University of Minnesota Driven to Discover

## 2010 college Student Health Survey Report

## Health and Health-Related Behaviors

University of Minnesota-Duluth Students

University of Minnesota

2010 college Student Health Survey Report

## Health and Health-Related Behaviors University of Minnesota-Duluth Students

Introduction ..... iii
Survey ..... v
Methodology ..... v
Analysis Summary ..... vi
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 ..... 33
Sexual Health ..... 39
Implications ..... 43
Appendices ..... 45
Appendix 1Colleges and Universities Participating in the 2010 College Student Health Survey45
Appendix 2
University of Minnesota-Duluth Survey Demographics Based on Student Response ..... 46
Glossary ..... 47
References ..... 49

## 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 college students.

Across the state of Minnesota, seventeen two-year and four-year postsecondary schools joined together with Boynton Health Service at the University of Minnesota in spring 2010 to collect information from 34,097 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. Of the 34,097 students who received a survey, 13,700 students completed the survey, for an overall response rate of $40.2 \%$.

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 13,000 undergraduate and graduate students enrolled in seventeen postsecondary institutions in Minnesota completed the 2010 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 $\$ 500$ (one) at a variety of stores and drawings for eleven iPod touches ${ }^{T M}$.

Randomly selected students were contacted through multiple mailings and e-mails:

- Invitation postcard
- Invitation e-mail
- Reminder postcard and multiple reminder e-mails

A total of 34,097 undergraduate and graduate students from seventeen colleges and universities in Minnesota were invited to participate in the 2010 College Student Health Survey (see Appendix 1 for a list of participating schools).

In addition to the 34,097 randomly selected students, an oversample of 2,180 students who attended one of these seventeen Minnesota schools and were identified as veterans of the United States Armed Forces were also invited to participate in the survey. The survey results for the oversample of veterans will be treated as a separate report.

University of Minnesota-Duluth Methodology Highlights

- 2,842 students from the University of Minnesota-Duluth were randomly selected to participate in this survey.
- 1,198 completed the survey.
- $42.2 \%$ of the students responded.


2010 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 College Student Health Survey asked students if they had ever been diagnosed with depression within their lifetime. For the purpose of illustration, if 100 students completed the survey and 10 of them reported they had been diagnosed with depression within their lifetime, then the lifetime prevalence of depression among this population of students is $10.0 \%$ (10/100).

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 ensures that the sample chosen is representative of the population and 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 care 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, report good health. The majority of young adults in Minnesota (92.5\%) and nationwide (92.2\%) 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 $80.9 \%$ report some kind of health care insurance, and nationwide the number is $70.3 \% .^{1,2}$ More young males (33.9\%) than young females ( $25.4 \%$ ) lack health insurance coverage. ${ }^{2}$ Among all age groups, young adults (69.8\%) 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 attending the University of MinnesotaDuluth (UMD) report an overall uninsured rate of 3.6\%. Males have a slightly higher uninsured rate compared to females ( $4.0 \%$ vs. $3.3 \%$, respectively).

Health Insurance Status-Uninsured All Students

*Does not include international students.

Health Insurance Status-Uninsured
All Students by Age Group


Spouse and Dependent Health Care Coverage All Students


Dependent Children and Health Care Coverage


Health Insurance and Number of Sick DaysPast 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. ${ }^{3}$

Both UMD students with health insurance and students without health insurance report on average 2.6 sick days in the past 30 days.

UMD students with health insurance report a higher rate of diagnosed chronic conditions and a similar rate of diagnosed mental health conditions compared to UMD students without health insurance.

Female students attending the University of Minnesota-Duluth report obtaining routine medical exams, cholesterol checks, and blood pressure checks at higher rates than male students attending the university. Female and male UMD students report obtaining dental exams and cleanings at similar rates.

Health insurance coverage appears to have an impact on whether UMD students obtained routine medical examinations within the past 12 months. Uninsured female students report a lower rate of obtaining a routine medical examination than insured females. However, uninsured male students report a higher rate of obtaining a routine medical examination than insured males.

Routine Medical Examination-Past 12 Months All Students by Gender and Insurance Status

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

Among University of Minnesota-Duluth students, the primary locations for obtaining many health care services appear to be a community clinic. It should be noted that of students who report receiving mental health services, $26.7 \%$ used their school's student counseling service and 22.0\% used their school's health service.

Health Care Service by Location
All Students (Includes Only Those Students Who Report Obtaining a Service in the Past 12 Months)

## Question asked:

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

| Health Care Service <br> (Percent of Students <br> Who Obtained Service) | Percent Who Report Obtaining Service |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Routine Doctor's Visit (88.1) | 24.4 | 0.3 | 17.5 | 45.1 | 1.9 | 19.7 |
| $\begin{aligned} & \text { Dental Care } \\ & (89.1) \end{aligned}$ | 1.5 | 0.1 | 1.9 | 28.3 | 1.6 | 67.4 |
| Mental Health Service (23.1) | 22.0 | 26.7 | 13.7 | 19.5 | 0.4 | 23.8 |
| Testing for Sexually Transmitted Infections (34.6) | 25.4 | 1.0 | 16.4 | 42.0 | 1.9 | 16.7 |
| Treatment for Sexually Transmitted Infections (18.9) | 23.8 | 0.9 | 17.2 | 42.3 | 1.3 | 17.2 |
| $\begin{aligned} & \text { Testing for HIV } \\ & (25.3) \end{aligned}$ | 20.5 | 0.7 | 20.1 | 43.2 | 1.7 | 17.5 |
| Emergency Care (82.5) | 8.2 | 0.4 | 89.5 | 9.4 | 0.6 | 2.7 |
| School Health ServiceStudent Counseling Service |  | Hospital <br> Community Clinic |  |  | HMO <br> Private <br> Practice |  |

Vaccination Status
All Students by Insurance Status


UMD students with health insurance obtain hepatitis $A$, hepatitis $B$, meningitis, and H1N1 influenza vaccinations at higher rates than students at the university without health insurance.

