

Vermont Young Adult Survey 2014

Statewide Summary

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Division of Alcohol and Drug Abuse Programs

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Executive Summary

This report highlights key findings from a recently conducted online survey of young adult Vermont residents aged 18 through 25. The survey was designed to obtain baseline data needed to evaluate Vermont's Partnerships for Success initiative, a federally funded substance abuse prevention grant awarded to the Vermont Department of Health by the Substance Abuse and Mental Health Services Administration. Topics covered include self-reported use of alcohol, marijuana, prescription drugs, and heroin, driving under the influence, and perceptions regarding availability, risk of harm, and law enforcement. The evaluation is ongoing, but the findings reported here may be of interest to the Department and its partner organizations at both the state and local levels for planning and public relations purposes.

The survey was widely advertised using social media and mailed announcements. Incentives were provided in the form of random drawings for cash prizes. A total of 3200 young adults participated. The data were weighted prior to analysis to ensure that the findings reflect the demographic makeup of Vermont's young adult population with respect to age group, gender, and county of residence.

Key findings regarding substance use highlighted in this report include:

- Over half (55%) of young adults reported binge drinking in the past 30 days
- Even among persons aged 18 to 20, 49 percent reported binge drinking
- The prevalence rate for marijuana use in the past 30 days was 37 percent
- Young adults were much more likely to report driving after using marijuana (15%) than driving after having too much to drink (4%)
- 17 percent of young adults reported misusing a prescription drug within the past year
- Among prescription drug categories, the highest prevalence of past year misuse was for stimulants (11%), followed by pain relievers (7%) and sedatives (4%)
- Half of marijuana users reported using it daily or almost daily (i.e., 20 or more days a month)

In addition, the data indicate that both marijuana and (for underage persons) alcohol are perceived as being readily accessible, and smoking marijuana once or twice per week is perceived by a considerable majority of respondents (73%) as posing little or no risk of harm to the user.

Among the diverse comments provided by the respondents, the most commonly expressed view was a concern about perceived high and/or increasing levels of drug use in Vermont or their community. Heroin and prescription drugs were mentioned specifically in the majority of these comments. Other relatively common viewpoints expressed in the comments were that marijuana was relatively benign and that prevention and enforcement efforts should focus on harder drugs, not marijuana.

Other than the high rate of stimulant misuse relative to the other prescription drug categories, none of the findings highlighted here are particularly surprising. But they do serve as a reminder that binge drinking and marijuana use remain the most common substance use behaviors among young adults in Vermont, both of which have prevalence rates considerably higher than the national average. Even so, public concern regarding drug use appears to be focused much more squarely on heroin and prescription drugs.

Three notable implications of these findings for statewide prevention efforts are:

- the need for a sustained focus on reducing underage and binge drinking
- the significant challenges faced by efforts to reduce and prevent marijuana use, given its ease of access, perceived harmlessness, and level of support for legalization
- a need to monitor and better understand levels and patterns of misuse of prescription stimulants (e.g., Adderall and Ritalin) among young adults

A follow-up administration of the survey is planned for the spring of 2016.

A. Background

Compared to other age groups, young adults, often categorized as persons aged 18 to 25, generally have the highest rates of many alcohol and drug use behaviors. These include binge drinking, marijuana use, and prescription drug misuse. Young adults, therefore, comprise an important population group to monitor and to reach with effective prevention and early intervention efforts.

The young adult data summarized in this report were collected to support the evaluation of Vermont's Partnerships for Success (PFS) project, a three-year substance use prevention effort being implemented by the Vermont Department of Health, Division of Alcohol and Drug Abuse Programs (ADAP). PFS is funded through a grant from the federal government's Substance Abuse and Mental Health Services Administration (SAMHSA). The focus of the PFS is to prevent alcohol use among persons aged 12 to 20 and prescription drug misuse by persons aged 12 to 25. An evaluation of Vermont's PFS grant is being conducted by the Pacific Institute for Research and Evaluation (PIRE).

The purpose of this summary report is to provide ADAP and its partner organizations with a brief description of the methods employed, along with highlights of the findings from the 2014 survey. Data on patterns and trends in young adult substance use behaviors, and perceptions related to substance use, may be useful for state and local prevention planning and priority setting, promoting public awareness, and documenting prevention needs, in addition to their role in the PFS evaluation.

