

**Health Insurance  
and Health Care Utilization**  
University of Minnesota–Twin Cities



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# Health Insurance and Health Care Utilization

University of Minnesota–Twin Cities



## Snapshot: Colleges and Universities Participating in the 2007 College Student Health Survey

Two-Year Schools	Location	Enrollment–Spring 2007*
Alexandria Technical College	Alexandria, MN	3,475
Anoka-Ramsey Community College	Cambridge, MN Coon Rapids, MN	9,724
Lake Superior College	Duluth, MN	8,876
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Four-Year Schools	Location	Enrollment–Spring 2007*
Bemidji State University	Bemidji, MN	6,449
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University of Minnesota–Crookston	Crookston, MN	951
University of Minnesota–Duluth	Duluth, MN	9,467
University of Minnesota–Morris	Morris, MN	1,489
University of Minnesota–Rochester	Rochester, MN	306
University of Minnesota–Twin Cities	Minneapolis, MN	43,737

\*Includes full-time and part-time students.



## University of Minnesota–Twin Cities Survey Demographics\*

	All Students
Average Age (Years)	23.4
Age Range (Years)	18-63
18-24 Years	72.6%
25 Years or Older	27.4%
Average GPA	3.38
<b>Class Status</b>	
First-Year Undergraduate	15.4%
Second-Year Undergraduate	14.5%
Third-Year Undergraduate	15.7%
Fourth-Year Undergraduate	15.8%
Fifth-Year Undergraduate	7.6%
Graduate or Professional	31.0%
<b>Gender</b>	
Male	40.1%
Female	59.7%
Transgender/Other	0.2%
Unspecified	0.0%
<b>Ethnic Origin</b>	
African American/Black	2.7%
American Indian/Alaskan Native	1.2%
Asian/Pacific Islander	12.7%
Latino/Hispanic	2.2%
Middle Eastern	1.0%
Caucasian/White	81.6%
Other	2.3%
<b>Current Residence</b>	
Residence Hall or Fraternity/Sorority	20.0%
Other	80.0%

\*Based on student response.



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# Introduction

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 report 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. Over 90% of young adults in Minnesota (91.2%) and nationwide (92.2%) report excellent, very good, or good health.<sup>1</sup> 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, 82.5% report some kind of health care insurance, and nationwide the number is 71.9%.<sup>1,2</sup> More young males (34.1%) than young females (25.5%) lack health insurance coverage.<sup>2</sup> Among all age groups, young adults (70.5%) are least likely to identify a usual place for medical care.<sup>2</sup> Fewer than one in ten (7.7%) young adults were unable to receive necessary medical care due to cost in the previous year.<sup>2</sup>

## References:

- <sup>1</sup> Centers for Disease Control and Prevention. (2005). Behavioral Risk Factor Surveillance System survey data. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved July 17, 2007, from <http://apps.nccd.cdc.gov/brfss>.
- <sup>2</sup> Cohen, R. A. & Martinez, M. E. (2007, March). Health insurance coverage: Early release of estimates from the National Health Interview Survey, January–September 2006. Retrieved July 17, 2007, from <http://www.cdc.gov/nchs/nhis.htm>.

## 2007 Health Insurance and Health Care Utilization Highlights

Among the individuals from 14 Minnesota colleges and universities who participated in the 2007 College Student Health Survey:

- **13.9%** report they are uninsured or do not know if they are insured, including **15.3%** of males and **13.0%** of females.

These rates tend to be lower than the uninsured rates among all 18- to 24-year-old Minnesotans. Because many insurance plans allow dependents under the age of 25 to remain eligible for coverage while attending a postsecondary institution, this may be a factor in the lower rates reported by survey respondents. In addition, the lower rates may reflect students' access to health insurance offered through the institution they are attending.

# Methodology

Students completed the 2007 College Student Health Survey, developed by Boynton Health Service at the University of Minnesota. As an incentive, all students who responded to the survey received a \$5 gift card and entry 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 at eleven schools were e-mailed a link to an online version of the survey, and students at three schools received a paper survey via U.S. Mail.
- Reminder postcards/multiple e-mails were sent to all students to encourage participation.
- All students received a minimum of two invitations to participate in the survey.