Currently these immunizations are not required for students enrolled in postsecondary institutions. Hepatitis B immunization, however, is required for high school students in Minnesota.

Average Number of Days Affected by Illness All Students by Gender


Compared to male respondents at the University of Minnesota-Duluth, female respondents at the university 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.

| Acute Condition Diagnosis- <br> Lifetime and Past 12 Months <br> All Students |  |  |
| :--- | :---: | :---: |
|  |  |  | Percent Who Report Being Diagnosed

University of Minnesota-Duluth students were asked to report if they have been diagnosed with selected acute illnesses within the past 12 months and within their lifetime.

The acute condition diagnosed most frequently within students' lifetimes was strep throat, with $55.9 \%$ of UMD students reporting having this diagnosis. The acute condition diagnosed most frequently within the past 12 months was urinary tract infection, with $9.7 \%$ of UMD students reporting having this diagnosis. Overall, 63.2\% of students report being diagnosed with at least one acute condition within their lifetime, and 18.0\% 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 students at UMD.

The two most common chronic conditions diagnosed in University of Minnesota-Duluth students are allergies ( $40.1 \%$ lifetime) and asthma (18.2\% lifetime). More than one-half (51.6\%) of students report being diagnosed with at least one chronic condition within their lifetime, and approximately one in six (16.4\%) report being diagnosed with at least one chronic condition within the past 12 months

Chronic Condition DiagnosisLifetime and Past 12 Months All Students

| Chronic Condition | Percent Who Report Being Diagnosed |  |
| :---: | :---: | :---: |
| Alcohol Problems | 1.7 | 0.9 |
| Allergies | 40.1 | 10.1 |
| Asthma | 18.2 | 2.5 |
| Cancer | 0.5 | 0.0 |
| Diabetes Type I | 0.4 | 0.2 |
| Diabetes Type II | 0.3 | 0.1 |
| Drug Problems <br> (Other Than Alcohol) | 1.0 | 0.4 |
| Genital Herpes | 0.6 | 0.2 |
| Genital Warts/ Human Papilloma Virus | 2.2 | 1.2 |
| Hepatitis B | 0.2 | 0.1 |
| Hepatitis C | 0.3 | 0.0 |
| High Blood Pressure | 2.4 | 0.9 |
| High Cholesterol | 2.3 | 0.9 |
| HIV/AIDS | 0.1 | 0.0 |
| Obesity | 3.4 | 1.3 |
| Repetitive Stress Injury | 1.5 | 0.6 |
| Tuberculosis | 0.4 | 0.0 |
| At Least One of the Above Chronic Conditions | 51.6 | 16.4 |

Within Lifetime Within Past 12 Months

## 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 wellbeing 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 $31.0 \%$ are age 25 or older. ${ }^{4}$ In addition, approximately 335,000 foreign undergraduate 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, $58.7 \%$ of 18-to 29-year-olds have been diagnosed with a mental disorder within their lifetime, and $43.8 \%$ 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 past-year prevalence of serious mental illness, i.e., mental illness that results in functional impairment, (7.4\%) and the highest past-year prevalence of major depressive episode (8.7\%). ${ }^{6}$ 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 University of Minnesota-Duluth students, depression and anxiety are the two most frequently reported mental health diagnoses for both lifetime and the past 12 months.

Among UMD students, 24.7\% report being diagnosed with at least one mental health condition within their lifetime. Females report being diagnosed with a mental health condition within their lifetime and within the past 12 months at higher rates than males, which is consistent with gender differences seen in national data.

Additional analysis shows that 13.5\% report being diagnosed with two or more mental health conditions within their lifetime.

Mental Health Condition DiagnosisLifetime and Past 12 Months All Students

| Mental Health Condition | Percent Who Report Being Diagnosed |  |
| :---: | :---: | :---: |
| Anorexia | 0.8 | 0.2 |
| Anxiety | 14.2 | 7.8 |
| Attention Deficit Disorder | 4.2 | 1.1 |
| Bipolar Disorder | 0.3 | 0.3 |
| Bulimia | 0.9 | 0.1 |
| Depression | 15.3 | 4.5 |
| Obsessive-Compulsive Disorder | 1.3 | 0.4 |
| Panic Attacks | 5.8 | 1.6 |
| Post-Traumatic Stress Disorder | 1.7 | 0.4 |
| Seasonal Affective Disorder | 3.3 | 1.5 |
| Social Phobia/ <br> Performance Anxiety | 1.8 | 1.0 |
| Within Lifetime | in Past |  |

Any Mental Health Condition DiagnosisLifetime and Past 12 Months
All Students by Gender

$\left.\begin{array}{|l|c|}\hline \begin{array}{l}\text { Mental Health Stressors } \\ \text { All Students }\end{array} & \\ \hline & \begin{array}{c}\text { Percent } \\ \text { Who Report } \\ \text { Experiencing } \\ \text { Within Past } \\ 12\end{array} \\ \hline \text { Stressorths }\end{array}\right\}$

Mental Health Stressors and Risky Behavior All Students


The most commonly experienced stressors among University of Minnesota-Duluth students are roommate/housemate conflict and the termination of a personal relationship. A total of $44.5 \%$ of students report experiencing one or two stressors within the past 12 months, and $\mathbf{2 3 . 0 \%}$ report experiencing three or more stressors over that same time period.

An association appears to exist between reported number of stressors experienced within the past 12 months and various types of risk-taking behavior. Over the same 12-month period, UMD students who experienced three or more stressors tend to have higher rates of current tobacco use, high-risk drinking, current marijuana use, and high credit card debt compared to students who experienced two or fewer stressors.

Approximately one-fourth (25.8\%) of UMD students report they are unable to manage their stress level. Additional analysis shows that among these students, $10.9 \%$ also report they were diagnosed with depression within the past 12 months. Nearly three-fourths (74.2\%) of UMD students report they are able to manage their level of stress. Only $\mathbf{2 . 2 \%}$ of these students report they were diagnosed with depression within the past 12 months.

