# Alcohol Consumption Among College Students in Illinois

2006 Core Survey Results and Analysis

### **Executive Summary**

The Illinois Higher Education Center for Alcohol, Other Drug and Violence Prevention, with funding from the Illinois Department of Human Services, Bureau of Substance Abuse Prevention, offered institutions of higher education in Illinois the opportunity to participate in the Core Alcohol and Drug survey during spring of 2006. The Core survey collects students' self-reported information related to their alcohol and other drug behavior, attitudes and beliefs. Primary findings of the 11,399 student respondents at 36 institutions of higher education in Illinois are an important indication of alcohol consumption and attitudes of Illinois college students.

It is important to note Core survey sampling procedures are representative of campuses and not the state as a whole, limiting the confidence of statewide findings. The 2006 Core survey administration at 36 Illinois campuses does represent the best data currently available on Illinois college student alcohol consumption.

Two separate survey instruments were used to collect the student data, core Alcohol and Drug Survey Long Form and the Core Alcohol and Drug Survey Community College Long Form. The Core Alcohol and Drug Survey was created by the US Department of Education in 1989 through a FIPSE grant, to date more than one million surveys have been administered to college students nation wide. The second survey utilized was the Core Alcohol and Drug Survey Community College Long Form. Many of our community college partners noted that items that discussed housing, Greek organizations and student classification schemes found in the original Core and Alcohol Drug Survey, simply did not apply to their student body. The Core Institute in conjunction with numerous community college leaders modified the existing Core Alcohol and Drug Survey Long Form so that the items better reflect the community college student population, yet while still retaining the central items of the original survey instrument.

Primary findings from the data include:

• One of the most striking outcomes of this data is the large differences between the reported use and experiences when looking at the data from community colleges (two year students) and university (four year students). Almost without exception the four year institutions report higher values in all usages and negative consequences. It was felt that with these differences the data would be best served reporting for two separate groups, instead of combining the data.

• Average number of drinks per week of Illinois college students responding to the 2006 Core Survey: 4.7 drinks for community college students and 6.0 for students attending four-year institutions.

• There are important gender, age, race and sector differences in average drinks per week and incidents of binge drinking (as defined by five or more drinks in one sitting). While the four year universities report higher values than the community colleges, these trends are consistent between both types of institutions. Men consume more than women. Traditional college age students (17-24) consume more than non-traditional age students. Caucasians and Native Americans are the highest consuming racial groups. Four-year residential students consume more and more often than do their community college counterparts (49.1% of four year students reported drinking 5 or more drinks in one sitting in the past weeks, compared with 39.9% of community college students).

• A strong relationship between academic performance and alcohol use exists. Those who perform the best academically are less likely to be high weekly consumers of alcohol and less likely to engage in incidents of high-risk consumption. College students who report poor grades are also the heaviest average weekly users of alcohol and the most likely to be engaged in binge drinking behavior.

• Students report high incidents of negative consequences associated with alcohol. 34.1% of community college students and 25.5% of four year institution students reported driving while intoxicated in the past year; 57.2% of community college students and 65.2% of four year students report hangovers; 48.2% of two year students and 57.7% of four year students report getting nauseated or vomiting; 31.3% of two year students and 34.2% of four year students report arguing or fighting following alcohol use; and 22.3% of two year students and 33.1% of four year students report missing class.

• While alcohol is the most prevalent substance utilized by students, other drugs also appear to be a regular part of college life for some students. 44.1% of two year students and 40.9% of four year students report using tobacco in the past year; 23.1% of two year students and 28.5% of four year students report using marijuana; 6.2% of two year students and 5.9% of four year students report using amphetamines; and 5.1% of two year students and 4.3% of four year students report using cocaine during the same time frame.

• Student attitudes toward alcohol reinforce the idea that college students positively associate alcohol with social interaction. Some examples of the prevalence of alcohol use and student attitudes include: 50.9% of two year students and 65.2% of four year students perceive that alcohol facilitates a connection with peers; 58.2% of two year students and 70.9% of four year students perceive it gives people something to talk about; 44.4% of two year and 41.1% of four year students indicate that alcohol is an easy way to deal with stress; and 60.7% of two year students and 79.2% of four year students believe that alcohol helps to break the ice in social situations.

