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College Student Health Survey Report

## HEALTH AND HEALTH-RELATED BEHAVIORS Minnesota Postsecondary Students

University of Minnesota

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University of Minnesota

## Table of Contents

Introduction ..... v
Survey ..... vii
Methodology ..... vii
Analysis Summary ..... viii
Results ..... 1
Health Insurance and Health Care Utilization ..... 1
Mental Health ..... 7
Tobacco Use ..... 13
Alcohol Use and Other Drug Use ..... 19
Personal Safety and Financial Health ..... 27
Nutrition and Physical Activity ..... 35
Sexual Health ..... 43
Implications ..... 49
Appendices ..... 51
Appendix 1
Colleges and Universities Participating in the 2008 College Student Health Survey ..... 51
Appendix 2
2008 College Student Health Survey Demographics Based on Student Response ..... 52
Glossary ..... 53
References ..... 55

## 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 $32.4 \%$.

[^0]
## 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).

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. ${ }^{1}$ 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 $71.9 \%$. $^{1,2}$ More young males ( $31.1 \%$ ) than young females ( $25.1 \%$ ) lack health insurance coverage. ${ }^{2}$ Among all age groups, young adults (70.8\%) are least likely to identify a usual place for medical care. ${ }^{2}$

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 $\mathbf{1 1 . 2 \%}$. Males tend to have a slightly higher uninsured rate compared to females ( $\mathbf{1 4 . 6} \%$ vs. $\mathbf{9 . 7} \%$, respectively). International students report an uninsured rate of $\mathbf{3 3 . 3} \%$.

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 $\mathbf{1 6 . 1 \%}$ 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, $\mathbf{7 . 6 \%}$ 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

Spouse Health Care Coverage


Dependent Children Health Care Coverage


Health Insurance and Number of Sick Days-

## Past 30 Days

All Students


Health Insurance and Health Status
All Students


Preventive Health Care UtilizationPast 12 Months
All Students by Gender


[^1]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. ${ }^{3}$

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.

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

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 ( $\mathbf{1 0 . 3 \%}$ ), 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 <br> Service | Student Counseling Service | Hospital | Community Clinic | HMO | 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 <br> (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 |

[^2]
## Immunization Status

All Students


Average Number of Days Affected by Illness
All Students by Gender

|  | Average Number of Days Affected- <br> Past 30 Days |  |
| :--- | :---: | :---: |
| Illness | Males | Females |
| Poor Physical Health | 3.0 | 4.0 |
| Poor Mental Health | 4.2 | 6.1 |
| Poor Physical and/or <br> Mental Health <br> Affected Daily Activities | 2.3 | 3.0 |

Diagnosed With Acute ConditionLifetime and Past 12 Months
All Students

|  | Percent Who Report Being Diagnosed |  |
| :--- | :---: | :---: |
|  | Within Lifetime | Within Past <br> 12 Months |
| Acute Condition | 4.3 | 0.7 |
| Chlamydia | 1.0 | 0.1 |
| Gonorrhea | 0.4 | 0.1 |
| Hepatitis A | 0.9 | 0.1 |
| Lyme Disease | 10.5 | 1.3 |
| Mononucleosis | 2.5 | 0.1 |
| Pubic Lice | 49.0 | 8.3 |
| Strep Throat | 0.2 | 0.1 |
| Syphilis | 27.1 | 9.3 |
| Urinary Tract Infection |  |  |

Diagnosed With at
Least One of the Above

Acute Conditions
60.9
rix

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n
$$

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.

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.

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 $\mathbf{9 . 3} \%$ 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 $\mathbf{1 7 . 6} \%$ 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 ( $\mathbf{1 7 . 1 \%}$ 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 ConditionLifetime and Past 12 Months
All Students

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

## 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. ${ }^{4}$ In addition, approximately 565,000 foreign students are studying at U.S. colleges and universities. ${ }^{4}$ 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. ${ }^{5}$ 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\%). ${ }^{6}$ The lifetime prevalence of major depressive episode for 18 - to 25 -year-olds is $15.0 \% .^{3}$ 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. ${ }^{6}$

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.

