

# HEALTH AND HEALTH-RELATED BEHAVIORS

Minnesota Postsecondary Students





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# Introduction

# Q: What do the following health conditions and health-related behaviors have in common?

- Health Insurance Status
- Depression
- Ability to Manage Stress
- Tobacco Use
- Alcohol Use
- Engagement in Physical Activity
- Credit Card Debt

# A: They all affect the health and academic achievement of Minnesota college students.

Across the state of Minnesota, 14 two-year and four-year postsecondary schools joined together with Boynton Health Service at the University of Minnesota in the spring of 2008 to collect information from over 25,077 undergraduate and graduate students about their experiences and behaviors in the areas of health insurance and health care utilization, mental health, tobacco use, alcohol and other drug use, personal safety and financial health, nutrition and physical activity, and sexual health. Over 8,000 students completed the survey for an overall response rate of 32.4%.

This report highlights the findings of this comprehensive survey and serves as an essential first step in identifying health and health-related behavior issues affecting college students. Boynton Health Service hopes that the information contained in this report will be helpful to college and university leaders as they strive to develop programs and policies that will assure a safe institutional environment, promote access to health care and essential services, encourage responsible student decision making and behavior, and contribute to the health, well-being, and academic success of students enrolled in their schools. The survey results are also intended to raise awareness among state and local policymakers and community leaders concerning the importance of the health of college students to the overall educational, health, and economic status of Minnesota.

# Survey

# Methodology

Over 8,000 undergraduate and graduate students enrolled in 14 Minnesota postsecondary institutions completed the 2008 College Student Health Survey, developed by Boynton Health Service. As an incentive, all students who responded to the survey were entered into a drawing for gift certificates valued at \$3,000 (one), \$1,000 (one), and \$500 (two) at a variety of stores.

Participants were contacted through multiple mailings and e-mails:

- Postcards were sent to randomly selected students notifying them of their eligibility to participate in the survey.
- Students were e-mailed a link to the online survey.
- Reminder postcards and multiple e-mails were sent to all students to encourage participation.
- All students were sent a minimum of two invitations to participate in the survey.

A total of 25,077 undergraduate and graduate students from 14 Minnesota colleges and universities were invited to participate in the 2008 College Student Health Survey (see Appendix 1 for a list of participating schools).

2008 College Student Health Survey Methodology Highlights

- 25,074 students from 14 Minnesota colleges and universities were randomly selected to participate in this study.
- 8,118 completed the survey.
- 32.4% was the overall 2008 College Student Health Survey response rate.

In addition to the 25,077 randomly selected students attending the 14 schools, also surveyed were 1,323 veterans who attended one of the 14 schools or the University of Minnesota–Twin Cities. The survey results for veterans will be treated as a separate report. This report is based on the original 25,077 randomly selected students.



2008 College Student Health Survey Postcard

# Survey

# Analysis Summary

The information presented in this report documents the prevalence of various diseases, health conditions, and health-related behaviors across seven areas:

- Health Insurance and Health Care Utilization
- Mental Health
- Tobacco Use
- Alcohol and Other Drug Use
- Personal Safety and Financial Health
- Nutrition and Physical Activity
- Sexual Health

The prevalence of a disease, health condition, or health-related behavior is defined as the total number of occurrences in a population (in this case, college students) at a given time, or the total number of occurrences in the population divided by the number of individuals in that population.

Prevalence is useful because it is a measure of the commonality of a disease, health condition, or health-related behavior. For example, the 2008 College Student Health Survey asked students if they had ever been diagnosed with depression within their lifetime. For the purpose of this illustration, if 6,000 students completed the survey and 720 of them reported they had been diagnosed with depression within their lifetime, then the lifetime prevalence of depression among this population of students is 12.0% (720/6,000).

The results from this survey are based on a random sample of students from each of the participating colleges and universities. Random sampling is a technique in which a group of subjects (in this case, the sample of college students) is selected for study from a larger group (in this case, the population of students enrolled at each of the participating institutions). Each individual is chosen entirely by chance, and each member of the population has an equal chance of being included in the sample. Random sampling guarantees that the sample chosen is representative of the population. This ensures that the statistical conclusions (in this case, the prevalence) will be valid.

# Results

# Health Insurance and Health Care Utilization

Students' current health influences their ability to realize their immediate goal of achieving academic success and graduating, and their future health affects their ability to accomplish their longer term goal of finding and sustaining a career. Access to health care has been shown to improve health. Although institutions of higher education differ in scope of services, each institution has a unique opportunity and bears a certain responsibility to address issues related to student health and to reduce barriers to health insurance access.

# **National Comparison**

This section examines the areas of health insurance, health services utilization, and preventive care. Recent research indicates that most young adults in the United States, ages 18 to 24 years old, report good health. The majority of young adults in Minnesota (89.0%) and nationwide (84.2%) report excellent, very good, or good health. At the same time, young adults have relatively low rates of health insurance and preventive care utilization. Among individuals under age 65, 18- to 24-year-olds report the lowest rate of health insurance coverage: in Minnesota 77.4% report some kind of health care insurance, and nationwide the number is 71.9%. More young males (31.1%) than young females (25.1%) lack health insurance coverage. Among all age groups, young adults (70.8%) are least likely to identify a usual place for medical care.

Many health insurance plans allow dependents under the age of 25 to remain covered by their parents' insurance while attending a postsecondary institution. Therefore, students who attend postsecondary institutions tend to have higher rates of health insurance coverage than those who do not.

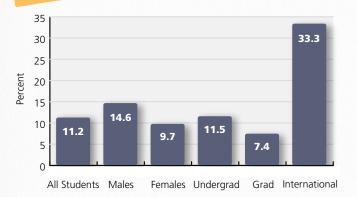
Students who completed the 2008 College Student
Health Survey report an overall uninsured rate of **11.2%**.
Males tend to have a slightly higher uninsured rate
compared to females (**14.6%** vs. **9.7%**, respectively).
International students report an uninsured rate of **33.3%**.

Students ages 25-29 report the highest uninsured rate. The lowest uninsured rate is among students ages 18-19. This may be a reflection of parental health insurance coverage for these students.

More than one-third (**34.6%**) of all students report having a spouse, and **16.1%** of these students report that their spouse is uninsured.

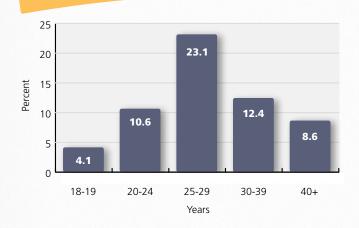
More than one-fifth (22.2%) of students report having dependent children. Of these dependent children, 7.6% lack health insurance.

# Health Insurance Status-Uninsured All Students

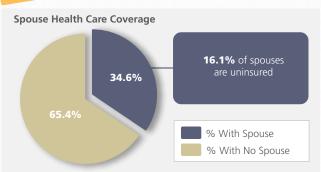


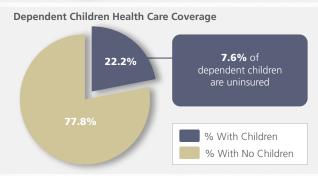
Health Insurance Status-Uninsured

All Students by Age Group



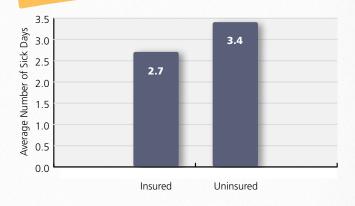
**Spouse and Dependent Health Care Coverage** All Students





# Health Insurance and Number of Sick Days-Past 30 Days

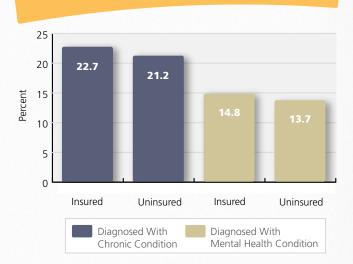
All Students



Number of sick days is a measure of health-related quality of life. Sick days reflect a personal sense of poor or impaired physical or mental health, or the inability to react to factors in the physical and social environments.<sup>3</sup>

Among students who completed the 2008 College Student Health Survey, those with health insurance report on average **0.7** fewer sick days in the past 30 days than those without health insurance.

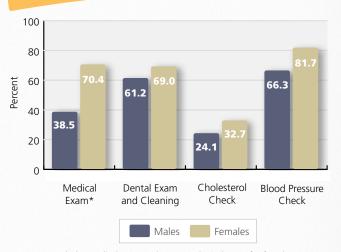
# Health Insurance and Health Status All Students



Students without health insurance report slightly lower rates of diagnosed chronic conditions and mental health conditions compared to students with health insurance.

# Preventive Health Care Utilization— Past 12 Months

All Students by Gender



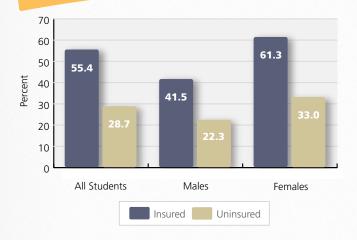
\*Includes medical exam and/or gynecological exam for females.

Female students who completed the 2008 College Student Health Survey access preventive services at higher rates than male students. Health insurance coverage appears to have an impact on whether students obtained routine medical examinations within the past 12 months. Uninsured male and female students had lower rates of obtaining a routine medical examination than insured students.

Among students who completed the 2008
College Student Health Survey, the primary
locations for obtaining many health care services
appear to be a community clinic and private
practice. It should be noted that of students
who report receiving mental health services,
5.9% used their school's health service and
12.8% used their school's student counseling
service. Among students who obtain the services,
approximately one-tenth used the their school's
health service for routine doctor's visits (8.9%),
testing for sexually transmitted infections
(9.7%), treatment for sexually transmitted
infections (10.3%), and testing for HIV (8.2%).