Ability to Manage Stress-Past 12 Months All Students

In an attempt to measure effectiveness in managing stress, students were asked 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.


Stress and Mental Health,
Acute, and Chronic Condition Diagnosis
All Students

| Condition | Percent Who Report Being Diagnosed Within the Past 12 Months |  |
| :---: | :---: | :---: |
| Any Acute Condition | 15.4 | 25.5 |
| Any Chronic Condition | 14.1 | 22.9 |
| Anxiety | 5.1 | 15.5 |
| Depression | 2.2 | 10.9 |
| Obsessive-Compulsive Disorder | 0.1 | 1.3 |
| Panic Attacks | 0.9 | 3.3 |
| Social Phobia/ Performance Anxiety | 1.1 | 1.0 |
| Managed Stress (Index $\leq 1$ ) | Unmanaged Stress (Index >1) |  |

Depression Diagnosis-
Lifetime and Past 12 Months
All Students by Gender


Depression Diagnosis-
Lifetime and Past 12 Months
All Students by Age Group


Currently Taking Medication for Depression All Students by Gender


The proportion of UMD students who report being diagnosed with depression within their lifetime increases with age. UMD students ages 25-29 report the highest rate of being diagnosed with depression within the past 12 months.

Overall, 6.1\% of University of MinnesotaDuluth students report they currently are taking medication for depression. Females report a higher rate of medication use for depression than males, which correlates with the higher depression diagnosis rates found in females compared to males.

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



Female University of Minnesota-Duluth students also report a higher rate of medication use for mental health problems other than depression than the university's male population. Overall, 4.7\% of students report taking medication for a mental health problem other than depression.

Among University of Minnesota-Duluth students, no males and $2.3 \%$ 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 <br> 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 37.1\%, while 18- to 20 -year-olds are not far behind at $33.5 \% .{ }^{6}$ Nearly one in three ( $30.0 \%$ ) full-time college students smoked cigarettes at least one time in the previous year, less than one in five (17.9\%) smoked cigarettes at least one time in the previous 30 days, and approximately one in ten (9.2\%) smoke cigarettes daily. ${ }^{7}$ Among young adults ages $18-25,5.4 \%$ 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 poses a major health risk.

The current tobacco use rate for University of Minnesota-Duluth students is $26.8 \%$, with a daily tobacco use rate of $5.4 \%$. 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.

University of Minnesota-Duluth students ages 22-23 report the highest current tobacco use rate.

The highest daily tobacco use rate is found among UMD students age 24 and older.

Current and Daily Tobacco Use
All Students by Gender


## Current Tobacco Use <br> All Students by Age Group



Daily Tobacco Use
All Students by Age Group


Current Smokeless Tobacco Use
All Students by Gender


Males are the predominant users of smokeless tobacco. Overall, 17.1\% of male University of Minnesota-Duluth students report using smokeless tobacco during the past 30 days.

Among students at the University of MinnesotaDuluth who report using smoking tobacco in the past 30 days, $65.1 \%$ do not consider themselves smokers. Among UMD students who do consider themselves smokers, $56.3 \%$ made at least one attempt to quit smoking over the past 12 months. These students made an average of 8.9 quit attempts during that same 12-month period.

## Number of Cigarettes Smoked Current Tobacco Users



Weekend Day

Quit Attempts-Past 12 Months
Current Smokers



Weekday

For UMD students who report using tobacco over the past 30 days, the percentage of those who say they smoke half a pack of cigarettes or more per day increases from $13.8 \%$ on a weekday to $19.3 \%$ on a weekend day.

The average number of cigarettes smoked by UMD students who are current tobacco users increases from 4.0 per weekday to 4.9 per weekend day. For daily tobacco users, the average number increases from 15.2 per weekday to 15.6 per weekend day.

University of Minnesota-Duluth students who used tobacco in the past 30 days report the most common locations of their use are at private parties (outside), in a car, where they live (outside), and on campus (outside).

Average Number of Cigarettes Smoked Current vs. Daily Tobacco Users


## Tobacco Use Location

Current Tobacco Users

| Location | Percent Who Indicate Use <br> at Specified Location |  |
| :--- | :---: | :---: |
| On Campus | 10.2 | 56.0 |
| Residence Halls | $*$ | 25.8 |
| Fraternity/Sorority | 4.7 | 5.8 |
| Bars/Restaurants | $*$ | 46.9 |
| In a Car | 65.8 | $*$ |
| Where I Live | $\mathbf{2 3 . 3}$ | $\mathbf{6 5 . 8}$ |
| Private Parties | $\mathbf{4 2 . 9}$ | $\mathbf{7 0 . 2}$ |
| Work Site | * | $\mathbf{2 9 . 5}$ |
| Parking Ramp/Garage |  | 17.5 |
| Other |  | 10.5 |

[^0]| Secondhand Smo All Students | e Exp | osure |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Location | Percent Who Indicate Exposure |  |  |  |  |  |
|  | Nonsmokers |  | Smokers |  | All Students |  |
| On Campus | 1.8 | 45.8 | 4.0 | 44.0 | 2.3 | 45.2 |
| Residence Halls | * | 10.5 | * | 15.3 | * | 11.6 |
| Fraternity/Sorority | 1.7 | 1.0 | 5.1 | 4.7 | 2.5 | 1.8 |
| Bars/Restaurants | * | 23.9 | * | 36.0 | * | 26.6 |
| In a Car | 12.9 | * | 51.6 | * | 21.8 | * |
| Where I Live | 5.4 | 12.3 | 11.6 | 33.5 | 6.8 | 17.1 |
| Private Parties | 14.2 | 20.3 | 40.7 | 51.3 | 20.3 | 27.4 |
| Work Site | * | 5.1 | * | 16.0 | * | 7.6 |
| Parking Ramp/Garage | 5.1 | * | 7.6 | * | 5.7 | * |
| Other | 5.2 | 14.1 | 9.1 | 23.3 | 6.2 | 16.2 |
| N/A-Never Exposed | 29.2 |  | 15.6 |  | 26.2 |  |

*Location not included in question.