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.

Diagnosed Mental Health ConditionLifetime and Past 12 Months All Students

|  | Percent Who Report <br> Being Diagnosed |  |
| :--- | :---: | :---: |
| Mental Health Condition | Within <br> Lifetime | Within <br> 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/ | 3.5 | 1.5 |
| Performance Anxiety |  |  |

Diagnosis of Any Mental Health ConditionLifetime and Past 12 Months
All Students by Gender


| Mental Health Stressors All Students |  |
| :---: | :---: |
|  | Percent |
| Stressor | Experienced Within Past 12 Months |
| Getting Married | 3.2 |
| Failing a Class | 10.9 |
| Serious Physical Illness of Someone Close to You | 18.1 |
| 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 |
| Being Arrested | 1.7 |
| 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 <br> (None of the Above Happened to Me) | 28.8 |
| Report Experiencing One or Two of the Above Stressors | 43.4 |
| Report Experiencing Three or More of the Above Stressors | 26.4 |

## Mental Health Stressors and Risky Behavior

 All Students

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 $\mathbf{2 6 . 4} \%$ report experiencing three or more stressors over that same time period.

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 ( $\mathbf{2 6 . 6 \%}$ ) 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 $\mathbf{5 . 1 \%}$ 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 $\leq 1$ Unmanaged Stress (Index >1)

## Stress and Mental Health-

 Acute and Chronic Condition Diagnosis All Students|  | Percent |  |
| :--- | :---: | :---: |
|  | Unmanaged <br> Stress <br> (Index >1) | Managed <br> Stress <br> (Index 5 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 <br> Social Phobia/ <br> Performance Anxiety | 7.9 | 1.9 |

Depression DiagnosisLifetime and Past 12 Months
All Students by Gender


Depression DiagnosisLifetime and Past 12 Months All Students by Age Group


Currently Taking Medication for Depression All Students by Gender


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 Mental Health Problems Other Than Depression All Students by Gender


Overall, $\mathbf{1 0 . 2 \%}$ 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.

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 $\mathbf{4 . 2 \%}$ of females report being diagnosed with anorexia and/or bulimia within their lifetime.

Eating Disorder Diagnosis-Lifetime
All Students by Gender


Number of Days of Adequate SleepPast Seven Days
All Students


## Adequate Sleep and Stress

All Students


Days per Week

## 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. ${ }^{7}$ Among young adults ages $18-25,5.2 \%$ used smokeless tobacco in the previous month. ${ }^{6}$ Current cigarette smokers are more likely to use other tobacco products, alcohol, or illicit drugs than nonsmokers. ${ }^{6}$ 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 $\mathbf{2 6 . 1 \%}$, with a daily tobacco use rate of $\mathbf{1 0 . 7} \%$. 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.

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 ( $\mathbf{2 1 . 3} \%$ ).

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


Current Smokeless Tobacco Use
All Students by Gender


Quit Attempts-Past 12 Months
All Students: Current Cigarette Users


## Number of Cigarettes Smoked

All Students: Current Tobacco Users


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 $\mathbf{1 0 . 1}$ per weekday to 11.1 per weekend day. For daily tobacco users, the average number increases from $\mathbf{2 0 . 2}$ per weekday to $\mathbf{2 0 . 9}$ per weekend day.

Students who used tobacco in the past 30 days report the most common locations of their use are in a car,

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


Location of Tobacco Use
All Students: Current Tobacco Users

| Location | Percent Who Indicate Use <br> 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 |
| Fraternity/Sorority | 3.5 |
| Other | 27.1 |

## Exposure to Secondhand Smoke

All Students

| Location | Percent of <br> Nonsmokers <br> Who Indicate <br> Exposure | Percent of <br> Smokers <br> Who Indicate <br> Exposure | Percent of <br> All Students <br> Who Indicate <br> 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, $\mathbf{2 6 . 8} \%$ report being exposed to some level of secondhand smoke per day, whereas during the weekend this exposure rate increases to $\mathbf{3 6 . 2} \%$

## Number of Hours Exposed to Secondhand Smoke

 All Students: Current Smokers

Weekday


Weekend Day


Tobacco Use Status and High-Risk Drinking All Students


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 $\mathbf{5 6 . 6} \%$ 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 $\mathbf{3 9 . 0} \%$ on a weekend day.