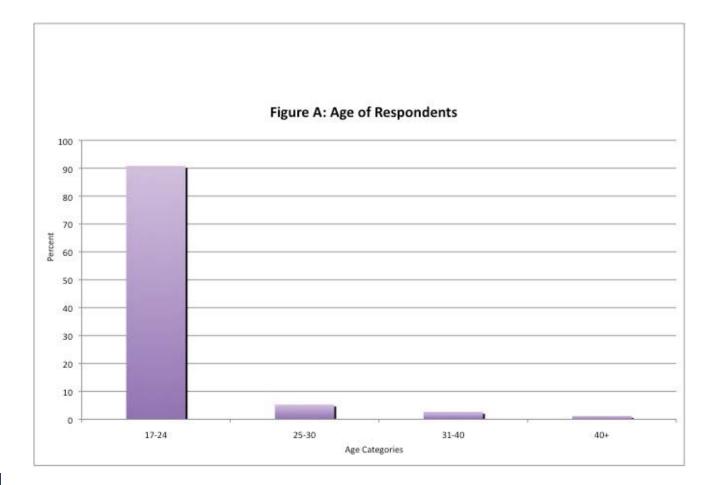
# **Survey Participants**

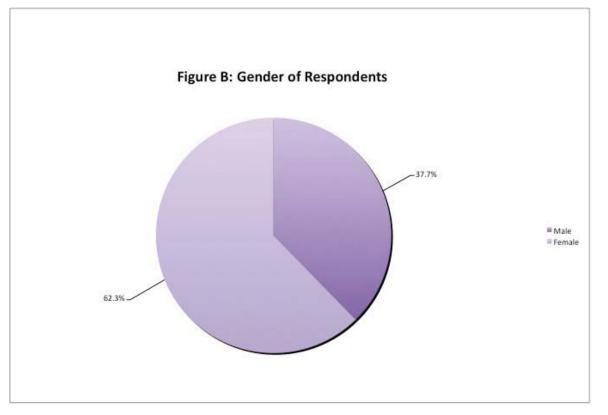
There were 36 institutions of higher education in Illinois that participated in the Core survey administration in Spring 2006. There were 20 four-year institutions and 16 two-year institutions that participated in the survey. The 36 institutions that participated in the Core selected to do so, and as such the statewide data reported is from a convenience sample of institutions of higher education in Illinois. The representative nature of both the typical Illinois college student and institutions of higher education in Illinois is limited by the reality that institutions self selected to participate in Core survey administration.

There are currently 168 Illinois institutions of higher education listed on the National Center for Educational Statistics IPEDS system, with only about 104 of those institutions being not for profit. There are 12 four-year public and 48 two-year public colleges and universities in Illinois. The remainder of not for profit higher education institutions in Illinois are two and four year privates. The sample of college students in Illinois includes 11,399 responses, of which 4,092 were from two year institutions and 7,307 are from four year institutions. These responses were gathered through campus directed data collection of a random group of students. Data were intended to be representative at the institutional level based upon the random sample of students at each campus. This report aggregated the responses of students at each campus.

# State Demographic Comparisons

In 2008, the Illinois Board of Higher Education reported 821,026 college students in Illinois based on the Fall 2007 Enrollment Survey (Illinois Board of Higher Education, 2008). Community college students make up 347,277 of college students overall in Illinois (Illinois Board of Higher Education, 2008). The 35.9% reported Core sample is from community colleges while 42.3% of the state's students are enrolled in community colleges. 15.8% of students at four year institutions in the state of Illinois, as reported by enrollment data, are 25 years old or under, while 90.8% of students in the aggregate Core sample are 24 or under (see Figure A).

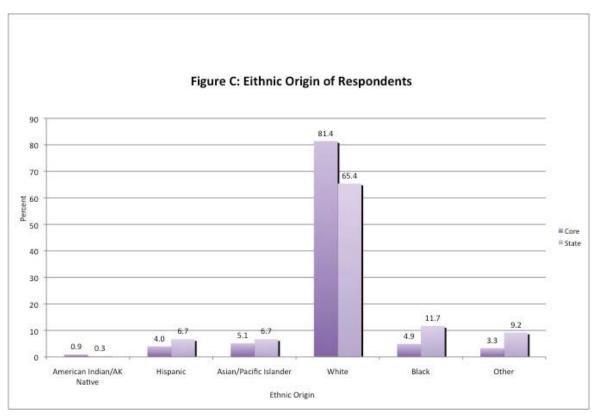


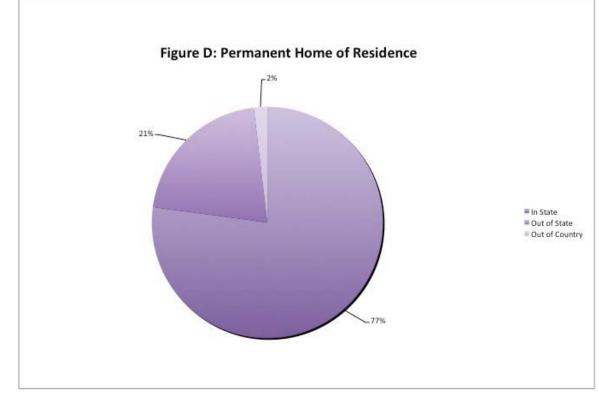


Women in Illinois make up 52.6% of state reported student enrollment, while the Core aggregate sample is 62.3% female (see Figure B).

 $\diamond\diamond\diamond\diamond\diamond\diamond\diamond\diamond\diamond\diamond\diamond\diamond\diamond\diamond\diamond$ 

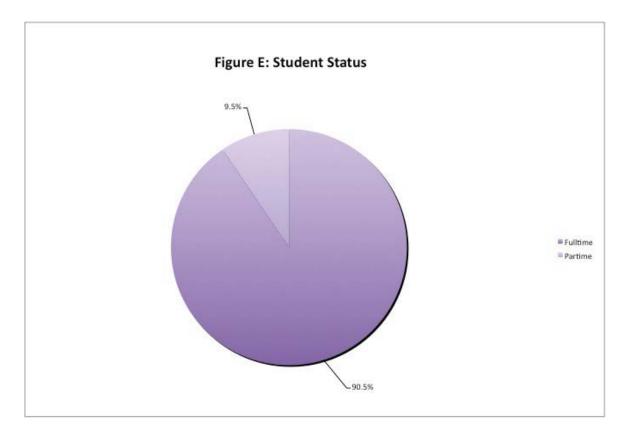
The Core aggregate sample over-represents Whites in terms of percentage of responses. 81.4% of Core aggregate responses were from those who report themselves to be White, but only 65.4% of state enrollment is White (see Figure C). Minority groups are under-represented in the Core data across the board. This is an important consideration in examining the findings of this summary (see Figure C).