B. Methods

Although other surveys¹ also collect data on substance use from young adults in Vermont, these surveys do not provide the sample sizes and geographic precision necessary for evaluating Vermont's PFS. The Young Adult Survey (YAS), therefore, was conducted in March and April 2014 to provide baseline data for the evaluation. A second round of the survey will be conducted in 2016. In addition to this summary report, a complete set of tables showing the response distribution of every item in the survey, broken out (in separate reports) by age group, gender, and student status, has also been provided to ADAP.²

The survey was accessible online and took about 10 minutes to complete. Vermont residents aged 18 through 25 were eligible to participate. It was designed to be used with a variety of devices, including desktop and laptop computers, tablets, and smart phones. Respondents were recruited through Facebook ads and via postcards mailed to young adults throughout the state. Survey participation was anonymous, although as an incentive survey respondents were directed to a separate web page where they could enter a random drawing for a cash prize. Zip codes were collected in order to determine the county of residence for each respondent. Out of a total 3650 surveys, 3200 were used for this report³. Because a scientific sampling design was not used, survey findings do not necessarily reflect the overall young adult

population of Vermont. The data were, however, weighted by age group (18-20 vs. 21-25), gender, and county⁴, in order to ensure that the sample characteristics match the Vermont population on these variables. Although survey respondents could differ in other ways from the overall young adult population of Vermont, the statewide YAS findings on key substance use behaviors match well with published Vermont-specific estimates from SAMHSA's National Survey on Drug Use and Health (NSDUH), which does employ a scientific sampling design and adjustment for non-response bias. Additional details on the methods used in conducting the survey and analyzing the data were presented at the 2014 National Prevention Network Annual Research Conference. Copies of both the Powerpoint file from that presentation and a hard copy of the survey are available online.⁵

C. Sample Characteristics

The demographic composition of the YAS sample is shown in Table 1 below. Slightly over one third of the respondents were in the age 18 to 20 category, and one third were full-time college or vocational school students. Most notable was that 70% of the respondents were female, in contrast to females comprising just under 50% of Vermont's young adult population. Proportionate representation across counties also varied, ranging from 3.1 to 6.9 percent of all eligible young adults (as determined by Census estimates), with the statewide average of 4.4 percent. As mentioned above, all findings reported here were weighted such that respondents within each age group by gender by county combination contributed proportionately to their numbers in the population.

Table 1. Composition of Young Adult Survey Sample by Age Group, Gender, and Student Status.

Demographic Category	Sample Percent	Population Percent
Age group		
18-20	37.4	43.6
21-25	62.6	56.4
Gender		
Female	70.0	48.4
Male	29.4	51.6
Transgender	0.6	--
Student Status		
Not a student	50.3	--
Full-time	33.5	--
Part-time/Other	16.3	--

The vast majority of respondents (87%) indicated that they learned about the survey through the ads on Facebook, while only 12 percent reported learning about the survey via the postcards that were mailed to a large random sample of age-eligible Vermont residents. Social media, therefore, turned out to be a much more efficient method of recruiting participants than mailing postcards. Regarding the devices used to access the survey, 49.2 percent used a laptop or desktop computer, 43.3 percent used a smart phone, and 5 percent used a tablet.

D. Highlights of Survey Findings

Comparisons to Vermont Estimates from NSDUH

State-specific estimates for selected substance use behaviors and perceptions are published annually by SAMHSA, based on data from NSDUH. These estimates are provided for two-year timeframes, the most recent one being 2011-2012. Due to the rigorous sampling and statistical adjustment procedures employed for NSDUH, the estimates provide a useful check for determining whether YAS yields reasonable estimates on these key indicators. Similar estimates, despite the differences in recruitment strategies and other methodological features, would provide confidence that the YAS sample is representative of the young adult population in Vermont. Figure 1 provides the YAS and NSDUH estimates for Vermont young adults aged 18 to 25, for those substance use measures common to both surveys. For past 30 day alcohol use, binge drinking (i.e., having five or more drinks on a single occasion), and marijuana use, the YAS estimates are all just slightly higher than those provided by NSDUH, but certainly within ranges that support the validity of the YAS. The estimate for past year use of prescription pain reliever misuse, however, is somewhat lower than the NSDUH estimate. This could be due in part to the time lag in the NSDUH estimate, as NSDUH national data indicate significant declines in prescription pain reliever misuse by young adults during the period from 2010 through 2013.