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. $\mathbf{2 3 . 6}$ \% 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 ( $\mathbf{2 4 . 5} \%$ ) compared to non-tobacco users ( $\mathbf{4 . 4} \%$ ). This is a more than fivefold increase in the rate.

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 Current Marijuana Use All Students


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.? 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. ${ }^{6}$ 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. ${ }^{7}$ Among college students, $6.0 \%$ have used amphetamines, $5.1 \%$ have used cocaine, and $0.3 \%$ have used heroin in the previous year. ${ }^{7}$

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. $\mathbf{8 1 . 4 \%}$, respectively).

## Definition:

Past-12-Month Alcohol Use
Any alcohol use within the past year.

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 ( $\mathbf{7 0 . 9}$ \% vs. $67.9 \%$, respectively).

## Definition:

## Current Alcohol Use

Any alcohol use within the past 30 days.

## The rate of current alcohol

consumption increases from $\mathbf{4 9 . 8 \%}$ among 18 -year-old students to $\mathbf{8 0 . 5 \%}$ among 22 -year-old students. The rate of this behavior peaks between the ages of 21 and 26.

Alcohol Use-Past 12 Months
All Students by Gender


Current Alcohol Use
All Students by Gender


Current Alcohol Use
All Students by Age


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.

High-Risk Drinking
All Students by Gender


High-Risk Drinking
All Students by Age


Male students report a higher rate of high-risk drinking compared to female students ( $\mathbf{4 4 . 5} \%$ 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 $\mathbf{3 8 . 2} \%$, and the actual high-risk drinking rate is $\mathbf{3 2 . 5 \%}$. 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\%.

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 $\mathbf{0 . 0 7}$

High-Risk Drinking Rates on CampusPerceived 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 <br> Drinking Status | Students' Perception of <br> High-Risk Drinking by <br> School Peers | Actual <br> High-Risk <br> Drinking Rate |
| :--- | :---: | :---: |
| All Students | $38.2 \%$ |  |
| High-Risk Drinkers | $49.1 \%$ | $32.5 \%$ <br> of All Students |
| Non-High-Risk Drinkers | $32.9 \%$ |  |

Average Estimated Blood Alcohol Content All Students by Age


The average estimated BAC levels for students range from $\mathbf{0 . 0 5}$ to $\mathbf{0 . 0 9}$, with the estimated BAC for all survey respondents averaging $\mathbf{0 . 0 7}$. Students ages 21-23 report estimated BAC levels of $\mathbf{0 . 0 9}$, which exceed the legal driving limit of 0.08 for individuals of legal drinking age.

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 $\mathbf{2 0 . 1} \%$ report performing poorly on a test or project as a result of alcohol/drug use.

There appears to be a strong
Average Number of Negative Consequences
All Students by Average Number of Drinks and High-Risk Drinking 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.

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, $\mathbf{6 3 . 7} \%$ of all students report they would be "very likely" to call for emergency assistance

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.


Likelihood of Calling 911 in an Alcohol/Drug-Related Situation All Students

|  |  | Percent |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | Did Not Use <br> Alcohol <br> Within <br> the Past | Did Use <br> Alcohol <br> Within <br> the Past <br> 30 |  |
| Response | All Students | Bays |  |  |

High-Risk Drinking and Selected Consequences*
All Students

|  |  | Percent |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  |  | All |  |  |
| Negative Consequences | 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 <br> (Includes Males and Females) | 3.7 | 1.9 | 7.5 |  |

*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


Selected Drug Use-Past 12 Months All Students


The rate for any marijuana use within the past 12 months is $\mathbf{1 7 . 1} \%$ 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.