The Illinois Board of Higher Education reports that 93.3% of first time enrollers in college in Illinois are from Illinois, with 2.5% from out of the country and 4.2% from out of state. The Core sample differs from the enrollment data (see Figure D).

64.4% of students in Illinois are reported to be enrolled full-time (Illinois Board of Higher Education, 2007). 90.5% of Core respondents indicate being enrolled full-time at their institution of higher education.



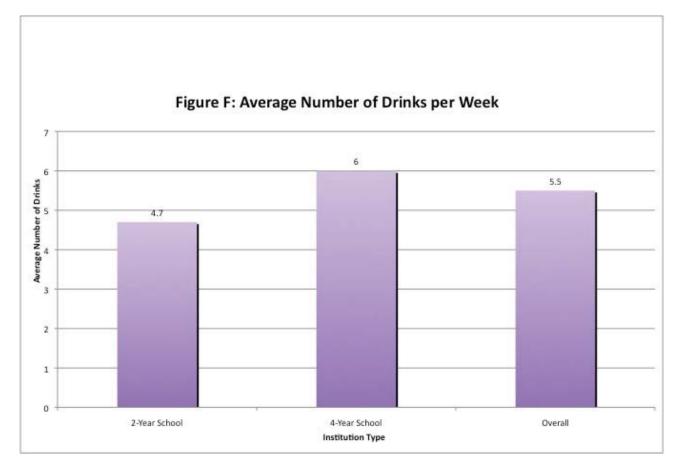
The Core statewide sample has some important similarities with student enrollment data, including a degree of similarity of trend with gender composition, state of permanent residence, and race composition. The data clearly is limited, though, in its ability to truly represent college students in Illinois based upon a comparison with Illinois enrollment trend data from the 2006-2007 academic year.

# Purpose Statement

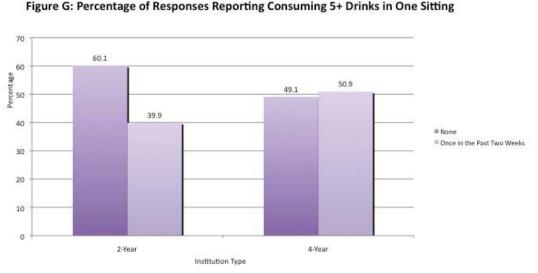
The intention of this report is to provide an important snapshot of college student alcohol and other drug use in higher education in Illinois, recognizing the limitations of the sample. The 36 institution data set available is the best current data from which to examine trends in Illinois college student alcohol and other drug use for 2006. The data also provides a picture of the harmful effects of alcohol and other drug use on college campuses in Illinois.

# Alcohol Use and Illinois College Students

Alcohol use by college students can be examined by looking at average consumption during the typical week and by instances of heavy drinking among students. Figure F represents the average number of drinks of college students in a typical week by institutional type.

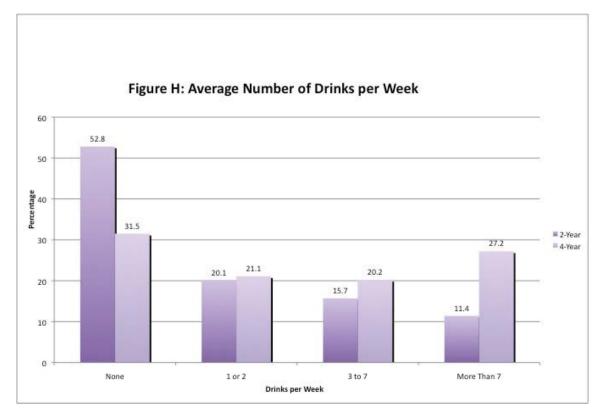


Students attending four-year institutions report a higher per week consumption level than do students attending community colleges in Illinois. National weekly consumption averages reported by the Core Institute in 2006 indicate a weekly average of 5.5 drinks per week. Illinois appears to closely mirror national average weekly consumption rates among college students. A second way to examine college student alcohol use is to look at incidents of heavy alcohol use, as defined by the frequency of drinking multiple drinks in one sitting. Figure G represents the frequency of individuals consuming 5 or more drinks in one sitting.



#### Figure G: Percentage of Responses Reporting Consuming 5+ Drinks in One Sitting

A majority of students reported not consuming 5 or more drinks in a sitting, with 60.1% of community college and 50.9% of four-year students reporting not consuming 5 or more drinks in a sitting. 39.9% of two year students and 46.7% of four year students responded that they consumed 5 or more drinks in one sitting in the past two weeks. This last group of students represents the highest risk consumers among the college population. Henry Weschler has defined binge drinking as consuming 5 or more drinks in one sitting. Binge drinking is a major concern because it marks a point at which a student begins to be involved in significantly more negative consequences of their alcohol use. Examining alcohol consumption rates among Illinois college students includes paying close attention to those who do not consume, those who consume in moderation and those who consume the most. Figure H depicts that fully 38.1% of two year college students and 39.4% of four year students who responded indicated not consuming alcohol in the typical week.