For nonsmokers attending UMD, on campus (outside) and bars and restaurants (outside) are the most commonly cited locations for exposure to secondhand smoke. In a car and private parties (outside) are the most frequently reported locations for exposure to secondhand smoke by smokers.

For nonsmokers attending the University of Minnesota-Duluth, 4.2\% report being exposed to secondhand smoke 2 or more hours per week. For current smokers, $\mathbf{1 7 . 8 \%}$ report being exposed to secondhand smoke for 2 or more hours per week.

University of Minnesota-Duluth students who use tobacco tend to have a higher rate of high-risk drinking compared to UMD students who are nontobacco users ( $72.8 \%$ vs. $33.6 \%$, respectively).

## Definition: <br> High-Risk Drinking

Consumption of five or more alcoho 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, use of marijuana in the past 30 days by UMD students is higher among tobacco users (42.8\%) compared to nontobacco users (8.6\%). This is a nearly 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 who attend UMD use illegal drugs other than marijuana at nearly six times the rate of non-tobacco users who attend the university (21.3\% vs. 3.7\%, respectively).

Tobacco Use Status and High-Risk Drinking All Students


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 (85.3\%) full-time college students have consumed alcohol at least one time, and more than two in three (69.0\%) full-time college students consume alcohol monthly. ${ }^{7}$ The rate of binge drinking (consuming five or more alcoholic beverages in a row in the previous two weeks) peaks between ages 21 and 25 at $46.0 \%$ and is $33.7 \%$ among 18 - to 20 -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 (49.5\%) of full-time college students have used an illicit drug at least once in their lifetime, more than one-third (35.2\%) of full-time college students have used an illicit drug at least once in the past year, and nearly one in five (18.9\%) full-time college students have used an illicit drug in the last month. ${ }^{7}$ Marijuana is the illicit drug of choice for full-time college students, with nearly half $(46.8 \%)$ of students having used the drug at least once in their lifetime and almost one-third (32.3\%) having used it in the past year. ${ }^{7}$ Among full-time college students, $5.7 \%$ have used amphetamines, $4.4 \%$ have used cocaine, and $0.3 \%$ have used heroin in the previous year. ${ }^{7}$

Among University of Minnesota-Duluth students, $85.0 \%$ report using alcohol in the past 12 months and $76.3 \%$ report using alcohol in the past 30 days. The rate for use of alcohol in the past 12 months is slightly higher among females compared to males, while the rate for use of alcohol in the past 30 days is slightly higher among males compared to females.

## Definition:

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

## Definition:

Current Alcohol Use
Any alcohol use within the past 30 days.

Approximately two-thirds (67.9\%) of UMD students ages 18-20 report consuming alcohol in the past 30 days. Nearly nine out of ten (85.6\%) UMD students ages 21-22 report consuming alcohol over the same time period.

## High-Risk Drinking <br> All Students by Gender



Male students at the University of MinnesotaDuluth report a higher rate of high-risk drinking compared to female UMD students (52.0\% vs. $38.2 \%$, respectively).

Among University of Minnesota-Duluth students, the peak years for engaging in high-risk drinking are between ages 21 and 22 .

## High-Risk Drinking Rates on Campus- <br> Perceived vs. Actual <br> 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 <br> of High-Risk Drinking <br> by School Peers | Actual <br> High-Risk <br> Drinking Rate |
| :--- | :---: | :---: |
| All Students | $\mathbf{4 6 . 7 \%}$ |  |
| High-Risk Drinkers | $\mathbf{5 3 . 6 \%}$ | $\mathbf{4 4 . 2 \%}$ <br> of All Students <br> Non-High-Risk Drinkers$\quad \mathbf{4 1 . 4 \%}$ |
|  |  |  |

UMD students who have engaged in high-risk drinking tend to overestimate this behavior among their peers (53.6\%), while those who have not engaged in high-risk drinking slightly underestimate this behavior among their peers (41.4\%). The estimate from all students is $46.7 \%$, and the actual high-risk drinking rate at the university is 44.2\%.

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.

For male and female students attending the University of Minnesota-Duluth, the average estimated blood alcohol content, based on the last time the student partied/socialized, is $\mathbf{0 . 0 8}$.

The average estimated BAC levels for University of Minnesota-Duluth students range from 0.03 to 0.10 , with the estimated BAC for all survey respondents averaging 0.08. Students age 23 report the highest average estimated BAC level but the average estimated BAC levels for students ages 20-23 all exceed the legal driving limit of 0.08 for individuals of legal drinking age.

## 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 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 Age

| Negative Consequences of Alcohol/Drug Use <br> All Students |  |
| :--- | :---: |
| Percent <br> Who Report <br> Experiencing <br> Within Past <br> 12 Months |  |
| Negative Consequence Due to Alcohol/Drug Use | 67.3 |
| Had a Hangover | 25.8 |
| Performed Poorly on a Test or Important Project | 11.5 |
| Been in Trouble With Police, Residence Hall, or <br> Other College Authorities | 2.4 |
| Damaged Property, Pulled Fire Alarms, etc. | 25.7 |
| Got Into an Argument or Fight | 49.5 |
| Got Nauseated or Vomited | $\mathbf{1 7 . 9}$ |
| Driven a Car While Under the Influence | 34.1 |
| Missed a Class | 26.1 |
| Been Criticized by Someone I Know | 9.1 |
| Thought I Might Have a Drinking or Other Drug Problem | 31.6 |
| Had a Memory Loss | 33.8 |
| Done Something I Later Regretted | $\mathbf{0 . 9}$ |
| Been Arrested for DWI/DUI | $\mathbf{5 . 2}$ |
| Have Been Taken Advantage of Sexually | $\mathbf{0 . 5}$ |
| Have Taken Advantage of Another Sexually | 3.3 |
| Tried Unsuccessfully to Stop Using | $\mathbf{4 . 2}$ |
| Seriously Thought About Suicide | $\mathbf{0 . 6}$ |
| Seriously Tried to Commit Suicide | $\mathbf{1 3 . 7}$ |
| Been Hurt or Injured |  |
|  |  |

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


More than one in six (17.9\%) University of Minnesota-Duluth students report having driven a car while under the influence of alcohol or drugs. Among UMD students, 34.1\% report missing a class and $\mathbf{2 5 . 8 \%}$ report performing poorly on a test or project as a result of alcohol/drug use.