The three illicit drugs most commonly used by students are sedatives ( $3.5 \%$ ), cocaine ( $\mathbf{2} .4 \%$ ), 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 $\mathbf{5 . 6} \%$ reporting an assault within their lifetime and $1.5 \%$ reporting an assault within the past 12 months
hs.

## 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?



## 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?
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. 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
Among students who completed新


Depression Rates-Lifetime
All Students by Sexual Assaul//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.

Of the students who indicate they have experienced a sexual assault within their lifetime (20.0\%), only 32.1\% state they reported the incident. Of the students who chose to report the incident, 26.5\% reported it to the police and $\mathbf{2 0 . 2} \%$ reported it to a health care provider.

Victim of Theft-Past 12 Months All Students

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

| Reported the |
| :--- | :---: |
| Assault to* |$\quad$ Percent

Reported Sexual Assault $\square$ Did Not Report Sexual Assault

More than one in eight ( $\mathbf{1 3 . 1}$ \%) students who completed the 2008 College Student Health Survey were theft victims within the past 12 months. Of those who report experiencing a theft, $\mathbf{7 7 . 7} \%$ say the amount of the theft was $\$ 499$ or less.
$\square$ Non-Victims

More than one-tenth ( $\mathbf{1 1 . 5 \%}$ ) of students report they have immediate access to a firearm, 19.3\% for males and $\mathbf{8 . 1} \%$ 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 ( $\mathbf{1 0 . 6 \%}$ vs. $\mathbf{3 . 8 \%}$, respectively).

Among students who rode in a car, $\mathbf{9 3 . 0} \%$ report wearing a seatbelt always or most of the time while in the car. Only $\mathbf{1 8 . 4} \%$ 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.

## Access to Firearms

All Students

$\square$ Access to Firearms $\square$ No Access to Firearms

Physical Fight-Past 12 Months
All Students by Gender


Helmet and Seatbelt Use-Past 12 Months All Students


Relationship Between Seatbelt Use and High-Risk Behaviors
All Students

*Does not include marijuana use.

Smoke Detector and Carbon Monoxide Detector Present in Residence
All Students


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.

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 $\mathbf{4 3 . 6} \%$ of students report having a carbon monoxide detector.

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.

Injuries Sustained-Past 12 Months
All Students


| 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 |

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, $\mathbf{6 6 . 3} \%$ 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.

The rate of high credit card debt increases from 15.2\% among first-year students to $\mathbf{4 8 . 7} \%$ 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.

## Current Credit Card Debt

All Students


High Credit Card Debt and Class Status All Students


Impact of Credit Card Debt
All Students


High Credit Card Debt $\square$ Low or No 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 ( $\mathbf{8 . 3 \%}$ ) report gambling at least once a month. Of the $\mathbf{4 8 . 4} \%$ 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. ${ }^{1,14}$ 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. ${ }^{17}$ 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 ( $\mathrm{BMI}=\mathrm{kg} / \mathrm{m}^{2}$ ). 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


| 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 |



BMI Category
All Students by Gender


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, $\mathbf{1 4 . 1 \%}$ 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


Engagement in Weight-Related Behavior
All Students by BMI Category

|  | Percent |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Behavior | 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 |

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.

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 ( $\mathbf{1 8 . 9 \%}$ ) 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

Engagement in Binge Eating BehaviorPast 12 Months
All Students by Gender


Engagement in Binge Eating BehaviorPast 12 Months
All Students by BMI Category


## Meal Patterns

All Students by BMI Category


Breakfast Consumption (Past 7 Days)

| 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 <br> or Less | 64.3 | 63.3 | 55.9 | 47.9 |
| :--- | :---: | :---: | :---: | :---: |
| Once/Week <br> or More | 35.7 | 36.7 | 44.1 | 52.1 |