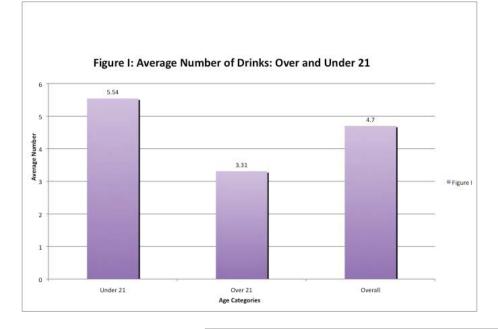


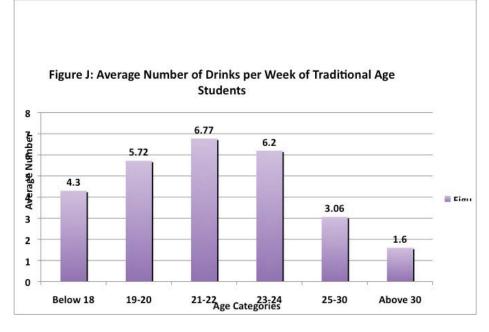
In addition to those who do not consume, nearly 20.1% of two year students and 21.1% of four year students of respondents report consuming a moderate average of 1 or 2 drinks in a typical week across institutional types. On the high end of the alcohol consumption spectrum, close to 27.2% of respondents average 7 or more drinks per week.

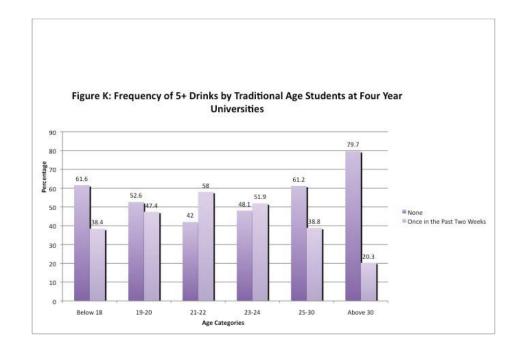
 $\diamond$ 

Age of students has been identified as an important variable in predicting the risk that college students are at with regard to the negative consequences of alcohol use (Dowdall & Wechsler, 2002). Some have suggested that traditional age freshmen and sophomores are at the greatest risk of harm related to use (Baer, 2002).

In Illinois, students under 21 appear to average slightly less alcohol use per week than those over 21. This difference is not dramatic, but does reinforce the idea that those under 21 are a group that one should pay attention to in regard to preventing harm related to high alcohol use. This result also points to the ease with which underage students are able to obtain alcohol. A further examination of alcohol use by different age groups reveals that use appears to increase from the time students traditionally enter college at 17 or 18 until average consumption peaks at 21 years of age. Use appears to moderate following the 21 years of age peak point. This finding also reveals a disconcerting pattern of use during traditional college years, as through the first few years of college alcohol use appears to increase, not entering a point of reduction until traditional age college students would be entering their fourth year of college.







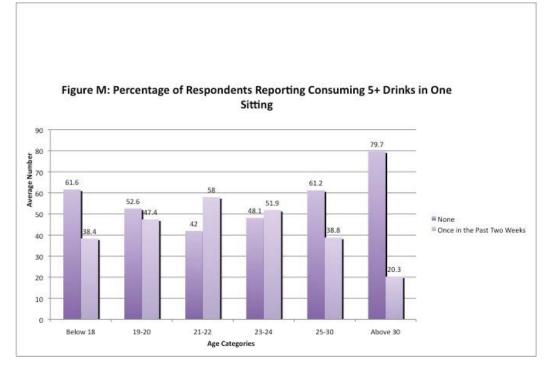
 $\diamond$ 

Figure L: Average Drinks per Week: Age of Respondents 7.43 7 6 39 5.75 98e 4.54 Series1 3 2 1 0 Below 18 19-20 21-22 23-24 Age Categories

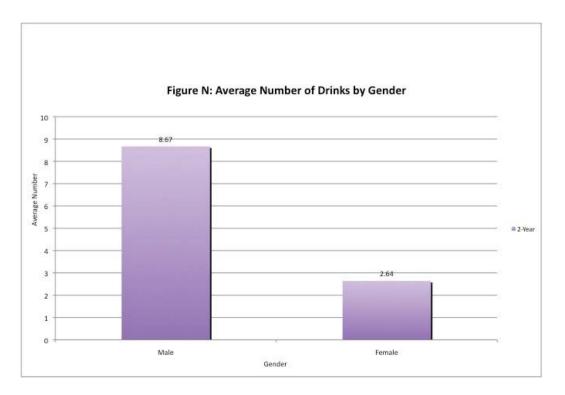
Examining the frequency of consuming 5 or more drinks in one sitting reveals that incidents of high-risk consumption also peak when students are 21 years of age. Fully 45.0% of two year students and 48.7% of four year students responded report consuming 5 or more drinks in one sitting when they were 21 years of age or younger. The rate of high-risk incidents of consumption remains fairly consistent for 18 or below, 19 and 20 year olds until the peak in high-risk consumption when students are 21 years of age.