### Rates of Obtaining a Routine Medical Examination—Past 12 Months

All Students by Gender and Insurance Status



### **Health Care Utilization by Location**

All Students (Includes Only Those Students Who Report Obtaining a Service)

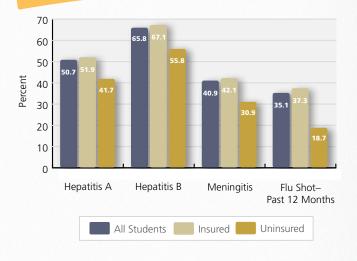
Question asked: Where do you obtain the following health care services while in school?

	Percent					
Health Care Service	School Health Service	Student Counseling Service	Hospital	Community Clinic	нмо	Private Practice
Routine Doctor's Visit (91.0%*)	8.9	0.1	15.7	48.2	9.9	22.8
Dental Care (89.3%*)	1.6	0.0	2.2	29.7	5.8	61.3
Mental Health Service (24.5%*)	5.9	12.8	11.2	29.8	8.4	33.8
Testing for Sexually Transmitted Infections (38.1%*)	9.7	0.3	13.1	51.1	7.6	19.7
Treatment for Sexually Transmitted Infections (20.6%*)	10.3	0.2	15.0	47.6	8.1	18.4
Testing for HIV (31.4%*)	8.2	0.3	14.4	49.0	8.4	19.9
Emergency Care (85.5%*)	3.1	0.1	85.2	11.4	3.1	4.0

<sup>\*</sup>Percent of students who obtained service.

# **Immunization Status**

All Students



Students with health insurance obtain flu shots and immunizations for hepatitis A, hepatitis B, and meningitis at higher rates than students without health insurance.

Currently these immunizations are not required for students enrolled in postsecondary institutions.

Hepatitis B, however, is required for high school students in Minnesota. It is expected that the hepatitis B immunization rate in postsecondary institutions will increase over the next ten years.

# **Average Number of Days Affected by Illness** All Students by Gender

	Average Number of Days Affected– Past 30 Days		
Illness	Males	Females	
Poor Physical Health	3.0	4.0	
Poor Mental Health	4.2	6.1	
Poor Physical and/or Mental Health Affected Daily Activities	2.3	3.0	

Compared to male respondents who completed the 2008 College Student Health Survey, female respondents report more days of poor physical health, more days of poor mental health, and more days when poor physical and/or mental health affected daily activities.

# Diagnosed With Acute Condition– Lifetime and Past 12 Months

All Students

	Percent Who Report Being Diagnosed		
Acute Condition	Within Lifetime	Within Past 12 Months	
Chlamydia	4.3	0.7	
Gonorrhea	1.0	0.1	
Hepatitis A	0.4	0.1	
Lyme Disease	0.9	0.1	
Mononucleosis	10.5	1.3	
Pubic Lice	2.5	0.1	
Strep Throat	49.0	8.3	
Syphilis	0.2	0.1	
Urinary Tract Infection	27.1	9.3	
Diameter of Mithest			
Diagnosed With at Least One of the Above Acute Conditions	60.9	17.6	

Students who completed the 2008 College Student Health Survey were asked to report if they have been diagnosed with selected infectious acute illnesses within the past 12 months and within their lifetime.

The acute condition diagnosed most frequently within students' lifetimes was strep throat, with 49.0% of all students reporting having this diagnosis. The acute condition diagnosed most frequently within the past 12 months was urinary tract infection, with 9.3% of all students reporting having this diagnosis. Overall, 60.9% of students report being diagnosed with at least one acute condition within their lifetime, and 17.6% report being diagnosed with at least one acute condition within the past 12 months.

Chronic conditions are ongoing health concerns for students. Surveillance of these conditions provides a picture of longer term health care needs for college students.

The two most common chronic conditions diagnosed in students who completed the 2008 College Student Health Survey are allergies (39.5% lifetime) and asthma (17.1% lifetime). Nearly three-fifths (57.4%) of all students report being diagnosed with at least one chronic condition within their lifetime, and almost one-fourth (22.5%) report being diagnosed with at least one chronic condition within the past 12 months.

# Diagnosed With Chronic Condition– Lifetime and Past 12 Months

All Students

	Percent Who Report Being Diagnosed		
Chronic Condition	Within Lifetime	Within Past 12 Months	
Alcohol Problem	4.7	1.1	
Allergies	39.5	11.1	
Asthma	17.1	3.3	
Cancer	1.7	0.4	
Diabetes Type I	0.7	0.2	
Diabetes Type II	1.0	0.4	
Genital Herpes	1.8	0.4	
Genital Warts/ Human Papilloma Virus	6.1	1.9	
Hepatitis B	0.4	0.1	
Hepatitis C	0.4	0.1	
High Blood Pressure	6.4	2.9	
High Cholesterol	7.8	3.6	
HIV/AIDS	0.2	0.1	
Drug Problems (Other Than Alcohol)	3.2	0.5	
Obesity	8.8	4.6	
Tuberculosis	0.6	0.1	
Diagnosed With at Least One of the Above Chronic Conditions	57.4	22.5	

# Results

# Mental Health

Mental health issues can have a profound impact on students' ability to engage fully in the opportunities presented to them while in college. These issues affect their physical, emotional, and cognitive well-being and can lead to poor academic performance, lower graduation rates, and poor interpersonal relationships.

There is increasing diversity among college students. Among undergraduates nationwide, 32.2% are minorities, 57.2% are female, and 31.3% are age 25 or older.<sup>4</sup> In addition, approximately 565,000 foreign students are studying at U.S. colleges and universities.<sup>4</sup> This diversity presents a myriad of counseling concerns related to multicultural and gender issues, life transition, stress, career and developmental needs, violence, interpersonal relationships, and serious emotional and psychological problems. This array of mental health problems represents ever-increasing challenges as postsecondary institutions strive to meet the needs of their students.

# **National Comparison**

This section examines areas related to the mental and emotional status of college and university students. Recent research shows that young adults in the United States have relatively high rates of mental health problems compared to other age groups. Based on the results of the National Comorbidity Survey Replication Study using the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders-IV criteria, 53.8% of 18- to 29-year-olds have been diagnosed with a mental disorder within their lifetime, and 38.0% of 18- to 29-year-olds have been diagnosed with a mental disorder within the previous year.<sup>5</sup> Among all age groups, 18- to 25-year-olds have the highest lifetime prevalence of serious psychological distress, i.e., mental illness that results in functional impairment (17.7%), and the highest past year prevalence of major depressive episode (9.0%).<sup>6</sup> The lifetime prevalence of major depressive episode for 18- to 25-year-olds is 15.0%.<sup>3</sup> More than one in ten (10.8%) young adults between the ages of 18 and 25 have received treatment for a mental health problem in the previous year.<sup>6</sup>

Results: Mental Health

For students who completed the 2008 College Student Health Survey, depression and anxiety are the two most frequently reported mental health diagnoses for both lifetime and the past 12 months.

# Diagnosed Mental Health Condition— Lifetime and Past 12 Months

All Students

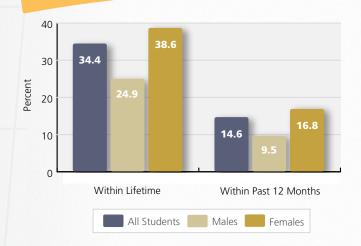
	Percent Who Report Being Diagnosed		
Mental Health Condition	Within Lifetime	Within Past 12 Months	
Anorexia	2.0	0.5	
Anxiety	17.9	7.9	
Attention Deficit Disorder	6.0	1.7	
Autism	0.2	0.0	
Bipolar Disorder	1.8	0.6	
Bulimia	1.8	0.5	
Depression	23.9	8.0	
Obsessive-Compulsive Disorder	2.0	0.8	
Panic Attacks	8.6	3.5	
Post-Traumatic Stress Disorder	3.6	1.2	
Seasonal Affective Disorder	3.7	1.8	
Social Phobia/ Performance Anxiety	3.5	1.5	

Among all students, **34.4%** report being diagnosed with at least one mental health condition within their lifetime. Females report higher rates of being diagnosed with a mental health condition within their lifetime and within the past 12 months compared to males. This is consistent with gender differences seen in national data.

Additional analysis shows that **19.7%** report being diagnosed with two or more mental health conditions within their lifetime.

# Diagnosis of Any Mental Health Condition— Lifetime and Past 12 Months

All Students by Gender



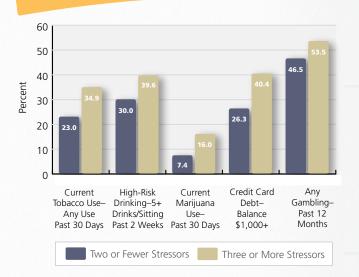
### **Mental Health Stressors** All Students

Percent Getting Married 3.2 Failing a Class 10.9

18.1 Serious Physical Illness of Someone Close to You Death of Someone Close to You 22 0 Being Diagnosed With a Serious Physical Illness 3.1 Being Diagnosed With a Serious Mental Illness 4.1 Divorce or Separation From Your Spouse 1.9 Termination of Personal Relationship (Not Including Marriage) 16.4 Attempted Suicide 1.1 Being Put on Academic Probation 6.8 Excessive Credit Card Debt 14.7 Excessive Debt Other Than Credit Card 14 2 1.7 Being Arrested Being Fired or Laid Off From a Job 5.2 Roommate/Housemate Conflict 20.5 Parental Conflict 14.8 Lack of Health Care Coverage 12.8 Issues Related to Sexual Orientation 2.3 Not Applicable (None of the Above Happened to Me) 28.8 Report Experiencing One or Two 43 4 of the Above Stressors Report Experiencing Three or More of the Above Stressors 26.4

The most commonly experienced stressor among students who completed the 2008 College Student Health Survey is the death of someone close to them. Other frequently reported stressors include roommate/ housemate conflict and the serious illness of someone close to them. A total of 43.4% of students report experiencing one or two stressors within the past 12 months, and 26.4% report experiencing three or more stressors over that same time period.