## University of Minnesota–Twin Cities Methodology Highlights

- **6,000** students from the University of Minnesota–Twin Cities were randomly selected to participate in this study.
- **2,920** completed and returned the survey.
- **0** surveys were undeliverable.
- **48.7%** was the overall UMTC response rate. (Surveys determined to be undeliverable were removed from the original sample size.)



UNIVERSITY OF MINNESOTA  
Boynton Health Service  
410 Church Street SE, N217  
Minneapolis, MN 55455

NONPROFIT ORG.  
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PERMIT NO. 155

You have been randomly selected to participate in the 2007 College Student Health Survey administered by your school and the University of Minnesota. The information you provide does a great service! It will be used to direct health resources across the state of Minnesota.

**How does this work?**  
Survey must be completed by midnight March 16, 2007. Just for completing the survey you will automatically receive a \$5 Target gift card and be entered into a drawing for the \$3,000 grand prize!

To begin, go to [www.bhs.umn.edu/healthsurvey](http://www.bhs.umn.edu/healthsurvey) & enter the username & password you see on the right hand side of this card!

**What are the prizes?**  
Everyone who completes a survey will automatically receive a \$5 Target gift card. In addition, four lucky students will win gift certificates to any combination of the following stores: Target, Best Buy, Macy's, Home Depot, IKEA, The Apple Store, Tiffany & Co., Sports Authority, Midwest Mountaineering, or Cabela's!

One Grand Prize: \$3,000  
One 2nd Place Prize: \$1,000  
Two 3rd Place Prizes: \$500

Your odds are 1 in 3,000 or better!

**Who do I contact with questions?**  
Katherine Lust, Survey Administrator  
(612) 624-6217 • [klust@bhs.umn.edu](mailto:klust@bhs.umn.edu)

**BOYNTON HEALTH SERVICE**  
UNIVERSITY OF MINNESOTA For more information, visit [www.bhs.umn.edu/healthsurvey](http://www.bhs.umn.edu/healthsurvey)

2007 College Student Health Survey Postcard

# Results

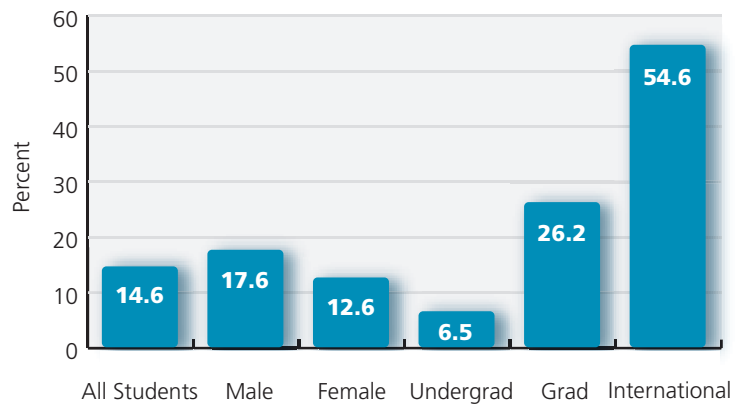
Many health insurance plans allow dependents under the age of 25 to remain covered by their parents' insurance while attending a postsecondary institution. Therefore, students who attend postsecondary institutions tend to have higher rates of health insurance coverage than those who do not.

Students attending the University of Minnesota–Twin Cities (UMTC) report an overall uninsured rate of **14.6%**. Males tend to have a higher uninsured rate compared to females (**17.6%** vs. **12.6%**, respectively). International students report an uninsured rate of **54.6%**.

University of Minnesota–Twin Cities students ages 25-29 report the highest uninsured rate. The lowest uninsured rates are among UMTC students ages 18-19 and 20-24. This may be a reflection of parental health insurance coverage for students ages 18-24.