With a gradual shift in student enrollment patterns moving steadily toward the inclusion of older and more diverse students, it is important to extend an analysis of age and alcohol use to larger age categories. The analysis of large age categories reveals a significant difference between traditional age college students and older students. Average weekly alcohol consumption of traditional age students is nearly twice that of all other age categories. Clearly alcohol misuse by the average older college student is far less likely to occur. This has significant implication for the type of alcohol related problems older students are likely to experience as part of their college experience.

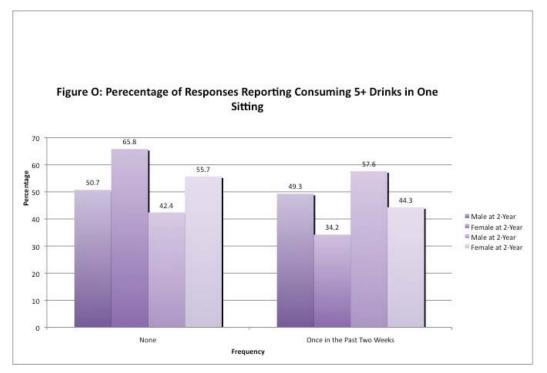
Traditional age college students (17 to 24 year olds) report consuming 5 or more drinks in 46.2% of two year students and 50.4% of four year students responded, which is a larger percentage of responses than any other age category. Those consuming in the highest risk fashion are disproportionately of traditional college ages. In fact, the group of highest risk drinkers, or those who report consuming 5 or more drinks, decreases from over 58.0% to 11.6% between the 21-22 and 40+ age groups for four year college students.



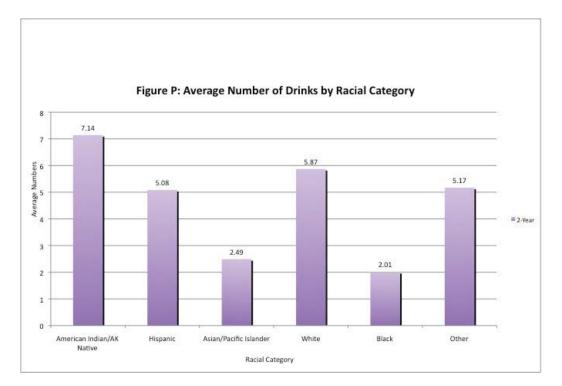
Gender has been noted as an important difference in alcohol consumption trends. Men have traditionally been seen to be larger consumers of alcohol, but recent evidence has suggested that women are increasingly consuming at higher and more risky levels. Student responses in Illinois point toward a remaining dramatic difference between average alcohol consumption of men and women in a typical week (see Figure N).



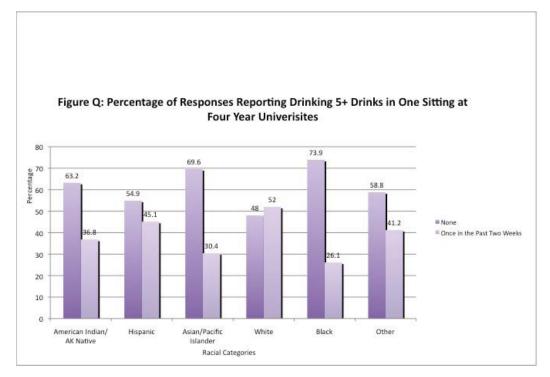
Not only is average alcohol consumption higher among males in college in Illinois, but also so are incidents of high-risk alcohol consumption. 57.6% of men report incidents of consuming 5 or more drinks in one sitting with 44.3% of females reporting similar incidents at four year institutions



Students in Illinois attending institutions of higher education continue to represent increasingly diverse groups and understanding the unique alcohol consumption of racial categories creates an interesting picture of how race, culture and alcohol interact. The first thing to note about alcohol consumption patterns of different racial categories is that there exist significant differences in both average weekly consumption and incidents of high risk consumption. In Illinois, the respondents conform to national data in trends that display high use among American Indians/Alaskan Natives and White/Caucasians. It is difficult to comment much on the American Indians/Alaskan Natives because of the very small sample size. Black/African-American and Asian/Pacific Islander categories are very moderate consumers of alcohol in terms of average consumption and incidents of high-risk use.

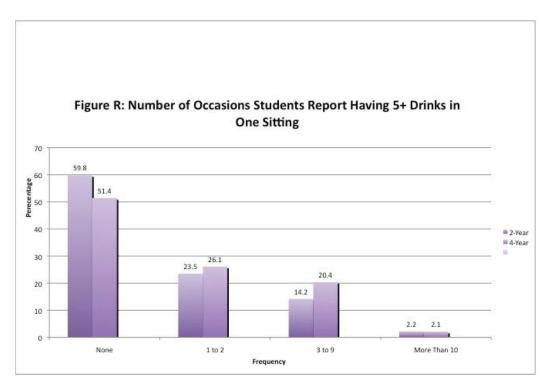


White students report average weekly consumption significantly above the state average weekly consumption of all college students and have the some of the greatest incidents of students reporting consuming 5 or more drinks in a sitting. 52.0% of Whites report drinking 5 or more drinks in one sitting, while Asian/Pacific Islanders and Blacks report 5 or more drinks in one sitting at only 30.4% and 26.1% of responses.