# **Mental Health Stressors and Risky Behavior** All Students



There appears to be an association between reported number of stressors experienced within the past 12 months and various types of risk-taking behavior. Over the same 12-month period, students who experienced three or more stressors tend to have higher rates of all the listed risk-taking behaviors compared to students who experienced two or fewer stressors.

More than one-fourth (26.6%) of students who completed the 2008 College Student Health Survey report they are unable to manage their stress level. Additional analysis shows that among these students, 15.9% also report they were diagnosed with depression within the past 12 months. Nearly three-fourths of all students (73.4%) report they are able to mange their level of stress. Only 5.5% of these students report they were diagnosed with depression within the past 12 months.

There appears to be an association between unmanaged stress levels and higher rates of diagnosis for acute and chronic conditions as well as various mental health conditions. For example, 15.4% of students with unmanaged stress levels report being diagnosed with anxiety within the past year compared to only 5.1% of students

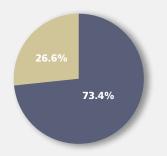
with managed stress levels reporting

the same diagnosis.

Depression is the mental health condition most frequently reported by students who completed the 2008 College Student Health Survey, both for lifetime and the past 12 months. Females report being diagnosed with depression-both lifetime and the past 12 months-at nearly twice the rate of males.

### **Ability to Manage Stress-Past 12 Months** All Students

In an attempt to measure effectiveness in managing stress, we asked students to rate their stress level and their ability to manage stress, each on a scale of 1 to 10. The reported stress level is then divided by the reported ability to manage stress. Any result greater than 1 means a student is not effectively managing his or her stress.



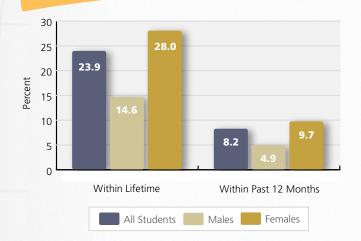
Managed Stress (Index ≤1) Unmanaged Stress (Index >1)

### Stress and Mental Health-**Acute and Chronic Condition Diagnosis** All Students

	Percent		
Diagnosed Within the Past 12 Months	Unmanaged Stress (Index >1)	Managed Stress (Index ≤1)	
Any Chronic Condition	27.8	20.5	
Any Acute Condition	22.7	15.8	
Anxiety	15.4	5.1	
Depression	15.9	5.5	
Obsessive-Compulsive Disorder	1.7	0.5	
Panic Attacks	7.9	1.9	
Social Phobia/ Performance Anxiety	3.5	0.9	

# **Depression Diagnosis-Lifetime and Past 12 Months**

All Students by Gender



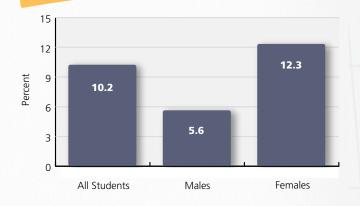
# **Depression Diagnosis-**Lifetime and Past 12 Months

All Students by Age Group



The proportion of all students reporting being diagnosed with depression within the past 12 months is lower among students ages 18-24 compared to students ages 25 and older.

# **Currently Taking Medication for Depression** All Students by Gender



Overall, 10.2% of students who completed the 2008 College Student Health Survey report they currently are taking medication for depression. Females report using medication for depression at more than two times the rate of males, which correlates with the higher diagnosis rates found in females compared to males.

### **Currently Taking Medication for** Mental Health Problems Other Than Depression All Students by Gender

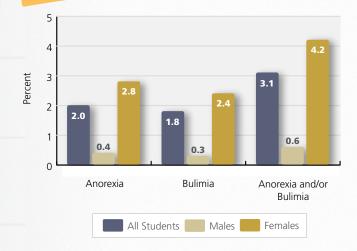


Female students also report a higher rate of medication use for mental health problems other than depression than male students. Overall, 6.8% of students report being on medication for a mental health problem other than depression.

Among students who completed the 2008 College Student Health Survey, 0.6% of males and 4.2% of females report being diagnosed with anorexia and/or bulimia within their lifetime.

# **Eating Disorder Diagnosis-Lifetime**

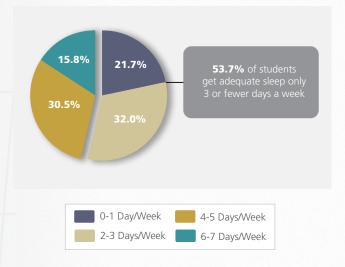
All Students by Gender



In response to a question regarding how many of the past seven days they got enough sleep so they felt rested when they woke up in the morning, more than half (53.7%) of all students report they received adequate sleep on only three or fewer days over the previous seven days.

# Number of Days of Adequate Sleep-Past Seven Days

All Students



Receiving adequate sleep in the past seven days appears to have an impact on students' ability to manage their stress level. Only 54.8% of students who report receiving 0-1 day/week of adequate sleep also report the ability to manage their stress, whereas 88.8% of students who report 6-7 days/week of adequate sleep also report the ability to manage their stress.

# **Adequate Sleep and Stress**

All Students



# Results

# Tobacco Use

Young adults transitioning between high school and college find themselves in an environment with increased opportunities to make personal and lifestyle decisions without supervision or input from their parents. Coupling this new-found freedom with growing academic pressure and an expanding social network can lead to experimentation and risky behaviors such as smoking. Preventing smoking among young adults is critical to reducing long-term use of tobacco products and the subsequent negative health consequences.

# **National Comparison**

Recent research shows that current cigarette use by Americans of all ages peaks among young adults ages 21-25 at 40.2%, while 18- to 20-year-olds are not far behind at 35.6%.6 Approximately one in three (30.9%) full-time college students smoked cigarettes at least one time in the previous year, one in five (19.2%) smoked cigarettes at least one time in the previous 30 days, and one in ten (9.2%) smoke cigarettes daily.7 No significant gender difference exists in the prevalence of current or daily tobacco smoking among college students.<sup>7</sup> Among young adults ages 18-25, 5.2% used smokeless tobacco in the previous month.<sup>6</sup> Current cigarette smokers are more likely to use other tobacco products, alcohol, or illicit drugs than nonsmokers.<sup>6</sup> Among all current smokers, 42.5% have tried to quit and have stopped smoking for at least one day in the preceding 12 months.8 Of the 15 million college students in the United States, an estimated 1.7 million will die prematurely due to smoking-related illnesses.9 Clearly the current level of tobacco use among college students pose a major health risk.

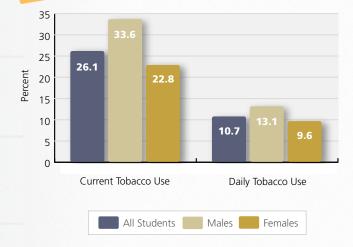
The current tobacco use rate for students who completed the 2008 College Student Health Survey is 26.1%, with a daily tobacco use rate of 10.7%. Males report higher rates of both current and daily tobacco use compared to females.

# **Definition:** Current Tobacco Use

Any tobacco use in the past 30 days. Tobacco use includes both smoking and smokeless tobacco.



All Students by Gender



The highest current tobacco use rates are found among 23- and 24-yearold students (34.1% and 33.3%, respectively), and the lowest current tobacco use rate is found among 18-year-old students (21.3%).

# **Current Tobacco Use** All Students by Age



The rates of daily tobacco use are lower among students ages 18-22 compared to students ages 23 and older.

### **Daily Tobacco Use** All Students by Age

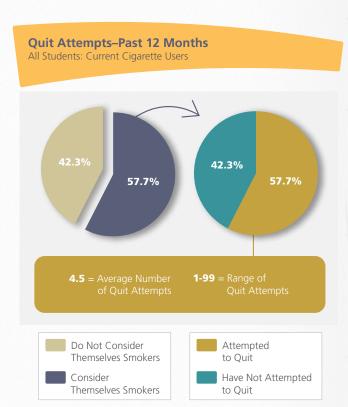




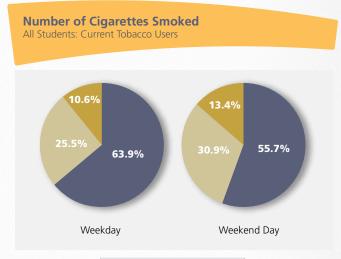
All Students by Gender



Males are the predominant users of smokeless tobacco. Overall, 12.2% of male students report using smokeless tobacco during the past 30 days.



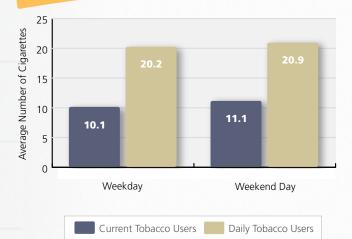
Among students who report using smoking tobacco in the past 30 days, 42.3% do not consider themselves smokers. Among students who do consider themselves smokers, 57.7% made at least one attempt to quit smoking over the past 12 months. These students made an average of **4.5** quit attempts during that same 12-month period.



For students who report using tobacco over the past 30 days, the proportion of those who say they smoke more than one pack of cigarettes per day increases from 10.6% on a weekday to 13.4% on a weekend day.

The average number of cigarettes smoked by students who are current tobacco users increases from 10.1 per weekday to 11.1 per weekend day. For daily tobacco users, the average number increases from 20.2 per weekday to 20.9 per weekend day.

# **Average Number of Cigarettes Smoked** All Students: Current vs. Daily Tobacco Users



Students who used tobacco in the past 30 days report the most common locations of their use are in a car, where they live, at private parties, and in bars/restaurants.