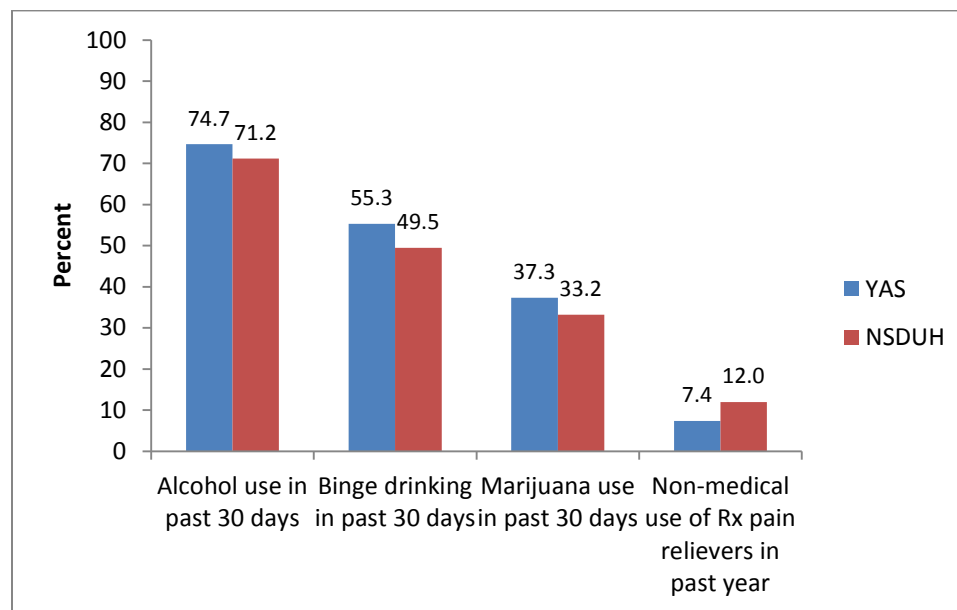


Figure 1. Prevalence Rates for Vermont Young Adults on Selected Substance Use Behaviors: YAS and NSDUH

One other item common to both the YAS and published estimates for Vermont from NSDUH pertains to the degree of risk perceived from having five or more drinks once or twice a week. The percent perceiving great risk of harm was very similar (24.1 percent for the YAS, 24.8 percent for NSDUH).

The level of agreement between the YAS and NSDUH estimates supports the representativeness of the YAS sample and also serves to reiterate differences that have consistently been observed between Vermont and the nation as a whole. Specifically, young adults in Vermont have been found to have higher prevalence rates of alcohol use, binge drinking, and marijuana use than seen in the national rates. The difference in marijuana use is especially dramatic, as evidenced when comparing the 2011/2012 NSDUH estimate for Vermont (33.2%) with the 2012 national estimate of 18.7 percent.

Prevalence Rates for Substance Use Behaviors

Table 2 presents prevalence rates derived from the YAS for a broader range of substance use behaviors than those for which state-specific NSDUH estimates are available. Because substantial differences between young adult women and men are observed for many of these behaviors, the rates are provided separately by gender, as well as for the total sample. Especially noteworthy findings include:

- Over half of young adults in Vermont engaged in binge drinking within the past 30 days.
- Over one third of Vermont's young adults used marijuana in the past 30 days.
- The prevalence of driving after using marijuana in the past 30 days (15.4%) was substantially higher than driving after having too much to drink (3.7%).
- Misuse⁶ of prescription drugs in the past year was reported by 17.3 percent of young adults. The most commonly misused prescription drug category was stimulants (11.3%).
- Males reported higher rates of use than females for all substances, as well as for driving after drinking and after using marijuana. Gender differences in prescription drug misuse were less pronounced than for binge drinking and marijuana use.

The relatively high rate of stimulant misuse in comparison to other drug categories was surprising, as this is contrary to national data. The most recent national data from NSDUH (2013), for example, show the rate of prescription pain reliever misuse in the past year among young adults to be 8.8 percent, as compared to 3.7 percent for prescription stimulants. Although a question about the use of heroin in the past year was included in the survey, as shown in Table 2, the percent of users reported should be treated with added caution due to the influence that even a small number of false positives could have on this relatively low-prevalence behavior.