The rates for the negative consequences identified generally are two to three times higher among UMD students who have engaged in high-risk drinking compared to UMD students who have not engaged in high-risk drinking. Nearly one in three (30.0\%) students who have engaged in high-risk drinking have driven while under the influence of alcohol or drugs one or more times in the past 12 months.

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, $59.8 \%$ of all University of Minnesota-Duluth students report they would be "very likely" to call for emergency assistance.

The rate for any marijuana use within the past 12 months is $28.8 \%$ for all University of MinnesotaDuluth students, while the current marijuana use rate is $17.9 \%$ for all UMD students. Both the past-12-month and current marijuana use rates are higher for males than for females.

## Definition:

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

## Definition:

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

High-Risk Drinking and Selected Consequences* All Students

| Negative Consequence | Percent |  |  |
| :--- | :---: | :---: | :---: |
| Driven a Car While Under the Influence | 17.9 | 8.4 | 30.0 |
| Got Into an Argument or Fight | 25.7 | 13.7 | 41.0 |
| Performed Poorly on a Test or Important Project | 25.8 | 14.9 | 39.5 |
| Missed a Class | 34.1 | 19.1 | 52.9 |
| Have Been Taken Advantage of Sexually <br> (Includes Males and Females) | 5.2 | $\mathbf{2 . 3}$ | 8.8 |
| All Students $\square$ Non-High-Risk Drinkers |  | High-Risk Drinkers |  |

*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 illicit drugs most commonly used by UMD students are sedatives (3.3\%), cocaine (3.2\%), hallucinogens (3.1\%), and ecstasy (3.1\%). Further analysis shows that among UMD students, 8.4\% report having used at least one of the nine listed illicit drugs. In addition, 9.7\% of students report using another person's prescription drugs.

## 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 (84.0\%) college students in the United States have at least one credit card, and one-half (50.0\%) have four or more credit cards. ${ }^{12}$ The average credit card debt per U.S. college student is $\$ 3,173.12$ More than two-fifths (41.9\%) of college students report that they participated in some type of gambling activity during the previous school year. ${ }^{13}$

Approximately one in five (20.7\%) female students at the University of Minnesota-Duluth report experiencing a sexual assault within their lifetime, with $5.6 \%$ reporting having been assaulted within the past 12 months. Male UMD students have experienced sexual assault at lower rates, with 4.0\% reporting an assault within their lifetime and $1.8 \%$ reporting an assault within the past 12 months.

Among female University of Minnesota-Duluth students, nearly one in four (23.6\%) report experiencing domestic violence within their lifetime. More than one in seven (14.6\%) male UMD students report having had the experience.

Further examination of data shows that about one in eight (12.6\%) students at the university 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, $37.7 \%$ indicate they have been a victim of a sexual assault within their lifetime.

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

Sexual assault is defined as answering yes to at least one of 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?


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

Domestic violence is defined as answering yes to at least one of 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 Diagnosis-Lifetime
All Students by Sexual Assault/Domestic Violence


For students who report being victims of sexual assault, $35.8 \%$ also say they have been diagnosed with depression within their lifetime; 29.5\% 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 UMD students who have not experienced sexual assault or domestic violence within their lifetime.


Theft Victims-Past 12 Months All Students


Of the University of Minnesota-Duluth students who indicate they have experienced a sexual assault within their lifetime (13.3\%), only $30.8 \%$ state they reported the incident. Of the UMD students who chose to report the incident, $14.3 \%$ reported it to the police and $30.6 \%$ reported it to a health care provider.

Nearly one-tenth (9.1\%) of University of Minnesota-Duluth students report they have immediate access to a firearm, $\mathbf{1 5 . 7 \%}$ for males and $3.8 \%$ for females. Of those who have access to a firearm, $35.8 \%$ report they have access to a handgun.

Further analysis shows that $10.7 \%$ of students attending the University of Minnesota-Duluth 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 at the University of MinnesotaDuluth are more likely to report having engaged in a physical fight over the past 12 months compared to female UMD students ( $13.4 \%$ vs. $4.4 \%$, respectively).

Firearm Access
All Students


Physical Fight-Past 12 Months
All Students by Gender


Among students at UMD who rode a bicycle, only 22.8\% report wearing a helmet always or most of the time while riding the bicycle. Nearly two-thirds (64.7\%) of students who rode a motorized twowheeled vehicle report they wear a helmet always or most of the time while on the vehicle.

Helmet Use-Past 12 Months
All Students


Injuries-Past 12 Months
All Students

| Type of Injury | Percent Who Report <br> Experiencing Within <br> Past 12 Months |
| :--- | :---: |
| Assaulted by Another Person (Nonsexual) | 1.5 |
| Burned by Fire or a Hot Substance | 8.4 |
| Motor Vehicle Related | 2.4 |
| Team Sports | 11.9 |
| Individual Sports | 10.9 |
| Bicycle Related | 2.3 |
| In-line Skating | 0.3 |
| Skate Boarding | 1.2 |
| Falls | 16.2 |
| Other | 12.8 |
| Not Applicable-I Was Not Injured | 56.7 |

More than two in five (43.3\%) UMD 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.


More than one in five (21.6\%) University of Minnesota-Duluth students report carrying some level of credit card debt over the past month. Of those who carry a monthly credit card balance, $17.8 \%$ report the debt as \$3,000 per month or more.