Racial category may reflect differences in cultural expectations and norms surrounding alcohol use and thus point to important differences for those working to prevent alcohol abuse on college campuses.

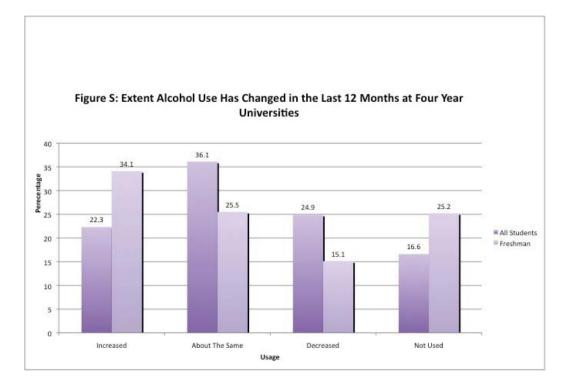
While there is frequent national and local coverage of college student drinking, almost all of this coverage reports on traditional age college students at four-year residential institutions. Figure R depicts the difference in incidents of five or more drinks in one sitting between two and four year institutions in Illinois.



In this example it is important to note that students attending college at two-year institutions do report consuming five or more drinks less frequently than do students attending four-year institutions.

Those who report never consuming five or more drinks is 8.7% greater in the two-year sector. On the other end of the spectrum, very frequent users (defined as 10 or more incidents of consuming five or more drinks in a sitting during the past two weeks) are similar at two and four year institutions with 2.2% and 2.0% respectively. Those who report 1 to 2, or 3 to 9 incidents of drinking five or more drinks per sitting during the past two weeks is less among students attending two year institutions. One should note that while there is a difference between sectors, even in the two-year sector the rate of consuming in a high-risk manner includes 39.9% of responses. This 39.9% of heavy drinkers (those who consume 5 or more in one sitting) is similar to the national average for heavy drinking among college students (national rate has been estimated as 40.5%). What is more disturbing is that four-year responses in Illinois report a binge-drinking rate of 49.1%.

The impact of college on student alcohol use is an important question. Data from national longitudinal surveys indicate that students who attend college experience an increase in alcohol use that outpaces those youth who do not attend college O'Malley & Johnston, 2002). Specifically, students who attend college consume in higher amounts than do those who chose not to attend. This points toward a potential disturbing impact of the college experience on youth alcohol utilization. Figure S indicates self-reported increases and decreases of alcohol use by responses in Illinois.

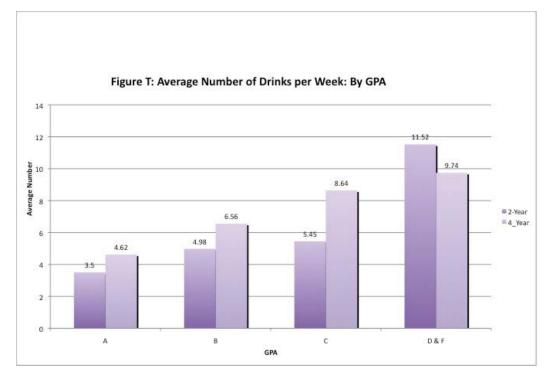


Among all survey responses only 13.4% at two year schools and 21.8% of four year students reported increasing their use, and 26.4% of two year and 24.4% of four year students indicated decreasing their use over the past year. Among freshmen at four year universities, 34.1% report increasing alcohol use and only 15.1% report decreasing over the past year. Clearly the self-reported impact of college on alcohol use among students in Illinois appears mixed.

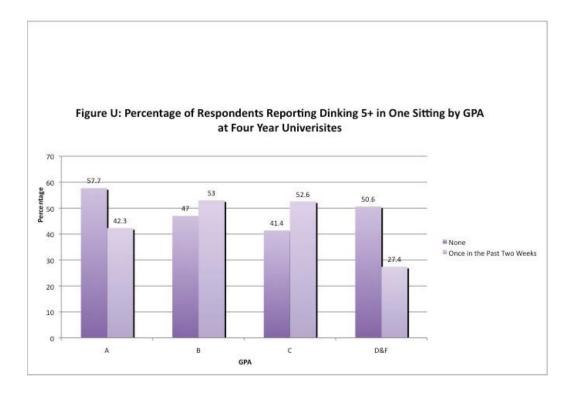
## Student Academic Performance, Involvement and Alcohol Use

One of the key questions for university leaders to consider is the impact of alcohol use on students and campus life. With the central purpose of undergraduate education focused on student learning, it is important to examine the impact of alcohol use on academic performance.

The relationship between alcohol use and academic performance is very clear. Core results from those responding in Illinois indicate a strong relationship between alcohol use and academic performance as measured by self-reported GPA. Those students who report their GPA to be in the "A" category consume the least alcohol per week on average. Those students who report an "F" GPA report the highest average alcohol use per week. More importantly, the trend between the self reported grades of "A" and "F" is consistent.