Table 2. Vermont Young Adult Survey: Prevalence Rates for Substance Use Behaviors, by Gender.

Substance Use Behavior	Female	Male	Total
Alcohol Use:			
Any alcohol use in past 30 days	71.9	77.3	74.7
Binge drinking in past 30 days	49.4	61.0	55.3
Driving after having too much to drink in past 30 days	2.5	4.8	3.7
Marijuana Use:			
Any marijuana use in past 30 days	31.0	43.1	37.3
Consumption of edible marijuana in past 30 days	3.3	5.9	4.6
Driving after using marijuana in past 30 days	10.1	20.4	15.4
Prescription Drug Misuse:			
Misuse of any prescription drug (in the categories listed below) in past year	15.8	18.8	17.3
Misuse of prescription pain relievers in past year	6.9	8.1	7.4
Misuse of prescription sedatives in past year	4.3	5.0	4.6
Misuse of prescription stimulants in past year	9.1	13.3	11.3
Misuse of methadone in past year	1.8	2.2	2.0
Other:			
Any use of heroin in past year	1.6	2.7	2.1

In addition to inquiring about whether any binge drinking and any marijuana use had occurred in the past 30 days, respondents were also asked about the frequency of these behaviors. The numbers of days within the past 30 days that each of these two behaviors occurred are shown in Figure 2. As might be expected, the majority of binge drinkers did so 3 times or less per month, with the data showing a strong inverse relationship between prevalence and frequency. This was not true for marijuana use, for which the data show that half of those who used marijuana in the past 30 days used it daily or almost daily (i.e., 20 or more days). Nationally, 42.5 percent of marijuana users aged 18 to 25 report daily or almost daily use (NSDUH 2013).

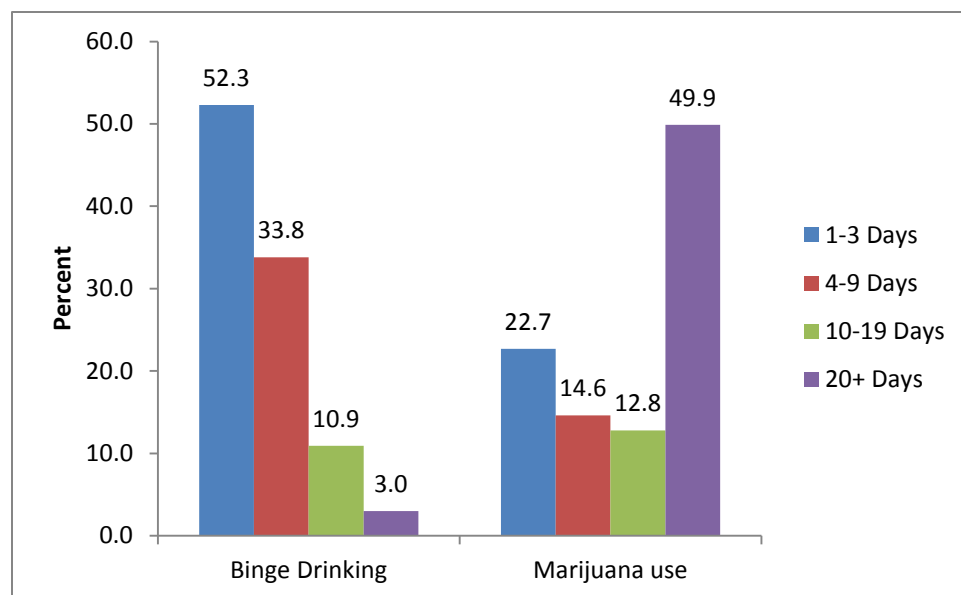


Figure 2. Number of Days in Past 30 Days: Binge Drinking and Using Marijuana

Although not shown in this report, tables have also been prepared that show the breakdowns for each survey item by age group and student status. Highlights from those tables, with respect to substance use behaviors, include:

- Young adults aged 18 to 20 were significantly less likely to use alcohol, binge drink, and drive after drinking, compared to those aged 21 to 25.
- Young adults aged 18 to 20 were significantly more likely to use marijuana, drive after using marijuana, and misuse prescription stimulants, compared to those aged 21 to 25.
- Full-time students and non-students had similar rates of alcohol use, but full-time students were more likely to binge drink than non-students (63.3% vs. 55.4%) and less likely to drive after having too much to drink (2.5% vs. 5.3%).
- Full-time students and non-students had similar rates of marijuana use, but the students who used marijuana in the past month used it less frequently (38.8% used 20+ days, vs. 58.3% of non-students).
- Stimulant misuse was higher among full-time students compared to non-students (14.4% vs. 10.5%). Rates of use for pain relievers and sedatives were slightly (but not significantly) lower among full-time students.