## Definition:

Current Credit Card Debt
Any unpaid balance at the end of the

The rate of high credit card debt increases from 0.5\% among UMD undergraduate students enrolled two years to $\mathbf{1 2 . 3} \%$ among UMD undergraduate students enrolled five or more years.

## Definition:

High Credit Card Debt
A monthly debt of $\$ 3,000$ or more.

Approximately one-half (50.3\%) of University of Minnesota-Duluth students report engaging in gambling over the past 12-month period. Less than one in ten (6.3\%) report gambling at least once a month. Of the $50.3 \%$ who gambled within the past year, $4.9 \%$ report spending $\$ 100$ or more per month.

High Credit Card Debt and Class Status All Students


Gambling-Past 12 Months
All Students



## 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 results 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. ${ }^{1}$ Young adults between the ages of 18 and 24 ( $23.0 \%$ ) are slightly less likely than all adults (24.4\%) to eat fruits and vegetable five or more times per day. ${ }^{1}$ 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. ${ }^{14}$ The rate of obesity among young adults ages 18 to 24 is $16.8 \%{ }^{1}$

Nationwide, $81.1 \%$ of young adults between the ages of 18 and 24 compared to $75.4 \%$ of all adults report participating in at least one physical activity during the last month. ${ }^{1}$ Approximately three out of five (60.9\%) 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 $50.5 \%{ }^{1}$

Body mass index (BMI) is a common and reliable indicator of body fatness. ${ }^{15} \mathrm{BMI}$ equals the weight in kilograms divided by the height in meters squared ( $\mathrm{BMI}=\mathrm{kg} / \mathrm{m}^{2}$ ). This table presents weight categories based on BMI ranges.

Approximately one in three (34.2\%) University of Minnesota-Duluth students fall within the overweight or obese/extremely obese category. This is based on self-reported height and weight.

Data analysis shows that the average body mass index for male University of Minnesota-Duluth survey respondents is 24.9 , and the average BMI for female UMD survey respondents is 24.1. For both male and female students, these averages fall within the normal weight category. Approximately two in five (40.8\%) males and more than one in four (28.9\%) females fall within the overweight or obese/extremely obese category.

BMI Category
All Students


BMI Category
All Students by Gender


Survey respondents at the University of MinnesotaDuluth 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.

Weight-Related Behaviors
All Students by Gender



University of Minnesota-Duluth students within the underweight category report the highest rate of laxative use. UMD students classified as overweight report the highest rate of diet pill use. The highest rate of induced vomiting is found among UMD students within the normal weight category.

Binge Eating Behavior-Past 12 Months
All Students by Gender
All Students by Gender


Binge Eating Behavior-Past 12 Months All Students by BMI Category


As with other weight-related behaviors, females at the University of Minnesota-Duluth engage in binge eating at a higher rate than males at the university. Approximately one out of seven (14.4\%) females report they engaged in binge eating over the past 12 months.

As BMI increases, the rate of reported binge eating behavior among University of Minnesota-Duluth students also increases.

UMD underweight students report the highest rate of never eating breakfast within the past seven days. The highest rates of fast food consumption once a week or more and of eating at a restaurant once a week or more within the past 12 months is for students classified as obese/extremely obese.

A majority of UMD students consume fruits and vegetables one to four times per day. Only 14.9\% 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 2.8 times per day, and females consume them on average 3.1 times per day.

Across all BMI categories, the majority of UMD students eat less than the recommended amount of fruits and vegetables per day. Only 10.5\% of obese/ extremely obese students eat fruits and vegetables five or more times per day.

Meal Patterns
All Students by BMI Category


Fruit and Vegetable Consumption-Per Day All Students by Gender


Fruit and Vegetable Consumption5 or More Times Per Day
All Students by BMI Category


Daily Regular Soda Consumption All Students by BMI Category


UMD underweight and obese/extremely obese students report higher levels of daily consumption of regular soda compared to normal weight and overweight students. 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, $\mathbf{1 6 . 7 \%}$ report daily consumption of diet soda compared to $0.0 \%$ 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 Centers for Disease Control and Prevention (CDC) (see CDC's recommendations listed at left) 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 out of four (74.6\%) UMD students report levels of physical activity that place them in the moderate or high classification, meeting the CDC's recommendations.

Male UMD students who engage in a high level of physical activity have a lower average BMI than male students who engage in a low or moderate level of physical activity. Female UMD 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.

Among University of Minnesota-Duluth students, level of screen time increases as BMI increases. Additional data analysis shows that approximately three-fourths (74.4\%) of UMD students report watching TV or using the computer (not for work or school) two hours or more per day. Among all students, 2.1\% report zero screen time, 23.5\% report a low level of screen time, $35.4 \%$ report a moderate level of screen time, and 39.0\% 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. ${ }^{17}$ 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. ${ }^{17}$ Due to a combination of behavioral, biological, and cultural reasons, sexually active young adults are at increased risk for acquiring sexually transmitted infections (STIs). ${ }^{18}$ 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. ${ }^{18}$ 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. ${ }^{17}$ Among all 15 - to 24 -year-olds, approximately 9.1 million cases of STIs and nearly 5,000 cases of HIV/AIDS are diagnosed annually. ${ }^{19}$

Female students attending the University of Minnesota-Duluth report slightly higher rates of sexual activity, both within their lifetime and within the past 12 months, compared to male students attending the university.

On average, UMD students had 2.3 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. Nearly three out of four (73.4\%) students report that they had 0 or 1 partner within the past 12 months.

Among University of Minnesota-Duluth students who were sexually active within the past 12 months, approximately three out of four (74.3\%) report that their most recent sexual partner was either a fiancé(e)/spouse or an exclusive dating partner.