The relationship between alcohol use and academic performance is further articulated when examining the frequency of incidents of five or more drinks per sitting. Those who report grades in the A category are also the most likely to report not consuming five or more drinks in one sitting. Those who report "D" and "F" grade categories reported the highest incidence of consuming five or more drinks in a sitting.



The implication for the relationship between academic performance and alcohol use is clear. Those who use the least are more likely to be high academic achievers. The nature of student involvement related to alcohol use is a key environmental question to consider when examining how alcohol use is impacted by the college culture.

 $\diamond$ 

#### Table A: Alcohol Use Related to Level of Student Involvement

	Not Involved	Attend	Active	Leader
Intercollegiate Athletics	5.55	NA	7.84	8.45
Fraternity & Sororities	5.37	7.13	9.41	9.23
Intramural Sports	4.88	NA	8.48	8.25
Minority - Ethnic Groups	6.3	3.73	2.57	4.96
Political / Social Groups	6.02	6.02	5.51	4.73
Music / Performing Arts Group	6.25	6.02	4.41	4.94
Religious Group	6.97	5.27	2.73	2.05

Table A displays the mean weekly alcohol consumption of students who are either not involved, have attended, are actively involved or are leaders of student groups. Table A is illustrative of two important findings: 1) college students participating as active members or leaders in certain groups (i.e. intercollegiate athletics, fraternities and sororities, and intramurals) consume far more than the norm for college students in Illinois; 2) leaders of student groups appear to consume significantly more than both attending members and active members. It appears that engagement in certain student groups and being a leader may predispose college students to higher alcohol use.

# Alcohol Use and Negative Consequences

The negative impact of alcohol on behavior is another specific consequence of alcohol in the college environment.

#### Table B: Percentage of Responses Reporting Negative Consequences Following Alcohol Use

Negative Consequence	2-Year	4-Year
Hangover	57.2	65.2
Got nauseated or vomited	48.2	57.7
Argument or Fight	31.3	34.2
Missed a class	22.3	33.1
Drove a car while under the influence	34.1	25.5
Performed Poorly on a Test	21.5	24.3
Trouble with Police, residence hall or college authorities	10.9	15
Damaged Property, pulled fire alarm	6.7	7.2

Table B describes the likelihood of negative consequences for individuals following alcohol use in the past year. The most likely response of students is that 57.2% of two year students and 65.2% of four year students reported experiencing a hangover in the past year due to their alcohol use. The second most likely negative consequence is getting nauseated or vomiting 48.2% of two year students and 57.7% of four year students as a result of substance use. After the two most likely responses, a group of responses emerges that about 30% of students in the sample report. This group of negative consequences includes driving a car after drinking, getting in an argument, missing a class, done something that I later regretted, been criticized by someone I know and had memory loss. The prevalence of negative consequences of alcohol use points toward the impact alcohol has on students in the collegiate context.

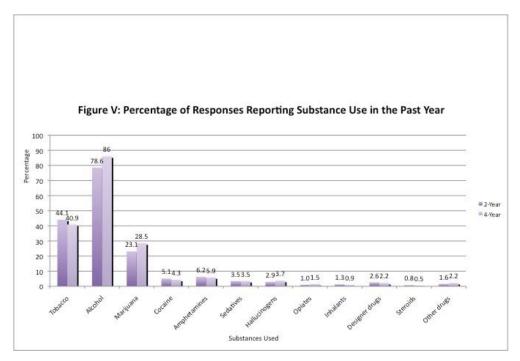
A further breakdown of negative consequences of alcohol use points toward the frequency with which individuals experience negative consequences of use. Hangovers, getting ill, missing class, performing poorly on an exam, getting in a fight, and driving after drinking remain prevalent negative consequences (Tables B and C).