## **Location of Tobacco Use** All Students: Current Tobacco Users

Location	Percent Who Indicate Use at Specified Location
Campus Events	16.9
Bars/Restaurants	50.9
In a Car	70.1
Where I Live	59.7
Private Party	54.5
Work Site	35.1
Residence Hall	6.4

3.5

27.1

For nonsmokers who completed the 2008 College Student Health Survey, bars and restaurants and private parties are the most commonly cited locations for exposure to secondhand smoke. Cars and private parties are the most frequently reported locations for exposure to secondhand smoke by smokers.

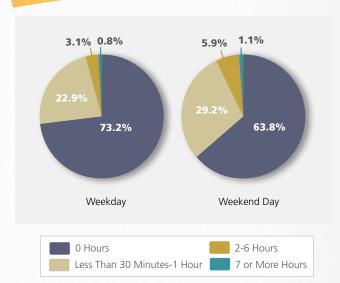
### **Exposure to Secondhand Smoke** All Students

Fraternity/Sorority

Other

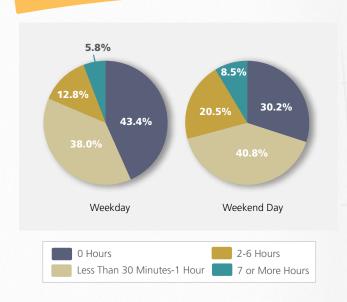
Location	Percent of Nonsmokers Who Indicate Exposure	Percent of Smokers Who Indicate Exposure	Percent of All Students Who Indicate Exposure
N/A-Never Exposed	44.2	14.9	37.1
Campus Events	6.8	5.5	6.4
Bars/Restaurants	19.8	32.2	22.8
In a Car	11.5	50.7	20.9
Where I Live	8.6	32.5	14.3
Private Party	17.9	45.2	24.5
Work Site	5.0	14.3	7.3
Residence Hall	3.1	2.6	3.0
Fraternity/Sorority	0.8	2.5	1.2
Other	17.2	23.6	18.7

### **Number of Hours Exposed to Secondhand Smoke** All Students: Nonsmokers



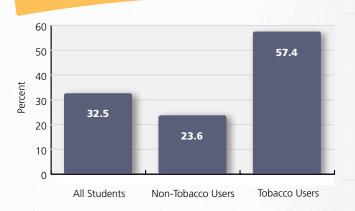
For nonsmokers, the hours of exposure to secondhand smoke increase from a weekday to a weekend day. During the week, 26.8% report being exposed to some level of secondhand smoke per day, whereas during the weekend this exposure rate increases to 36.2%.

### **Number of Hours Exposed to Secondhand Smoke** All Students: Current Smokers



The same trend of increased exposure to secondhand smoke from a weekday to a weekend day is seen in smokers. Any exposure to secondhand smoke increases from 56.6% on a weekday to 69.8% on a weekend day. In addition, exposure to two hours or more per day increases from 18.6% on a weekday to 39.0% on a weekend day.

# **Tobacco Use Status and High-Risk Drinking** All Students



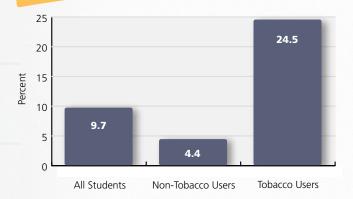
Students who use tobacco tend to have a higher rate of high-risk drinking compared to students who are non-tobacco users. (57.4% vs. 23.6% respectively).

# **Definition:** High-Risk Drinking

Consumption of five or more alcohol drinks at one sitting within the past two weeks for both males and females. A drink is defined as a bottle of beer, wine cooler, glass of wine, shot glass of liquor, or mixed drink.

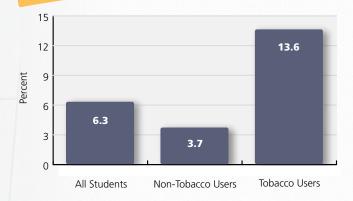
Similar to the relationship between high-risk drinking and tobacco use, the use of marijuana in the past 30 days is higher among tobacco users (24.5%) compared to non-tobacco users (4.4%). This is a more than fivefold increase in the rate.

# **Tobacco Use Status and Current Marijuana Use** All Students



As with high-risk drinking and marijuana use, the use of other illegal drugs is associated with tobacco use. Tobacco users use illegal drugs other than marijuana at more than three times the rate of non-tobacco users (13.6% vs. 3.7%, respectively).

### **Tobacco Use Status and Other Illegal** Drug Use (Not Marijuana)-Past 12 Months All Students



# Results

# Alcohol Use and Other Drug Use

For some young adults, college life includes an introduction or increase in the use of alcohol, marijuana, and various illicit drugs. Whether students are using these substances to signify emergence into adulthood, enhance their social life, or cope with stress, substance abuse can lead to a decline in classroom performance, lower grades, aggressive behavior, property damage, and personal injury.

# **National Comparison**

American college students consume alcohol and other drugs at very high rates. More than four in five (84.7%) college students have consumed alcohol at least one time, and nearly seven in ten (65.4%) college students consume alcohol monthly.7 Heavy or "binge" drinking (consuming five or more alcoholic beverages in a row in the previous two weeks) rates peak between ages 21 and 23 (49.3% at age 21, 48.9% at age 22, and 47.2% at age 23).6 The rate of binge drinking is 36.2% among 18- to 20-year-olds and 46.1% among 21- to 25-year-olds.<sup>6</sup> Young adults ages 18 to 22 who are enrolled in college full time are more likely than their peers who are not enrolled in college full time to consume alcohol monthly and to binge drink.6

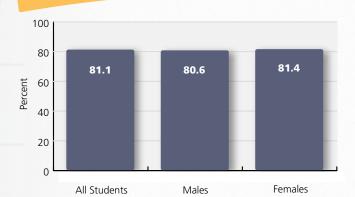
Approximately one-half (50.6%) of college students have used an illicit drug at least once in their lifetime, about one-third (33.9%) of college students have used an illicit drug at least once in the past year, and nearly one in five (19.2%) college students have used an illicit drug in the last month.7 Marijuana is the illicit drug of choice for college students, with nearly half (46.9%) of students having used the drug at least once in their lifetime and almost one-third (30.2%) having used it in the past year.<sup>7</sup> Among college students, 6.0% have used amphetamines, 5.1% have used cocaine, and 0.3% have used heroin in the previous year.<sup>7</sup>

The rates for any use of alcohol in the past 12 months are similar for males and females who completed the 2008 College Student Health Survey (80.6% vs. 81.4%, respectively).

# **Definition:**

Past-12-Month Alcohol Use

Any alcohol use within the past year.



**Alcohol Use-Past 12 Months** 

All Students by Gender

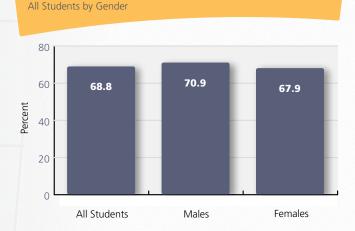
**Current Alcohol Use** 

Among students who completed the 2008 College Student Health Survey, the rate for use of alcohol in the past 30 days is slightly higher for males compared to females (70.9% vs. 67.9%, respectively).

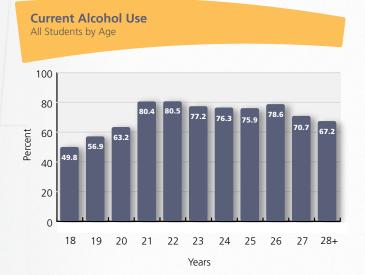
### **Definition:**

Current Alcohol Use

Any alcohol use within the past 30 days.

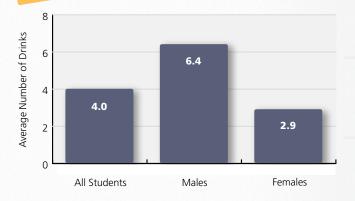


The rate of current alcohol consumption increases from 49.8% among 18-year-old students to 80.5% among 22-year-old students. The rate of this behavior peaks between the ages of 21 and 26.

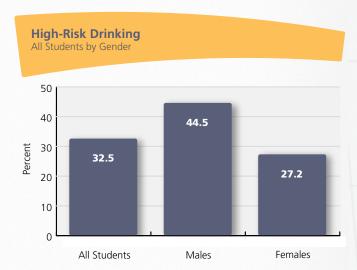


# Average Number of Drinks per Week

All Students by Gender



Male students who completed the 2008 College Student Health Survey consume a higher average number of drinks per week than female students. The consumption rate is more than two times higher for males. The average number of drinks per week may serve as an indicator of overall alcohol use.



Male students report a higher rate of high-risk drinking compared to female students (44.5% vs. 27.2%, respectively).



The peak years for engaging in highrisk drinking are between ages 21 and 23. Students who completed the 2008 College Student Health Survey overestimate the actual high-risk drinking rate among their peers. The estimate from all students is 38.2%, and the actual high-risk drinking rate is 32.5%. Those who have engaged in high-risk drinking tend to estimate a higher level of this behavior among their peers (49.1%), while those who have not engaged in high-risk drinking estimate very accurately at 32.9%.

# High-Risk Drinking Rates on Campus-Perceived vs. Actual

All Students

Question asked: In the past two weeks, what percentage of students at your school do you think had five or more drinks at a sitting? (One drink = one shot of alcohol, 12-ounce can of beer, mixed drink containing 1 or 1.5 ounces of alcohol, 12-ounce wine cooler, or 5-ounce glass of wine.)

High-Risk Drinking Status	Students' Perception of High-Risk Drinking by School Peers	Actual High-Risk Drinking Rate
All Students	38.2%	
		32.5%
High-Risk Drinkers	49.1%	of All Students
Non-High-Risk Drinkers	32.9%	

The blood alcohol content of a student on the most recent socializing/partying occasion was calculated based on answers to four different survey questions (gender, current body weight, amount of alcohol consumed, and time period of consumption). It should be noted that the BAC calculated in this study is an estimate. This information is self-reported, and students tend to underestimate the actual amount of alcohol they consume.