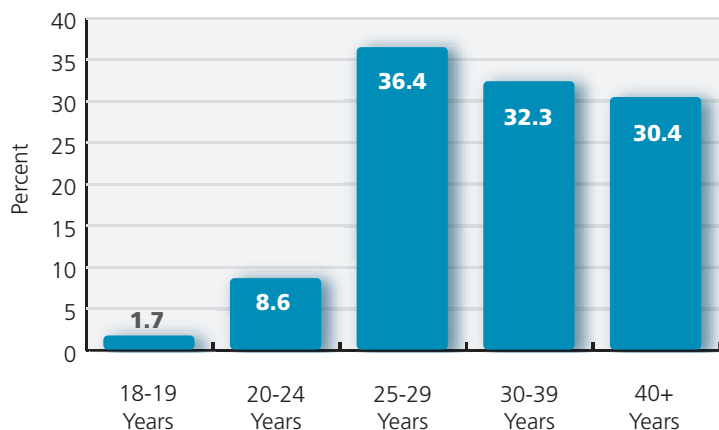
## Health Insurance Status–Uninsured

All Students



## Health Insurance Status–Uninsured

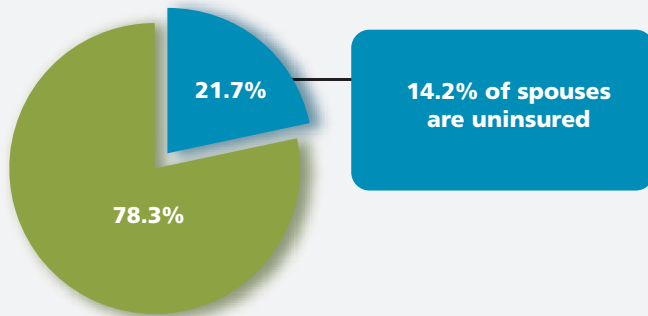
All Students by Age Group



## Spouse and Dependent Health Care Coverage

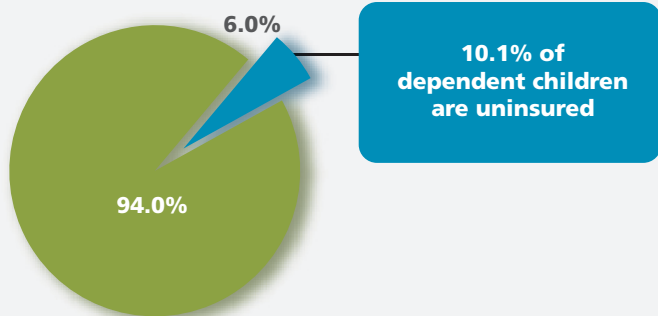
All Students

### Spouse Health Care Coverage



■ % With Spouse ■ % With No Spouse

### Dependent Children Health Care Coverage



■ % With Children ■ % With No Children

A little over one-fifth (**21.7%**) of students who attend the University of Minnesota–Twin Cities report having a spouse, and **14.2%** of these students report that their spouse is uninsured.

More than one in twenty (**6.0%**) UMTC students report having dependent children. Of these dependent children, **10.1%** lack health insurance.

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

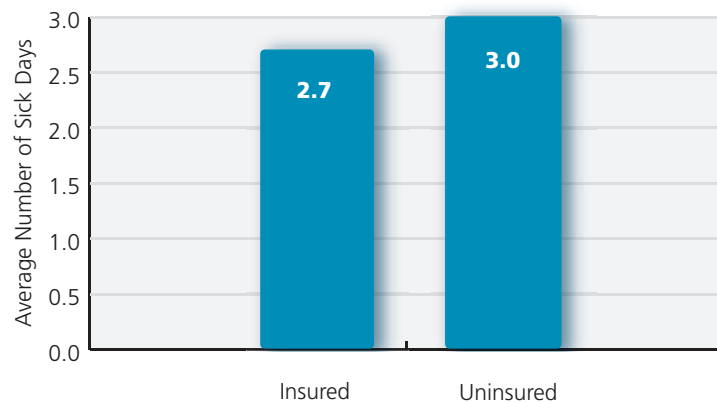
UMTC students with health insurance report on average **0.3** fewer sick days in the past 30 days than UMTC students without health insurance.