Perceptions Regarding Availability, Health Risks, and Enforcement

Perceived availability of substances and perceived risk of harm from using substances are significant predictors of use and also a primary focus for prevention efforts. Law enforcement efforts are also important, as they can influence both availability of substances and perceived risks of legal sanctions.

Displayed in Figure 3 are the percentages of respondents who indicated that certain substances were either “very easy” or “somewhat easy” to obtain by persons in their community. Note that the alcohol-related items are linked to specific sources and also were asked in regards to persons aged 18 to 20. The findings highlight the ease of access for underage persons to alcohol from family members or friends, as well as ease of accessing marijuana by young adults in general. Retail access to alcohol by underage persons was perceived as being much more difficult, although even here we see that 27 percent of respondents perceived getting alcohol from stores to be at least somewhat easy, compared to 14 percent from restaurants and bars. Obtaining prescription drugs without having a prescription was viewed as being more difficult than obtaining marijuana, but still at least somewhat easy by 40 percent of respondents.

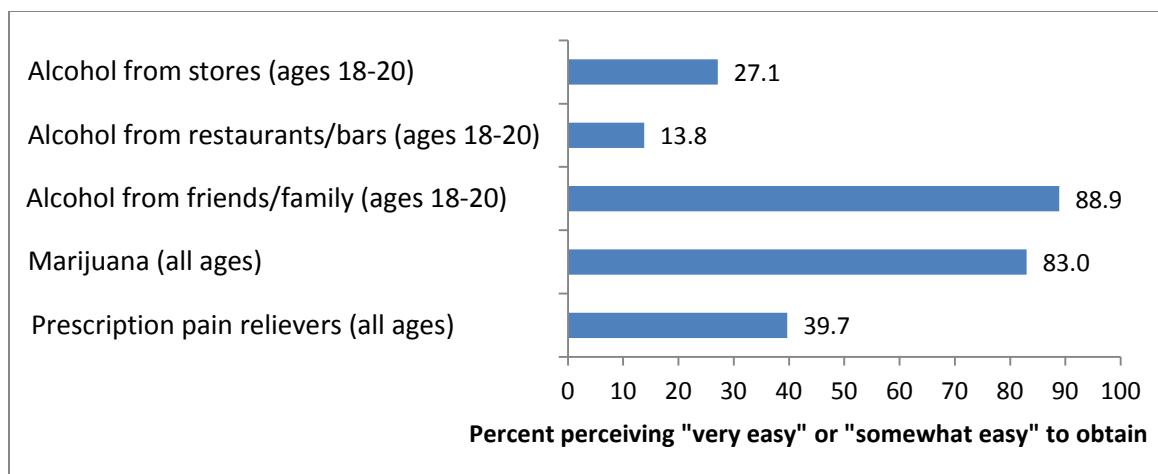


Figure 3. Ease of Obtaining Alcohol, Marijuana, and Prescription Pain Relievers

Figure 4 displays the percentages of respondents perceiving either “no risk” or “slight risk” of harm (physically or in other ways) for various substance use behaviors. What stands out is the high percent of respondents who perceive little or no risk of smoking marijuana, both in absolute terms and relative to the other substance use behaviors. It is also notable that using prescription pain relievers without a prescription, as well as using prescribed pain killers at higher doses or for different reasons than prescribed, are both perceived as relatively high risk, even in comparison to binge drinking once or twice a week.