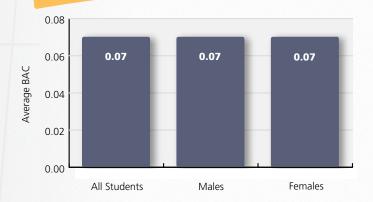
The average estimated blood alcohol content for both male and female students who completed the 2008 College Student Health Survey, based on the last time the student partied/ socialized, is **0.07**.

# **Blood Alcohol Content**

Blood alcohol content (BAC) measures the percentage of alcohol in a person's blood. The calculation of BAC is based on a simple formula that takes into account the following factors:

- Gender
- Current body weight
- Amount of alcohol consumed (number of drinks)
- Time period of consumption
- Concentration of alcohol in the beverage consumed (based on the alcohol content of one typical can of beer containing 4.5% alcohol)

## **Average Estimated Blood Alcohol Content** All Students by Gender



# **Average Estimated Blood Alcohol Content** All Students by Age



The average estimated BAC levels for students range from **0.05** to **0.09**, with the estimated BAC for all survey respondents averaging **0.07**. Students ages 21-23 report estimated BAC levels of **0.09**, which exceed the legal driving limit of 0.08 for individuals of legal drinking age.

# **Negative Consequences of Alcohol/Drug Use**

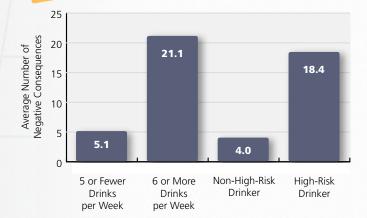
Negative Consequences Due to Alcohol/Drug Use	Percent of Survey Respondents
Had a Hangover	55.9
Performed Poorly on a Test or Important Project	20.1
Been in Trouble with Police, Residence Hall, or Other College Authorities	6.2
Damaged Property, Pulled Fire Alarms, etc.	1.7
Got Into an Argument or Fight	20.7
Got Nauseated or Vomited	38.0
Driven a Car While Under the Influence	19.2
Missed a Class	21.3
Been Criticized by Someone I Know	22.1
Thought I Might Have a Drinking or Other Drug Problem	9.0
Had a Memory Loss	21.2
Done Something I Later Regretted	24.9
Been Arrested for DWI/DUI	1.1
Have Been Taken Advantage of Sexually	3.7
Have Taken Advantage of Another Sexually	0.5
Tried Unsuccessfully to Stop Using	3.2
Seriously Thought About Suicide	3.5
Seriously Tried to Commit Suicide	0.7
Been Hurt or Injured	8.3

In an attempt to understand the relationship between alcohol/drug use and alcohol/drug-related negative consequences, survey respondents were asked which negative consequences they have experienced as a result of drinking or drug use. The list includes 19 consequences that range from mild to severe. Respondents were instructed to indicate which consequences they experienced and the number of times they experienced each consequence within the course of the past year. The consequences were tallied and the number of occurrences ranged from 0 to 10, resulting in a maximum possible score of 190.

Nearly one-fifth (19.2%) of all students report having driven a car while under the influence of alcohol or drugs. Among all students, 21.3% report missing a class and 20.1% report performing poorly on a test or project as a result of alcohol/drug use.

There appears to be a strong association between the average number of drinks students consumed per week and the total number of reported negative consequences they experienced over the past 12 months. There also appears to be an association between engaging in high-risk drinking within the past two weeks and reported negative consequences.

# **Average Number of Negative Consequences** All Students by Average Number of Drinks and High-Risk Drinking



Students were asked if they would call 911 when someone "passes out" due to alcohol/drug use and they are unable to wake the individual. In this example of a situation in which 911 must be called, 63.7% of all students report they would be "very likely" to call for emergency assistance

# Likelihood of Calling 911 in an **Alcohol/Drug-Related Situation**

All Students

		Percent	
Response	All Students	Did Not Use Alcohol Within the Past 30 Days	Did Use Alcohol Within the Past 30 Days
Very Likely	63.7	74.2	59.0
Somewhat Likely	22.5	17.1	24.9
Somewhat Unlikely	9.2	5.0	11.1
Very Unlikely	4.6	3.7	5.0

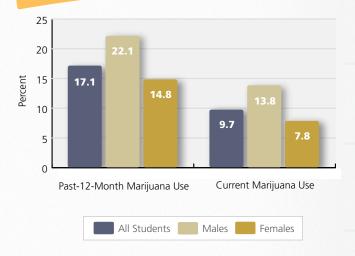
The rates for the negative consequences identified are generally three to four times higher among students who have engaged in highrisk drinking compared to students who have not engaged in high-risk drinking. Approximately two out of five (41.0%) students who have engaged in high-risk drinking have driven while intoxicated one or more times in the past 12 months.

# **High-Risk Drinking and Selected Consequences\*** All Students

	Percent		
Negative Consequences	All Students	Non-HRD	HRD
Driven While Intoxicated	19.2	8.8	41.0
Argument	20.7	11.0	40.8
Poor Test/Project	20.1	11.3	38.5
Missed Class	21.3	11.3	42.2
Been Taken Advantage of Sexually (Includes Males and Females)	3.7	1.9	7.5

<sup>\*</sup>Note: The rate for high-risk drinking is based on behavior in the past two weeks while the rate for negative consequences is based on reported experiences within the previous 12-month period.

# Marijuana Use—Past 12 Months and Current All Students by Gender



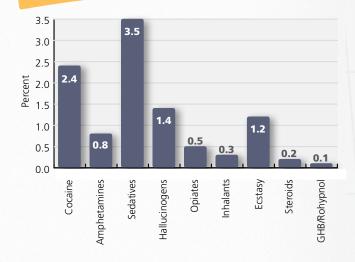
The rate for any marijuana use within the past 12 months is **17.1%** for all students who completed the 2008 College Student Health Survey, while the *current marijuana use* rate is **9.7%** for all students. Both the past-12-month and current marijuana use rates are higher for males than for females.

### **Definitions:**

Past-12-Month Marijuana Use
Any marijuana use within the past year.

# Current Marijuana Use Any marijuana use within the past 30 days.

### Selected Drug Use–Past 12 Months All Students



The three illicit drugs most commonly used by students are sedatives (3.5%), cocaine (2.4%), and hallucinogens (1.4%). Further analysis shows that among students, 6.3% report having used at least one of the nine listed illicit drugs, with drug use ranging from 0.1% for GHB/Rohypnol to 3.5% for sedatives.

### Results

# Personal Safety and Financial Health

The health of students and their subsequent success in academic life depends on a multitude of factors both intrinsic and extrinsic to the individual. Safety and personal finances are natural sources of concern for students, parents, and college personnel. A safe campus offers students the opportunity to pursue learning in an environment free from threats to their physical or emotional well-being. As college populations become more diverse, the challenge of creating a safe environment becomes more complex. Students' decisions related to finances also affect their academic success. This section concentrates on the areas of personal safety and financial health.

#### **National Comparison**

Though many efforts are made to reduce violence and victimization on campus, these unfortunate events still occur. Current data show that almost one in six (17.6%) women and one in 33 (3.0%) men in the United States have been victims of rape or attempted rape in their lifetime. 10 Based on estimates by the National Institute of Justice, 20.0% of American women experience rape or attempted rape while in college, but fewer than 5.0% of college rape victims report the incident to the police.11

Financial health is another area of concern. More than four in five (83%) college students in the United States have at least one credit card, and nearly one-half (47%) have four or more credit cards. 12 The average credit card debt per U.S. college student is \$2,327.12 More than two-fifths (41.9%) of college students report that they participated in some type of gambling activity during the previous school year.13

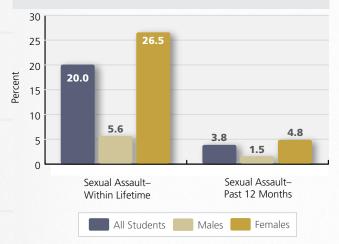
More than one in four (26.5%) female students who completed the 2008 College Student Health Survey report experiencing a sexual assault within their lifetime, with 4.8% reporting having been assaulted within the past 12 months. Male students have experienced sexual assault at lower rates, with 5.6% reporting an assault within their lifetime and 1.5% reporting an assault within the past 12 months.

#### **Sexual Assault-Lifetime and Past 12 Months** All Students by Gender

Students were asked to answer the following two questions:

Within your lifetime or during the past 12 months, have you:

- Experienced actual or attempted sexual intercourse without your consent or against your will?
- Experienced actual or attempted sexual touching without your consent or against your will?



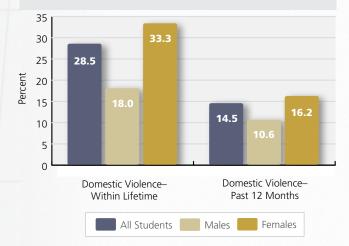
Among students who completed the 2008 College Student Health Survey, one in three (33.3%) females and more than one in six (18.0%) males report experiencing domestic violence within their lifetime. Further examination of data shows that 19.0% of students report either sexually assaulting or inflicting domestic violence on another person within their lifetime. Of those who report being a perpetrator of sexual assault or domestic violence, 38.9% indicate they have been a victim of a sexual assault within their lifetime.

#### **Domestic Violence-Lifetime and Past 12 Months** All Students by Gender

Students were asked to answer the following two questions:

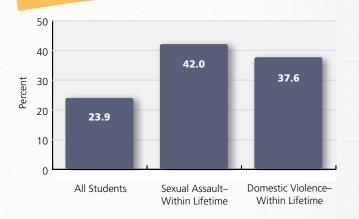
Within your lifetime or during the past 12 months, have you:

- Been slapped, kicked, or pushed by your significant other or spouse/partner?
- Been hurt by threats, "put-downs," or yelling by your significant other or spouse/partner?