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


Number of Sexual Partners-Past 12 Months All Students


Most Recent Sexual Partner-Past 12 Months Sexually Active Students



Among UMD students sexually active within their lifetime, $63.4 \%$ used a condom the last time they engaged in vaginal intercourse, 24.0\% used a condom during their last anal intercourse, and 6.7\% 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 78.0\% of University of Minnesota-Duluth students who report being sexually active within their lifetime, $92.2 \%$ engaged in vaginal intercourse, $91.6 \%$ engaged in oral sex, and $\mathbf{2 2 . 9 \%}$ engaged in anal intercourse.

## Pregnancy Prevention Methods <br> Sexually Active Students Within Lifetime



The two most common methods that UMD students report using to prevent pregnancy the last time they engaged in vaginal intercourse are birth control pills (52.6\%) and condoms (51.8\%). The withdrawal method is reported by $13.9 \%$ of UMD students. Other methods of pregnancy prevention reported by students are identified in the table below.

Among UMD students, 3.2\% report not using any method of pregnancy prevention the last time they engaged in vaginal intercourse.

A total of $1.8 \%$ of University of MinnesotaDuluth students has been involved in a pregnancy within the past 12 months. Of those involved in a pregnancy, $55.0 \%$ state it was unintentional. Among the unintentional pregnancies, 54.5\% resulted in abortion and 18.2\% resulted in miscarriage.

Analysis shows that within the past 12 months, 23.5\% of sexually active female students at the University of Minnesota-Duluth have used emergency contraception. Among those who used emergency contraception, $68.0 \%$ have used it once, $22.3 \%$ have used it twice, and 9.7\% have used it three or more times within the past 12 months.

Unintended Pregnancy OutcomePast 12 Months
All Students


Emergency Contraception Use-Past 12 Months Sexually Active Female Students


Sexually Transmitted Infection DiagnosisLifetime and Past 12 Months
All Students

| Sexually Transmitted Infection | Percent Who Report <br> Being Diagnosed |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
| Chlamydia | $\mathbf{2 . 7}$ | $\mathbf{0 . 8}$ |  |  |
| Genital Herpes | $\mathbf{0 . 8}$ | $\mathbf{0 . 2}$ |  |  |
| Genital Warts/HPV | $\mathbf{2 . 8}$ | $\mathbf{1 . 5}$ |  |  |
| Gonorrhea | $\mathbf{0 . 3}$ | $\mathbf{0 . 1}$ |  |  |
| HIV/AIDS | $\mathbf{0 . 1}$ | $\mathbf{0 . 0}$ |  |  |
| Pubic Lice | $\mathbf{1 . 1}$ | $\mathbf{0 . 0}$ |  |  |
| Syphilis | $\mathbf{0 . 3}$ | $\mathbf{0 . 0}$ |  |  |
| At Least One of the Above <br> Sexually Transmitted Infections | $\mathbf{6 . 7}$ | $\mathbf{2 . 4}$ |  |  |
| Within Lifetime |  |  |  | Within Past 12 Months |

## Implications

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

Results from the 2010 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 postsecondary schools in Minnesota. Identification of these health-related issues is critical because the health of college students in Minnesota 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 $\mathbf{2 0 1 0}$ College Student Health Survey


| Two-Year Schools | Location | Enrollment- <br> Spring 2010* |
| :--- | :--- | :---: |
| Anoka Technical College | Anoka, MN | $\mathbf{3 , 0 9 0}$ |
| Century College | White Bear Lake, MN | $\mathbf{1 2 , 3 2 9}$ |
| Itasca Community College | Grand Rapids, MN | $\mathbf{1 , 4 6 6}$ |
| Minnesota State College- <br> Southeast Technical | Winona, MN | $\mathbf{2 , 5 8 1}$ |
| Rochester Community and <br> Technical College | Rochester, MN | $\mathbf{7 , 4 9 0}$ |
| St. Cloud Technical and <br> Community College | St. Cloud, MN | $\mathbf{5 , 4 5 1}$ |
| Schools with Two-Year <br> and Four-Year Programs | Location | Enrollment- <br> Spring 2010* |
| Winona State University | Winona, MN | $\mathbf{9 , 3 8 8}$ |


| Four-Year Schools | Location | Enrollment- <br> Spring 2010* |
| :--- | :--- | :---: |
| Bemidji State University | Bemidji, MN | $\mathbf{6 , 5 6 2}$ |
| Carleton College | Northfield, MN | $\mathbf{1 , 9 3 6}$ |
| Concordia College | Moorhead, MN | $\mathbf{2 , 7 7 7}$ |
| Minnesota State University, <br> Mankato | Mankato, MN | $\mathbf{1 6 , 8 5 6}$ |
| St. Cloud State University | St. Cloud, MN | $\mathbf{2 0 , 4 7 9}$ |
| University of Minnesota- <br> Crookston | Crookston, MN | $\mathbf{1 , 2 6 4}$ |
| University of Minnesota- <br> Duluth | Duluth, MN | $\mathbf{9 , 7 9 4}$ |
| University of Minnesota- <br> Morris | Morris, MN | $\mathbf{1 , 5 0 7}$ |
| University of Minnesota- <br> Rochester | Rochester, MN | $\mathbf{3 8 7}$ |
| University of Minnesota- <br> Twin Cities | Minneapolis, MN <br> St. Paul, MN | $\mathbf{4 5 , 8 8 1}$ |

## Appendix 2

University of Minnesota-Duluth Survey Demographics Based on Student Response

|  | All Students |
| :---: | :---: |
| Average Age (Years) | 21.9 |
| Age Range (Years) | 18-53 |
| 18-24 Years | 87.1\% |
| 25 Years or Older | 12.9\% |
| Average GPA | 3.21 |
| Class Status |  |
| Undergraduate-Enrolled One Year | 16.3\% |
| Undergraduate-Enrolled Two Years | 17.4\% |
| Undergraduate-Enrolled Three Years | 19.6\% |
| Undergraduate-Enrolled Four Years | 17.9\% |
| Undergraduate-Enrolled Five or More Years | 10.9\% |
| Masters, Graduate, or Professional Program | 12.4\% |
| Unspecified | 5.5\% |
| Gender |  |
| Male | 44.2\% |
| Female | 55.5\% |
| Transgender/Other | 0.1\% |
| Unspecified | 0.2\% |
| Ethnic Origin |  |
| American Indian/Alaska Native | 1.8\% |
| Asian/Pacific Islander | 6.1\% |
| Black-Not Hispanic | 1.3\% |
| Latino/Hispanic | 1.7\% |
| White-Not Hispanic (Includes Middle Eastern) | 90.3\% |
| Other | 2.0\% |
| Current Residence |  |
| Residence Hall or Fraternity/Sorority | 26.4\% |
| Other | 73.6\% |

## 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 $\$ 3,000$ 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.