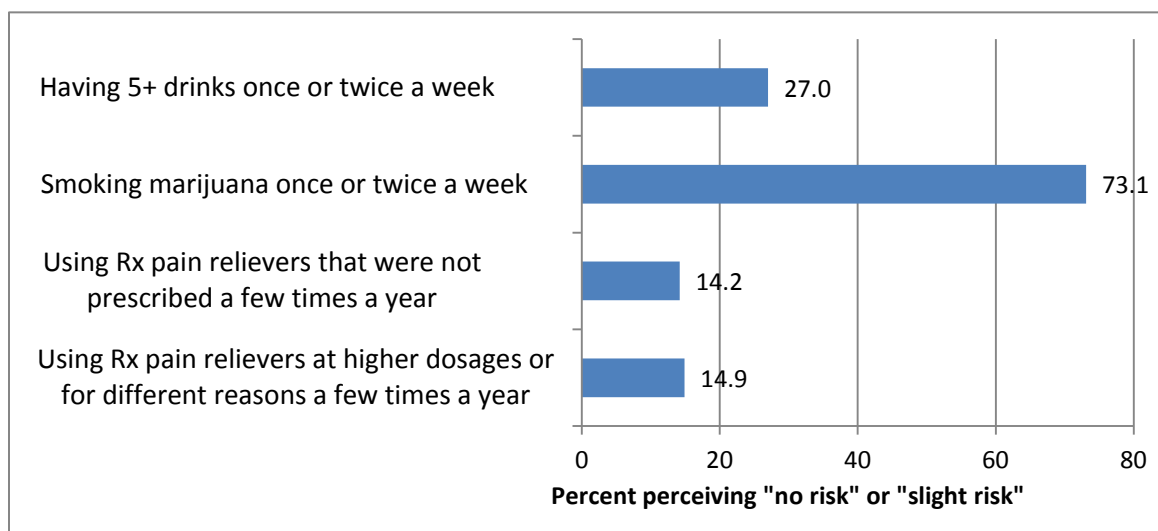


Figure 4. Perceived Risk of Harm from Various Substance Use Behaviors

The perceived likelihood of various enforcement actions in response to specific scenarios involving substance use or possession is displayed in Table 3. Perceptions were in the direction of enforcement being viewed as at least somewhat likely, although perceived likelihood of enforcement actions in response to underage drinking parties was lower than for the other two scenarios presented.

Table 3. Perceived Likelihood of Law Enforcement Actions (in Response to Specific Scenarios).

Enforcement Action	Percent perceiving action to be:				
	Very likely	Somewhat likely	Not very likely	Not at all likely	Don't know
Being noticed and stopped by the police if someone respondent's age was driving through their community one evening after having too much to drink.	17.2	45.8	25.7	5.8	5.5
Police in respondent's community finding out about and breaking up parties where underage persons are drinking.	12.0	34.7	31.4	8.6	13.4
Being cited or fined if someone respondent's age was caught by the police using or possessing a small amount of marijuana.	35.7	28.7	13.4	3.8	18.4

E. Respondent Comments

At the end of the survey, participants were invited to enter comments about the survey or issues that were raised in the survey. Just under 20 percent of the respondents provided commentary. A substantial portion of the comments received were articulate and lengthy (i.e., more than just a single phrase or sentence), reflecting what appear to be deeply held beliefs and perceptions regarding substance use issues. Although those who chose to provide comments may differ in important ways from the general pool of respondents, the sentiments expressed may still provide useful insights regarding the relative importance of substance use issues to young adults in Vermont.

As displayed in Table 4, the specific comments entered were categorized into 21 more generic comments plus a “miscellaneous category” composed of a heterogeneous mix of viewpoints, anecdotes and observations that did not fall into any of the other categories. The majority of respondents provided only one comment category, with the number of categories ranging from one to four per respondent.

Two themes in the categorized comments were predominant. The first was concern over perceived high and/or increasing levels of drug use, usually in regards to either the respondents’ own communities or the state of Vermont more generally. The majority of these comments specifically mentioned either heroin or prescription drugs, and appear to reflect recent publicity regarding these topics. At the same time, however, many of these comments also mentioned personal accounts of witnessing use of these drugs and/or the consequences of such use. Concerns that focused only on either alcohol (including underage drinking) or marijuana were far less common. Clearly it is the “harder” drugs that were most commonly viewed as posing a serious problem, or being “out of control.”

The second major theme to emerge was perceptions that marijuana was relatively benign and that enforcement efforts should focus on the harder drugs. In fact, many respondents who expressed this viewpoint also commented on concerns they had regarding high levels of heroin and prescription drug use and the problems caused by these substances.