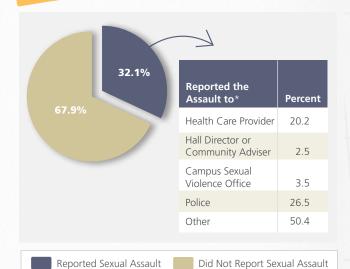
#### **Depression Rates-Lifetime**

All Students by Sexual Assault/Domestic Violence



For students who report being victims of sexual assault, 42.0% also say they have been diagnosed with depression within their lifetime; 37.6% of victims of domestic violence say they have had a diagnosis of depression within their lifetime. It should be noted these rates are higher than the lifetime depression rate reported among all students.

#### **Sexual Assault Reporting by Victims-Lifetime**



\*Note: Students may have reported incident to individuals in more than one category.





Theft Victims

Non-Victims

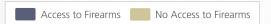
More than one in eight (13.1%) students who completed the 2008 College Student Health Survey were theft victims within the past 12 months. Of those who report experiencing a theft, 77.7% say the amount of the theft was \$499 or less.

More than one-tenth (11.5%) of students report they have immediate access to a firearm, 19.3% for males and 8.1% for females. Of those who have access to a firearm, 41.3% report they have access to a handgun.

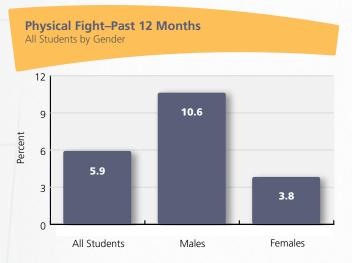
Further analysis shows that 8.1% of students state they carried a weapon (e.g., gun, knife) within the past 12 months. This does not include carrying a weapon while hunting.





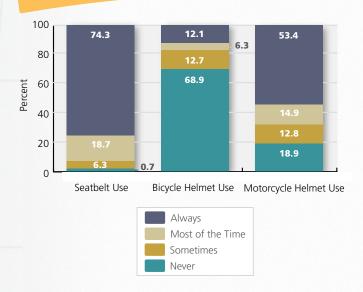


Male students are more than twice as likely to report having engaged in a physical fight over the past 12 months as female students (10.6% vs. 3.8%, respectively).



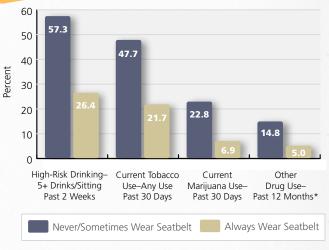
Among students who rode in a car, 93.0% report wearing a seatbelt always or most of the time while in the car. Only 18.4% of students who rode a bicycle report wearing a helmet always or most of the time while riding the bicycle. Approximately two-thirds (68.3%) of students who rode a motorcycle report they wear a helmet always or most of the time while on the motorcycle.

#### **Helmet and Seatbelt Use-Past 12 Months** All Students



#### **Relationship Between Seatbelt Use** and High-Risk Behaviors

All Students

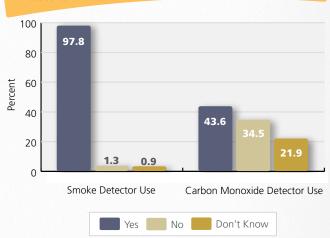


<sup>\*</sup>Does not include marijuana use.

There appears to be an association between seatbelt use and various high-risk behaviors. Students who report they always wear a seatbelt while riding in a car have lower rates of high-risk drinking, current tobacco use, current marijuana use, and other drug use compared to students who indicate they do not always wear a seatbelt.

### **Smoke Detector and Carbon Monoxide Detector Present in Residence**

All Students



Nearly all (97.8%) students who completed the 2008 College Student Health Survey report having a smoke detector in their place of residence, whereas only 43.6% of students report having a carbon monoxide detector.

#### **Injuries Sustained-Past 12 Months** All Students

Type of Injury	Percent
Assaulted by Another Person (Nonsexual)	1.9
Burned by Fire or a Hot Substance	6.3
Motor Vehicle Related	2.9
Team Sports	8.3
Individual Sports	5.8
Bicycle Related	0.9
In-line Skating	0.7
Skate Boarding	0.4
Falls	13.2
Other	12.1
Not Applicable–I Was Not Injured	63.4

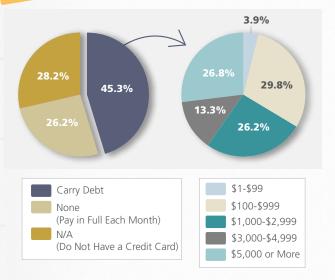
More than one-third (36.6%) of students report experiencing at least one injury over the past 12 months. The injuries most commonly reported during this period are due to falls and miscellaneous causes.

Almost one-half (45.3%) of all students report carrying some level of credit card debt over the past month. Of those who carry a monthly credit card balance, 66.3% report the debt as \$1,000 per month or more.

#### **Definition:** Current Credit Card Debt

Any unpaid balance at the end of the past month.

#### **Current Credit Card Debt** All Students



The rate of high credit card debt increases from 15.2% among first-year students to 48.7% among fifth-year students. More than two-fifths (43.7%) of graduate/professional students report high credit card debt.

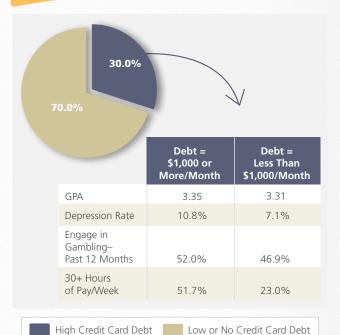
#### **Definition:** High Credit Card Debt

A monthly debt of \$1,000 or more.

#### **High Credit Card Debt and Class Status** All Students



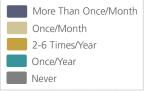
#### Impact of Credit Card Debt All Students



Students who carry a high level of credit card debt work more hours for pay per week, have a higher depression rate, and have a higher rate of engaging in gambling than students who carry no or a low level of credit card debt. However, students who carry a high level of credit card debt have a slightly higher average GPA compared to students who carry no or a low level of credit card debt.

## **Gambling Frequency–Past 12 Months**All Students





Nearly half (48.4%) of students who completed the 2008 College Student Health Survey report engaging in gambling over the past 12-month period. Less than one in ten (8.3%) report gambling at least once a month. Of the 48.4% who gambled within the past year, 7.0% reported spending \$100 or more per month.

## Results

# Nutrition and Physical Activity

For many students, the college years represent a time of new experiences and increased opportunities to make personal health decisions. Some of these decisions encompass the areas of nutrition and physical activity. Students are on their own, free to eat what they want, when they want. Busy academic and social schedules can take priority over eating well and exercising regularly. Class and work schedules vary from day to day and change every semester. Lifestyle changes, peer pressure, and limited finances may lead to an increase in stress, triggering overeating that result in weight gain. In addition, the steady availability of a wide variety of food, both nutritious and not so nutritious, can make wise food choices difficult.

#### **National Comparison**

Research shows that young adults in the United States generally eat fewer fruits and vegetables but are more physically active compared to older adults.<sup>1,14</sup> Young adults between the ages of 18 and 24 (30.1%) are slightly less likely than all adults (32.6%) to eat fruits two or more times per day. Fewer young adults (20.9%) than all adults (27.2%) eat vegetables three or more times per day. 14 Young adults between the ages of 18 and 27 report consuming breakfast an average of 3.1 days per week and consuming fast food an average of 2.5 days per week. 15 The rate of obesity among young adults ages 18 to 29 is 17.7%.16

Nationwide, nearly all young adults between the ages of 18 and 24 (89.1%) report participating in at least one physical activity during the last month; by comparison, the participation rate for all adults is 76.1%.1 Approximately three out of five (59.4%) 18- to 24-year-olds report engaging in at least 30 minutes of moderate physical activity five or more days per week or at least 20 minutes of vigorous physical activity three or more days per week; for all adults, the rate is 48.7%.1 Young adults 18 to 24 (40%) also engage in at least 20 minutes of vigorous physical activity three or more days per week more frequently than all adults (27.4%).1

Body mass index (BMI) is a common and reliable indicator of body fatness.<sup>17</sup> BMI is based on a mathematical formula that takes into account both a person's height and weight. BMI equals the weight in kilograms divided by the height in meters squared  $(BMI = kg/m^2)$ . The table to the right presents weight categories based on BMI ranges.

Nearly half (46.2%) of all students who completed the 2008 College Student Health Survey fall within the overweight and obese/extremely obese categories. This is based on selfreported height and weight.

Data analysis shows that the average body mass index for male survey respondents is 26.4, and the average BMI for female survey respondents is 25.8. For both male and female students, these averages fall within the overweight category. More than half (53.8%) of males and more than twofifths (42.9%) of females fall within the overweight or obese/extremely obese categories.

**BMI Category** All Students

10

3.2

Underweight

ı	BMI Range	Weight Category
	Less Than 18.5	Underweight
	18.5 to 24.9	Normal Weight
	25.0 to 29.9	Overweight
	30.0 to 39.9	Obese
	40.0 and Greater	Extremely Obese
	60	
	50	
Percent	40	50.6
	30	
	20	26.6

Normal

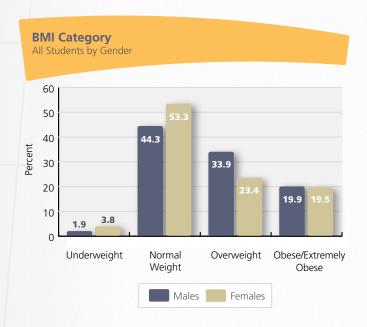
Weight

Overweight

19.6

Obese/Extremely

Obese



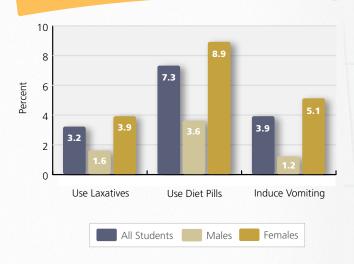
#### Weight-Related Goals All Students by BMI Category



As BMI increases, the proportion of students who report they are attempting to lose weight also increases. However, **14.1%** of students whose BMI falls within the underweight category also report they are attempting to lose weight.