# Table C: Percentage of Responses Reporting Negative Consequences Following Alcohol Use at Four Year Institutions

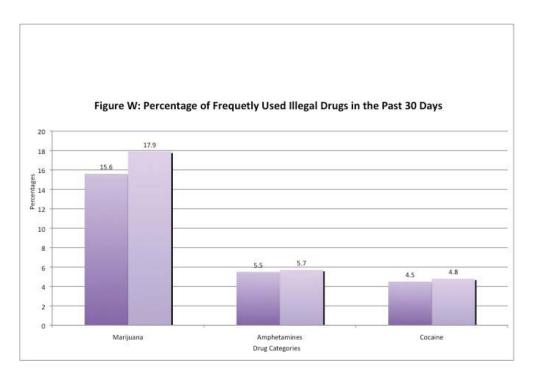
or More
4

What these findings point to is how alcohol use in moderate and heavy amounts impacts college students. Negative consequences experienced by a majority of students relate to the physiological impact of alcohol, i.e. hangovers and nausea. These negative consequences are largely personal and relate to physical discomfort. The negative consequences that should be more disconcerting for college administrators and the public relate to the issues of academic performance and driving a car after consuming alcohol. Fully 34.1% of two year students and 25.5% of four year students indicated they have driven a car in the past year after consuming alcohol, with 24.5% of two year students and 16.75% of four year students saying they have done this on multiple occasions. In fact, 7.5% of two year and 3.8% of four students indicated they have driven after drinking 10 or more times in the past year. This is a major concern for those interested in reducing cases of drunk driving, as clearly some portion of the college population still feels that it is acceptable to drive after consuming alcohol. The relationship between alcohol use and academic performance is further illuminated in Tables B and C as the frequency of students reporting missing classes on multiple occasions in relationship to alcohol consumption points to why students who drink more are more likely to perform poorly in their academic work. Self reported incidents of performing poorly on a test also reinforce the connection between academics and alcohol. It is interesting that 21.5% of two year students and 24.3% of four year students report performing poorly on an exam after alcohol use at least once and 7.8% of two year and 6.6% of four year students report having this happen on three or more occasions. Alcohol use is part of the college experience and clearly it is part of why some students do not perform better academically. The negative consequences to individuals, academic performance and even to traffic safety point to why university administration needs to attend to alcohol misuse in their college environment.

The Core survey examines alcohol use by college students in detail, but also provides information on the prevalence of drug use among college students. It is important to understand not just alcohol use rates among college students, but also to see that in relationship to other drug use. Alcohol is reported to have been used by 78.6% of two year students and 86% of four year students in Illinois in the past year, while tobacco and marijuana were reported to have been utilized by 44.1% of two year students, 40.9% of four year students and 23.1% of two year students and 28.5% of four year students respectively. Over a third of students reported using tobacco in some form in the past year and just over a quarter of the sample reported using marijuana. These two drugs represent the most prevalently utilized by college attending individuals for the previous year.

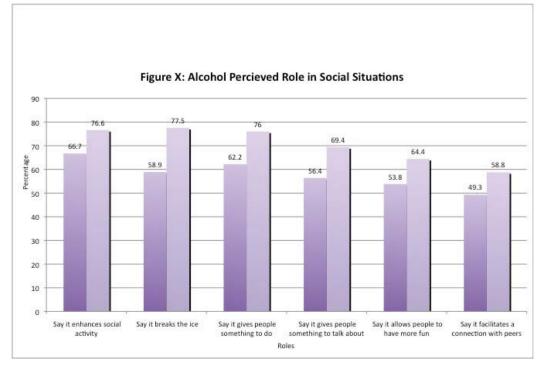


Along with marijuana, the other illegal drugs reportedly utilized by college students during the previous year include cocaine, amphetamines and sedatives, see Figure W.



# **Student Attitudes**

Student attitudes and beliefs about alcohol and other drugs in the college environment provide insight into the cultural milieu in which college students operate. Figure X depicts what students think about alcohol's role in the social arena.



Students clearly perceive alcohol functions as a social lubricant, with 49.3% of two year students and 58.8% of four year students seeing alcohol facilitating connections between peers. In addition, 56.4% of two year students and 69.4% of four students saying that alcohol gives students something to talk about. Alcohol is also frequently seen as a stress reducer and something that "breaks the ice" in social situations. Student attitudes toward the prevention of alcohol abuse and related problems are described in Table D.

Table D: What Students Care About in Relationship to Alcohol, Other Drugs and Violence Prevention at Four
Year Institutions

	Caring Not at All	Caring Slightly	Caring Somewhat or Very Much
Alcohol and Other Drug Use	20.8	41.2	38
Campus Vandalism	16.3	30.4	53.3
Sexual Assault	5.2	11.3	83.5
Assualt, Non-Sexual	7	17.7	75.3

Students appear to be very concerned about the negative consequences associated with alcohol use, but less directly concerned about alcohol and other drug use. Students report caring the most about sexual assault (83.5% report caring somewhat or very much). In comparison, students report caring significantly less about alcohol and other drug use (38.0% care somewhat or very much). This finding has important implications for how universities can mobilize support for prevention. Clearly support is more likely to be built upon preventing the negative consequences associated with alcohol and other drug use.

# Second Hand Consequences of Student Alcohol Use

The second hand consequences of alcohol use, or impact of someone's alcohol use on others, are an important dynamic associated with alcohol abuse in the college environment.

Table E: Adverse Effects of Other Students Alcohol Use		
Percentage Of Students Reporting other Students Drinking Adversly Affecting		4-Year
Studying	15.5	34.6
Feeling of Safety	12.8	16.2
Messing up Living Space	16.7	28.5
Adversely impacts athletic team or group	9.9	8.2
Prevents Enjoying events	12.2	15.2

Table E reflects whether students have experienced a negative impact of others' drinking on studying, safety, physical space, or campus involvement.

The important finding here is that about a quarter of students report that other students' drinking adversely impacts their studying and living space. Clearly, drinking is not just a personal choice, but also one that impacts the individuals surrounding the person consuming.

### Summary

The effort in this report has been to depict alcohol consumption trends of college students in Illinois. The trends point to concerns about heavy consumption among students in both two and four year institutions in Illinois. Though there is difference in the patterns found at the two types of institutions the use and prevalence that exist are still high in both. The concern related to alcohol use is described through the prevalence of negative consequences of use, including academic and interpersonal negative consequences. Efforts to remain vigilant in preventing heavy alcohol use and negative consequences among Illinois college students are important given the findings described in the 2006 Core survey report.