Eat at Restaurant (Past 12 Months)

| 1-2 Times/Month <br> or Less | 66.3 | 61.1 | 56.2 | 54.6 |
| :--- | :---: | :---: | :---: | :---: |
| Once/Week <br> or More | 33.7 | 38.9 | 43.8 | 45.4 |

Fruit and Vegetable Consumption-Per Day
All Students by Gender


Fruit and Vegetable Consumption-Per Day All Students by BMI Category


Daily Consumption of Regular Soda
All Students by BMI Category


A majority of students who completed the 2008 College Student Health Survey consume fruits and vegetables one to four times per day. Only $\mathbf{1 5 . 6 \%}$ 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 $\mathbf{2 . 9}$ times per day, and females consume them on average $\mathbf{3 . 0}$ times per day.

Across all BMI categories, the majority of students (ranging from $\mathbf{8 3 . 8} \%$ of overweight students to 87.3\% of underweight students) eat fruits and vegetables fewer than five times per day.

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 $\mathbf{1 0 . 9} \%$ 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. ${ }^{18}$



## Average BMI

All Students by Physical Activity Level


## Level of Screen Time

All Students by BMI Category

Screen time levels-zero, low, moderate, and high-were determined based on a survey question that asked respondents to report the average number of hours they watch TV or use the computer in the course of a day:

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


Additional data analysis shows that approximately two-thirds (68.7\%)
of students who completed the 2008
College Student Health Survey report watching TV or using the computer (not for work or school) two hours or more per day. Among all students, 2.2\% report zero screen time, 29.1\% report a low level of screen time, $37.5 \%$ report a moderate level of screen time, and 31.2\% report a high level of screen time

## 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 19-year-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. ${ }^{19}$ 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. ${ }^{20}$ 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. ${ }^{20}$

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.

On average, students had $\mathbf{2 . 2}$ 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.

Among students who were sexually than four out of five ( $\mathbf{8 2} .8 \%$ ) report that their most recent sexual partner was either a fiancé(e)/spouse or an exclusive dating partner.


Pregnancy Prevention Methods
All Students


Among students sexually active within their lifetime, 55.0\% used a condom the last time they engaged in vaginal intercourse, $\mathbf{2 4 . 0} \%$ 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.

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.

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 $\mathbf{4 . 8 \%}$ 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, $\mathbf{4 5 . 7} \%$ 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. $\qquad$ s.


Outcome of Unintended PregnancyPast 12 Months
All Students


Emergency Contraception Use-Past 12 Months
Female Students, Sexually Active


2 Times 3 Times 4 Times
 5+ Times

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- <br> 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 <br> and Technical College | Detroit Lakes, MN <br> Fergus Falls, MN <br> Moorhead, MN <br> Wadena, MN | 7,642 |
| Rochester Community <br> and Technical College | Rochester, MN | 7,791 |
| South Central College | Faribault, MN <br> Mankato, MN | 4,824 |
| St. Cloud Technical College | St. Cloud, MN | 5,053 |

*Includes full-time and part-time students.

| Four-Year Schools | Location | Enrollment- <br> Spring 2008* |
| :--- | :--- | :---: |
| Concordia College | Moorhead, MN | 2,801 |
| Metropolitan State University | Minneapolis, MN <br> St. Paul, MN | 9,021 |
| Minnesota State University <br> Moorhead | Moorhead, MN | 9,185 |
| Southwest Minnesota <br> State University | Marshall, MN | 7,353 |
| St. Cloud State University | St. Cloud, MN | 19,671 |
| University of Minnesota <br> (Veterans Only) | Minneapolis, MN <br> St. Paul, MN | 362 |
| Schools with Two-Year <br> and Four-Year Programs | Location | Enrollment- <br> Spring 2008* |
| The College of St. Catherine | Minneapolis, MN <br> St. Paul, MN | 4,907 |
| Winona State University | Winona, MN | 9,168 |

## 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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[^0]:    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.

[^1]:    *Includes medical exam and/or gynecological exam for females.

[^2]:    *Percent of students who obtained service