Many other comments were received, but were far less common than the two themes described above. Of the relatively small number of respondents who offered suggestions for prevention or treatment strategies, the most common was to enhance enforcement and/or increase sanctions. One interpretation of this finding is that the young adult Vermonters are generally unaware, or not convinced, of the importance and the effectiveness of the comprehensive range of treatment, early intervention, and prevention services that could be directed towards the substance use problem in their communities.

Table 4. Comments Provided by Respondents

Comments (Organized by General Category)	Number of Comments	Percent of All Respondents¹	Percent of Those Who Commented²
Comments on scope or seriousness of substance use in state or community			
Level of alcohol use (and/or availability) is a problem	34	1.1	5.4
Levels of hard drug use, Rx drug misuse, and/or multiple drugs (and/or availability), addiction, or drug-related crime, is a problem	192	6.0	30.7
Level of marijuana use (and/or availability) is a problem	19	0.6	3.0
Drinking and driving is a problem	16	0.5	2.6
The greatest alcohol and drug problems are in the urban areas (e.g. Burlington and Rutland)	4	0.1	0.6
Alcohol and/or drug use is common (and/or access is easy), but no problem was implied	20	0.6	3.2
Drugs in VT have been portrayed as a bigger problem than they really are	8	0.3	1.3
Comments on need for different approaches and perspectives			
Enforcement/prevention efforts should focus on hard drugs rather than marijuana (and/or alcohol)	57	1.8	9.1
Marijuana should be legalized/is not harmful or a problem	98	3.1	15.7
Drinking age should be lowered	9	0.3	1.4
Do not support the "war on drugs" / focus should be on reducing harms, not imposing fines or incarceration	10	0.3	1.6
State shouldn't provide benefits or support to people who abuse drugs	14	0.4	2.2
Comments on need for enhanced services			
Need more/better drug treatment options/better access to treatment	19	0.6	3.0
Youth need more prevention education	13	0.4	2.1
Need enhanced enforcement and/or harsher punishment	41	1.3	6.6
Youth are bored/need more alternative activities	9	0.3	1.4
Other comments			
Explanation of answer(s)/personal anecdote	57	1.8	9.1
Respondent is in recovery	14	0.4	2.2
Concerns about accuracy of the data (due to not reaching the right people or to dishonest responses)	4	0.1	0.6
Would like to change something about the survey/disliked some of the questions or found them to be confusing	31	1.0	5.0
Liked the survey/thanks for doing this research	60	1.9	9.6
Miscellaneous	67	2.1	10.7

¹N = 3200

²N = 625

Notes

1. These surveys include the National Survey on Drug Use and Health (NSDUH) and the Behavioral Risk Factor Surveillance System (BRFSS), both of which are federally funded national surveys that provide state-level estimates on selected substance use behaviors. In addition to sponsoring the YAS, the Vermont Department of Health also collaborated with 11 Vermont colleges and universities in conducting college student surveys in the spring of 2014 using the National College Health Assessment (NCHA). The Department is developing a statewide report based on the aggregated data from those surveys.
2. The detailed tables are available through the following links:
Age group:
http://www.pire.org/documents/Vermont_PFS_Eval/VT_PFS_YAS2014_Tables_by_Age.docx
Gender:
http://www.pire.org/documents/Vermont_PFS_Eval/VT_PFS_YAS2014_Tables_by_Gender.docx
Student status:
http://www.pire.org/documents/Vermont_PFS_Eval/VT_PFS_YAS2014_Tables_by_Student_Status.docx
3. The majority of unused surveys were blank except for the first few items.
4. County definitions were altered slightly to accommodate inclusion of three townships that were outside the primary county served by the one of the PFS grantees. All other PFS grantee service areas were defined by intact counties. In addition, the two smallest counties were combined with neighboring counties prior to calculation of the weights.
5. The Powerpoint presentation from the NPN conference is available at:
https://npn.ou.edu/assets/cms_page_media/43/Session3_SurveyingYoungAdultsforPFSEvaluation_BFlewellinLivingston.pdf
A printable copy of the survey instrument is available at:
http://www.pire.org/documents/Vermont_PFS_Eval/VT_PFS_YAS2014_Survey_Items.pdf
6. Misuse (also referred to as “non-medical use”) is based on whether a respondent reported either using a drug that was not prescribed for them or using the drug at higher dosages or for different purposes than prescribed. (These behaviors were presented as separate items in the survey). For methadone, however, misuse is based only on use without a prescription, as the question about using at higher dosages or for different purposes was not asked.