeast regional estimate (56%).

Vermont students reported high rates of health and social problems associated with alcohol or other drug use in the past year, such as having a hangover (67%), missing a class (37%), driving while intoxicated (30%), being taken advantage of sexually (14%), and being hurt or injured (20%). Alcohol and other drug abuse also were strongly associated with poor academic performance.

Core survey results have helped to identify Vermont college student population subgroups at high risk for alcohol, tobacco, and other drug abuse and other risk and protective factors associated with substance use behaviors. High risk population subgroups included students who were under the age of 21, male, or living in fraternities/sororities. Binge drinking in the past two weeks and marijuana use in the past month were significantly more likely among students under 21 (57% and 42%, respectively) than for students 21 and older (47% and 33%, respectively) and among males (62% and 47%, respectively) compared to females (46% and 32%). Students living in fraternities/sororities were more likely to report alcohol use in the past month (95%) or binge drinking in the past 2 weeks (80%) than students living in other types of housing (past-month alcohol drug use: <83%, binge drinking: <60%). However, students living in residence halls were more likely to report marijuana use in the past month (42%) compared to students living in other types of housing (<37%). Tobacco use in the past month was significantly more likely to be reported by students 21 and older (43%) than by students under 21 (39%) and by ethnic minority students (47%) than by non-Hispanic white students (40%).

Other risk and protective factors examined in this study included characteristics of the campus environment, peer attitudes and substance use behaviors, and students’ attitudes toward substance use. The majority (89%) of students indicated that they knew about alcohol and drug policies on their campus, but 59% also thought that the social atmosphere on their campus promoted alcohol use, and

45% thought the social atmosphere on their campus promoted other drug use. These findings are consistent with the percentages of students who thought their friends approved of “binge” drinking (48%) and occasional marijuana use (62%) and are strongly reinforced by the large percentages of students ( $\geq 96\%$ ) who thought their friends had used alcohol, tobacco, or marijuana at least once in the past year. A growing body of research indicates that alcohol, tobacco, and other drug use behaviors are strongly associated with students’ perceptions that use of these substances is normative among their peers (Haines & Spear, 1996; Perkins & Wechsler, 1996). Changing this perception has thus become a highly recommended strategy for reducing alcohol, tobacco, and other drug abuse (Perkins, 1997).

Students’ attitudes toward substance use also provide clues for possible prevention strategies as research has shown that attitudes are predictive of substance use behaviors (Hawkins, Catalano, & Miller, 1992). For example, 57% of the students thought that alcohol use allows people to have more fun, and 69% thought that alcohol use gives students something to do. A significantly larger percentage of students who did not think that “binge” drinking poses a health risk reported “binge” drinking in the past two weeks (82%), compared to 26% of students who thought that “binge” drinking poses a great health risk. These findings and previous studies suggest that environmental strategies (e.g., providing more alcohol and drug-free campus activities, curtailing alcohol advertising and campus activities sponsored by beer companies, providing educational programs to increase students’ knowledge of health risks) may help to change students’ attitudes and reduce levels of substance abuse and related health and social problems (Eigen, 1995; Hingson, Berson, & Dowley, 1997; Stewart, 1997).

In conclusion, results of the 2001 and the previous 1998 Core survey results support general recommendations for “best practices” provided in the Executive Summary of this report and previously disseminated to Vermont colleges by the Vermont Department of Health, Office of Alcohol and Drug Abuse Programs (ADAP). This Statewide survey provides ADAP and Vermont colleges (through the Vermont College Alcohol Network) with a means of demonstrating the continuing need for prevention and treatment services and for identifying promising approaches to reduce substance abuse and related problems among college students. Finally, results of this Statewide survey can serve as one potential method to examine progress in developing and implementing successful prevention and treatment programs at the State, community, and college levels.

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## ▶ **APPENDIX MATERIALS**

- Percentages and Statistical Tests from Each Section of the Report
- Weighted and Unweighted Frequency Distributions for All Variables in Core Questionnaire
- Copy of Core Alcohol and Drug Survey