### **Engagement in Weight-Related Behavior**

All Students by Gender



Survey respondents were asked to report their engagement in any of the following activities in an attempt to control their weight: laxative use, diet pill use, and induced vomiting. Compared to males, females engage in these behaviors at higher rates.

### **Engagement in Weight-Related Behavior** All Students by BMI Category

	Percent			
	Underweight	Normal Weight	Overweight	Obese/ Extremely Obese
Use Laxatives	2.8	3.3	3.0	3.4
Use Diet Pills	1.6	5.7	7.8	11.7
Induce Vomiting	3.5	4.3	3.4	3.4

Students classified as obese/extremely obese report the highest rates of laxative use and diet pill use. The highest rate of induced vomiting is found among students with BMIs that fall within the normal weight category.

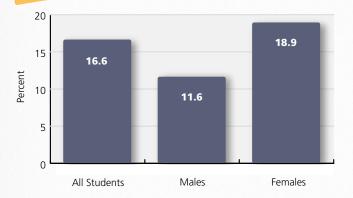
As with other weight-related behaviors, females who completed the 2008 College Student Health Survey engage in binge eating at a higher rate than males. Nearly one out of five (18.9%) females report they had engaged in binge eating over the past 12 months.

As BMI increases, the rate of reported binge eating behavior among students also increases.

Students with BMIs that place them within the underweight category have the highest rate of never eating breakfast within the past seven days. The highest rates of fast food consumption and eating at a restaurant at least once a week within the past 12 months are found among students classified as obese/extremely obese.

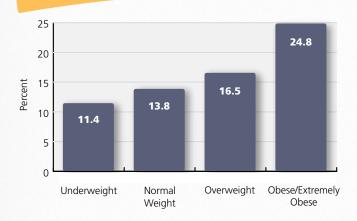
#### **Engagement in Binge Eating Behavior-**Past 12 Months

All Students by Gender



## Engagement in Binge Eating Behavior– Past 12 Months

All Students by BMI Category

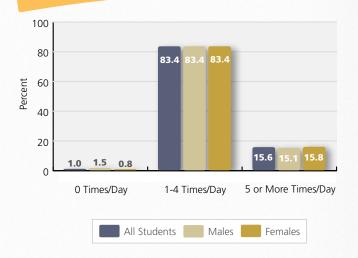


#### **Meal Patterns**

All Students by BMI Category

	Percent			
	Underweight		Overweight	Obese/ Extremely Obese
Breakfast Consum	ption (Past 7 Da	ys)		
0 Days/Week	11.4	8.9	8.7	8.8
1-3 Days/Week	34.5	27.8	29.5	32.8
4-7 Days/Week	54.1	63.3	61.8	58.4
Fast Food Consumption (Past 12 Months)				
1-2 Times/Month or Less	64.3	63.3	55.9	47.9
Once/Week or More	35.7	36.7	44.1	52.1
Eat at Restaurant (Past 12 Months)				
1-2 Times/Month or Less	66.3	61.1	56.2	54.6
Once/Week or More	33.7	38.9	43.8	45.4

## **Fruit and Vegetable Consumption–Per Day** All Students by Gender



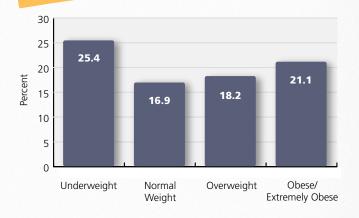
A majority of students who completed the 2008 College Student Health Survey consume fruits and vegetables one to four times per day. Only **15.6%** of all students consume fruits and vegetables five or more times per day. Based on the reported number of times per day fruits and vegetables are consumed, an average number of times per day can be calculated. Males consume fruits and vegetables on average **2.9** times per day, and females consume them on average **3.0** times per day.

### Fruit and Vegetable Consumption—Per Day All Students by BMI Category



Across all BMI categories, the majority of students (ranging from **83.8%** of overweight students to **87.3%** of underweight students) eat fruits and vegetables fewer than five times per day.

#### **Daily Consumption of Regular Soda** All Students by BMI Category



Students classified within the underweight category report the highest level of daily consumption of regular soda, while students classified within the normal weight category report the lowest level of consumption of regular soda. It should be noted that the number of students who consume regular soda on a daily basis does not reflect the actual quantity of soda consumed per day. In the survey, students were also asked to report their consumption of diet soda. Among those classified within the obese/extremely obese category, 28.7% report daily consumption of diet soda compared to only 10.9% of those classified within the underweight category.

Students were asked several questions related to their physical activity level. The two survey questions that relate to recommendations outlined by the CDC (see CDC's recommendations listed at right) are:

In the past seven days, how many hours did you spend doing the following activities?

- Strenuous exercise (heart beats rapidly)
- Moderate exercise (not exhausting)

Based on their response to the two questions, students were classified into one of four physical activity levels (zero, low, moderate, or high). The moderate and high classifications meet the CDC's recommended level of physical activity.

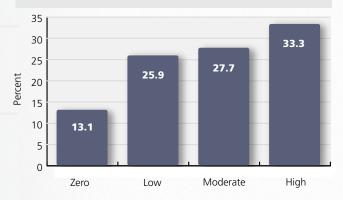
Approximately three-fifths (61.0%) of all students report levels of physical activity that place them in the moderate or high classification, meeting the CDC's recommendations.

For male students, average BMI decreases as physical activity level increases. Female students who engage in a moderate or high level of physical activity have lower average BMIs than female students who engage in a low level of physical activity. It should be noted that the average BMI levels for male and female students in all physical activity levels fall within the overweight category.

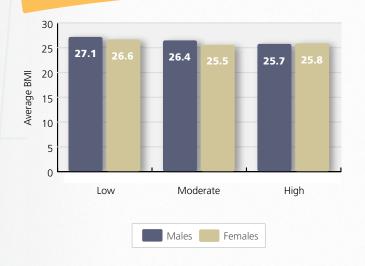
#### **Physical Activity Level** All Students

The Centers for Disease Control and Prevention's recommendations for adults are to:

- Engage in moderate-intensity physical activity for at least 30 minutes on five or more days of the week or
- Engage in vigorous-intensity physical activity for at least 20 minutes on three or more days per week.15



#### **Average BMI** All Students by Physical Activity Level



Additional data analysis shows that

approximately two-thirds (68.7%) of students who completed the 2008

College Student Health Survey report

Zero Screen Time: 0.0 Hours of Viewing Low Level: 0.5 to 1.5 Hours/Day Moderate Level: 2.0 to 3.5 Hours/Day High Level: 4.0 or More Hours/Day



## Results

## Sexual Health

College is a time of great transition. With its increase in freedom and decision-making opportunities, this transitional period poses many challenges for students. Some of the most important decisions facing college students concern sexual health. Choices relating to sexual behavior have the potential for significant, and oftentimes long-term, consequences. So important is the issue of sexual health that in 2001 the U.S. Surgeon General listed "responsible sexual behavior" as one of the 10 leading health indicators for the nation.

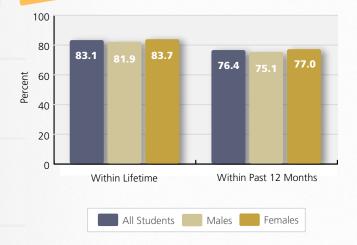
#### **National Comparison**

The majority of young adults in the United States are sexually active, with 68.1% of 18- to 19year-old males, 75.2% of 18- to 19-year-old females, 84.4% of 20- to 24-year-old males, and 86.6% of 20- to 24-year-old females reporting they have had at least one sexual partner in the previous 12 months.<sup>19</sup> Among 20- to 24-year-olds, 52.7% of males and 30.9% of females who have had sexual contact in the previous year used a condom during their last sexual contact. 19 Due to a combination of behavioral, biological, and cultural reasons, sexually active young adults are at increased risk for acquiring sexually transmitted infections.<sup>20</sup> The higher prevalence of STIs among young adults reflects multiple barriers to accessing quality STI prevention services, including lack of health insurance or other ability to pay, lack of transportation, and concerns about confidentiality.<sup>20</sup>

Among 20- to 24-year-olds, 7.1% of males and 13.4% of females report having a sexually transmitted disease other than HIV within their lifetime. 19 The prevalence of chlamydia is 2.8% in females and 0.7% in males who are between the ages of 15 and 24.20 Among all 15- to 24-yearolds, approximately 9.1 million cases of STIs and nearly 5,000 cases of HIV/AIDS are diagnosed annually.21

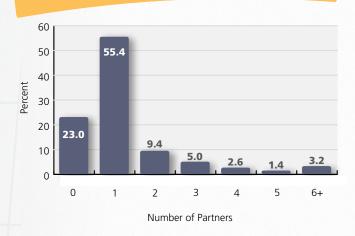
Female students who completed the 2008 College Student Health Survey report slightly higher rates of sexual activity, both within their lifetime and within the past 12 months, compared to male students.

#### **Sexually Active-Lifetime and Past 12 Months** All Students by Gender



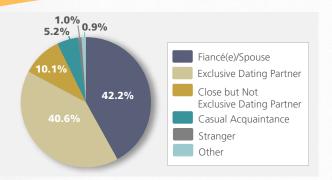
On average, students had 2.2 sexual partners over the past 12-month period. This average is based on the experience of all students, both those who were sexually active and those who were not sexually active. More than three out of four (78.4%) students report that they had 0 or 1 partner within the past 12 months.