## References

1. Centers for Disease Control and Prevention. (2008). Behavioral Risk Factor Surveillance System [survey data]. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved April 2, 2010, from http://apps.nccd.cdc.gov/brfss.
2. Heyman KM, Barnes PM, Schiller JS. (2010). Early release of selected estimates based on data from the January-September 2009 National Health Interview Survey. Hyattsville, MD: National Center for Health Statistics. Retrieved April 2, 2010, from http://www.cdc.gov/nchs/nhis.htm.
3. U.S. Department of Health and Human Services. (2000). Healthy People 2010: Understanding and improving health. 2nd ed. Washington, DC: U.S. Government Printing Office.
4. Snyder TD, Dillow SA, Hoffman CM. (2009). Digest of education statistics 2008 (NCES 2009-020). Washington DC: National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education.
5. Harvard School of Medicine. (2007). National Comorbidity Survey-Replication [survey data]. Retrieved April 2, 2010, from http://www.hcp.med.harvard.edu/ncs/index.php.
6. Substance Abuse and Mental Health Services Administration. (2009). Results from the 2008 National Survey on Drug Use and Health: National findings (NSDUH Series H-36, DHHS Publication No. SMA 09-4434). Rockville, MD: Office of Applied Studies.
7. Johnston LD, O'Malley PM, Bachman JG, Schulenberg JE. (2009). Monitoring the Future national survey results on drug use, 1975-2008. Vol. II: College students and adults ages 19-45 (NIH Publication No. 09-7403). Bethesda, MD: National Institute on Drug Abuse.
8. Centers for Disease Control and Prevention. (2006, October 27). Tobacco use among adults-United States, 2005. Morbidity and Mortality Weekly Report, 5(42), 1145-1148.
9. Halperin AC. (2002, March). State of the union: Smoking on US college campuses. A report for the American Legacy Foundation. Washington, DC. (unpublished, internal report).
10. Tjaden P, Thoennes N. (2006). Extent, nature, and consequences of rape victimization: Findings from the National Violence Against Women Survey (Report NCJ 210346). Washington, DC: National Institute of Justice.
11. Fischer BS, Cullen FT, Turner MG. (2000). The sexual victimization of college women (Report NCJ 182369). Washington, DC: National Institute of Justice.
12. Sallie Mae. (2009). How undergraduate students use credit cards. Sallie Mae's national study of usage rates and trends 2009. Retrieved April 2, 2010, from http:// www.salliemae.com/NR/rdonlyres/OBD600F1-9377-46EA-AB1F-6061FC763246/10744/ SLMCreditCardUsageStudy41309FINAL2.pdf.
13. LaBrie RA, Shaffer HJ, LaPlant DA, Wechsler H. (2003). Correlates of college student gambling in the United States. Journal of American College Health, 52(2), 53-62.
14. Niemeier HM, Raynor HA, Lloyd-Richardson EE, Rogers ML, Wing RR. (2006). Fast food consumption and breakfast skipping: Predictors of weight gain from adolescence to adulthood in a nationally representative sample. Journal of Adolescent Health, 39(6), 842-849.
15. Centers for Disease Control and Prevention. (2007). About BMI for adults. Retrieved April 2, 2010, from http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm\#Interpreted.
16. Centers for Disease Control and Prevention. (2008). Physical activity for everyone. Retrieved April 2, 2010, from http://www.cdc.gov/nccdphp/dnpa/physical/everyone/recommendations/.
17. Mosher WD, Chandra A, Jones J. (2005). Sexual behavior and selected health measures: Men and women 15-44 years of age, United States, 2002. Advance data from vital and health statistics (No. 362). Hyattsville, MD: National Center for Health Statistics.
18. Centers for Disease Control and Prevention. (2009, November). Sexually transmitted disease surveillance, 2008. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved April 2, 2010, from http://www.cdc.gov/std/stats08/main.htm.
19. Centers for Disease Control and Prevention. (2006, June 9). Youth risk behavior surveillance-United States, 2005. Morbidity and Mortality Weekly Report Surveillance Summaries, 55(SS-5), 1-108.

Principal Investigator
Katherine Lust, Ph.D., M.P.H.
Boynton Health Service
(612) 624-6214 • klust@bhs.umn.edu

## Co-Investigators

Edward P. Ehlinger, M.D., M.S.P.H.
Boynton Health Service
(612) 625-1612 • eehlinger@bhs.umn.edu

David Golden
Boynton Health Service
(612) 626-6738 • dgolden@bhs.umn.edu

Publication Coordinator/Editor
Britt Bakke
Boynton Health Service
(612) 624-2965 • bbakke@bhs.umn.edu

Writer/Editor
Julia Sanem, M.P.H.
Boynton Health Service
(612) 624-1940 • jsanem@bhs.umn.edu

Designer
Amy Bartkus
Boynton Health Service
(612) 624-0911 • abartkus@bhs.umn.edu

## Boynton Health Service

University of Minnesota
Driven to Discover ${ }^{m}$
www.bhs.umn.edu
410 Church Street S.E., Minneapolis, MN 55455
Phone (612) 625-6410 • Fax (612) 625-2925


[^0]:    *Location not included in question