#### **Number of Sexual Partners-Past 12 Months** All Students



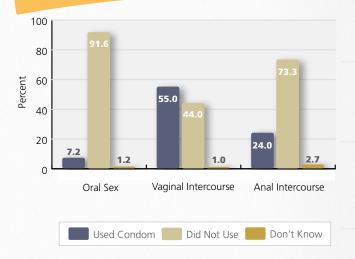
Among students who were sexually active within the past 12 months, more than four out of five (82.8%) report that their most recent sexual partner was either a fiancé(e)/spouse or an exclusive dating partner.

#### Most Recent Sexual Partner-Past 12 Months All Students, Sexually Active





All Students, Sexually Active Within Lifetime (Does not include those who are married or with a domestic partner.)



Data analysis shows that of the 83.1% of students who report being sexually active within their lifetime, 93.0% engaged in vaginal intercourse, 89.0% engaged in oral sex, and 28.4% engaged in anal intercourse.

Among students sexually active within

their lifetime, **55.0%** used a condom the last time they engaged in vaginal

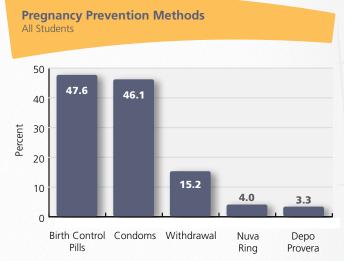
intercourse, 24.0% used a condom

during their last anal intercourse, and

**7.2**% used a condom during their last oral sex. Percents are based solely on

those who indicated they engaged in

the activity.



Type of Method	Percent Who Report Using Method
Intrauterine Device	3.2
Fertility Awareness	2.3
Emergency Contraception	1.6
Ortho Evra	1.1
Diaphragm	0.7
Sponge	0.1
Other	11.5
Don't Know/Can't Remember	1.5

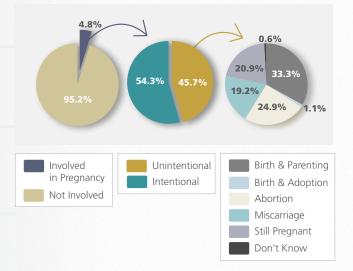
The two most common methods that students report using to prevent pregnancy the last time they engaged in vaginal intercourse are birth control pills (47.6%) and condoms (46.1%). The withdrawal method is reported by 15.2% of students. Other methods of pregnancy prevention reported by students are identified in the table at the lower left.

A total of 4.8% of students who completed the 2008 College Student Health Survey has been involved in a pregnancy within the past 12 months. Of those involved in a pregnancy, 45.7% state it was unintentional.

Among the unintentional pregnancies, 33.3% resulted in birth and parenting, 24.9% resulted in abortion, 19.2% resulted in miscarriage, and 1.1% resulted in birth and adoption.



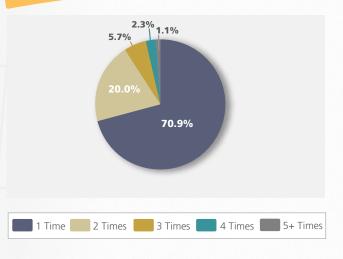
All Students



Analysis shows that within the past 12 months, 11.7% of sexually active female students have used emergency contraception. Among those who used emergency contraception, 70.9% have used it once, 20.0% have used it twice, and 9.1% have used it three or more times within the past 12 months.

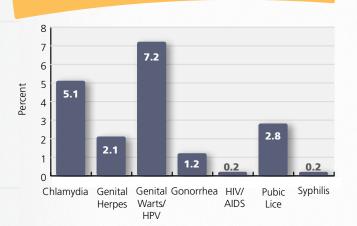
### **Emergency Contraception Use-Past 12 Months**

Female Students, Sexually Active

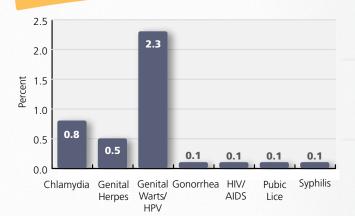


Among students who have been sexually active within their lifetime, 14.6% report being diagnosed with a sexually transmitted infection within their lifetime. Genital warts/human papilloma virus (7.2%) and chlamydia (5.1%) are the two most commonly diagnosed sexually transmitted infections.

#### **Sexually Transmitted Infections-Lifetime** All Students, Sexually Active



## **Sexually Transmitted Infections–Past 12 Months** All Students, Sexually Active



Analysis shows that a total of 3.5% of students who report having been sexually active within their lifetime also report having been diagnosed with a sexually transmitted infection within the past 12 months.

## **Implications**

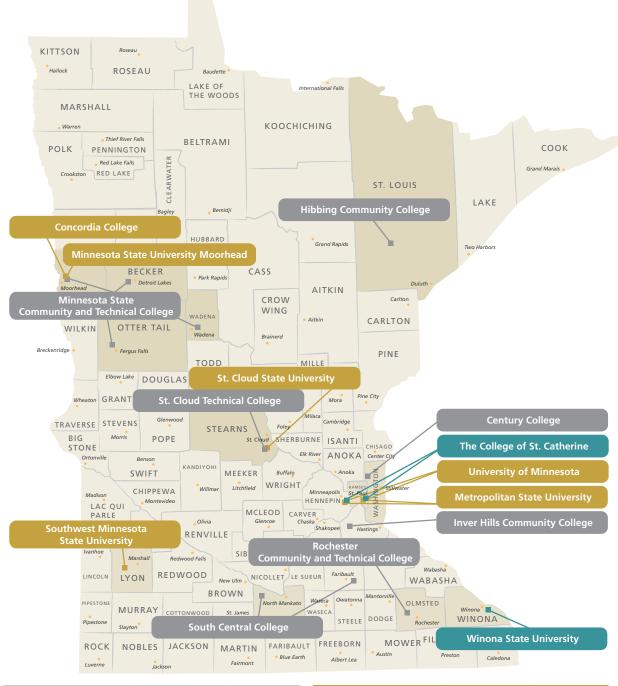
# Healthy individuals make better students, and better students make healthier communities.

Results from the 2008 College Student Health Survey presented in this report document the health and health-related behaviors of students enrolled in the participating institutions. These data, therefore, offer a comprehensive look at the diseases, health conditions, and health-related behaviors that are impacting students attending Minnesota's postsecondary schools. Identification of these health-related issues is critical because the health of Minnesota's college students affects not only their academic achievement but also the overall health of our society.

While it is intuitively obvious that health conditions can affect academic performance, the link to overall societal health is more subtle but no less profound. Given that there are now more students enrolled in postsecondary institutions than in high schools, that college students help set the norms of behavior for our society and serve as role models for younger students, that college students are establishing and solidifying lifestyles and behaviors that will stay with them for the rest of their lives, and that obtaining a college degree is one of the major determinants of future health and economic status, the importance and the impact of the health of college students on our society becomes evident.

## **Appendix 1**

Colleges and Universities Participating in the 2008 College Student Health Survey



Two-Year Schools	Location	Enrollment– Spring 2008*
Century College	White Bear Lake, MN	11,872
Hibbing Community College	Hibbing, MN	1,934
Inver Hills Community College	Inver Grove Heights, MN	7,644
Minnesota State Community and Technical College	Detroit Lakes, MN Fergus Falls, MN Moorhead, MN Wadena, MN	7,642
Rochester Community and Technical College	Rochester, MN	7,791
South Central College	Faribault, MN Mankato, MN	4,824
St. Cloud Technical College	St. Cloud, MN	5,053

*Includes f	omit III	and	part time	ctudonte
*Includes f	uli-time	anu	part-time	students.

Location	Spring 2008*
Moorhead, MN	2,801
Minneapolis, MN St. Paul, MN	9,021
Moorhead, MN	9,185
Marshall, MN	7,353
St. Cloud, MN	19,671
Minneapolis, MN St. Paul, MN	362
Location	Enrollment– Spring 2008*
Minneapolis, MN St. Paul, MN	4,907
Winona, MN	9,168
	Moorhead, MN Minneapolis, MN St. Paul, MN Moorhead, MN Marshall, MN St. Cloud, MN Minneapolis, MN St. Paul, MN Location Minneapolis, MN St. Paul, MN

# **Appendix 2**

### 2008 College Student Health Survey Demographics Based on Student Response

	All Students
Average Age (Years)	26.3
Age Range (Years)	18-89
18-24 Years	60.8%
25 Years or Older	39.2%
Average GPA	3.32
Class Status	
First-Year Undergraduate	22.3%
Second-Year Undergraduate	21.2%
Third-Year Undergraduate	19.9%
Fourth-Year Undergraduate	15.0%
Fifth-Year Undergraduate	10.7%
Graduate or Professional	10.9%
Gender	
Male	30.8%
Female	69.0%
Transgender/Other	0.1%
Unspecified	0.1%
Ethnic Origin	
African American/Black	3.9%
American Indian/Alaskan Native	1.5%
Asian/Pacific Islander	5.0%
Latino/Hispanic	2.1%
Middle Eastern	0.4%
Caucasian/White	88.9%
Other	1.4%
Current Residence	
Residence Hall or Fraternity/Sorority	15.9%
Other	84.1%

## **Glossary**

#### Current Alcohol Use

Any alcohol use within the past 30 days.

#### Current Credit Card Debt

Any unpaid balance at the end of the past month.

#### Current Marijuana Use

Any marijuana use within the past 30 days.

#### Current Tobacco Use

Any use of tobacco in the past 30 days. Tobacco use includes both smoking and smokeless tobacco.

#### High Credit Card Debt

A monthly debt of \$1,000 or more.

#### High-Risk Drinking

Consumption of five or more alcohol drinks at one sitting within the past two weeks for both males and females. A drink is defined as a bottle of beer, wine cooler, glass of wine, shot glass of liquor, or mixed drink.

#### Past-12-Month Alcohol Use

Any alcohol use within the past year.

#### Past-12-Month Marijuana Use

Any marijuana use within the past year.

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#### Published November 2008

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