**Reference:**

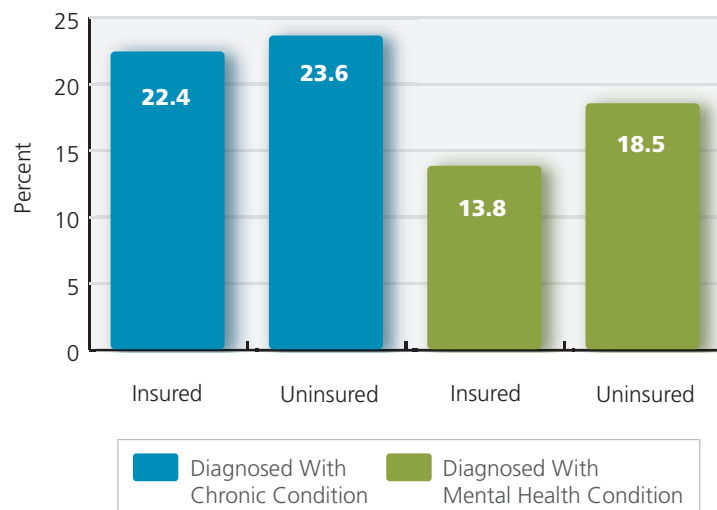
<sup>3</sup> U.S. Department of Health and Human Services. (2000). *Healthy People 2010: Understanding and Improving Health*. 2nd ed. Washington, D.C.: U.S. Government Printing Office.

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

### Health Insurance and Number of Sick Days— Past 30 Days All Students

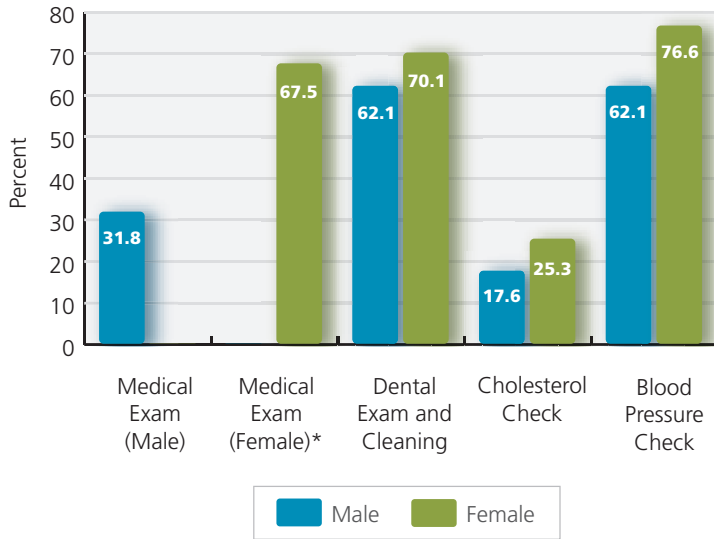


### Health Insurance and Health Status All Students





### Preventive Health Care Utilization— Past 12 Months All Students by Gender

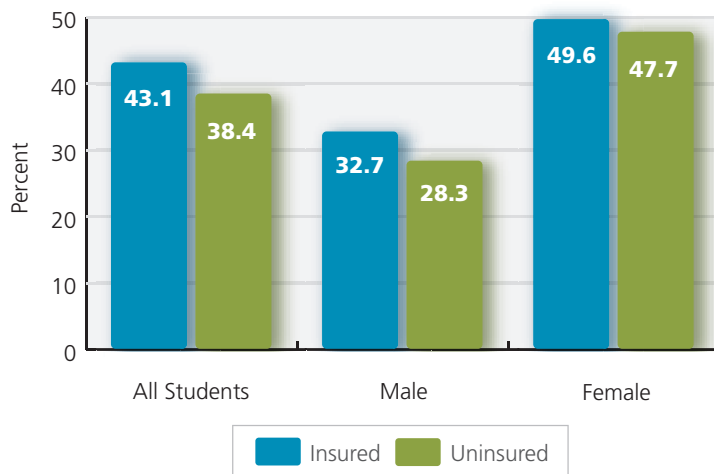


\*Includes gynecological exam.

Female students attending the University of Minnesota–Twin Cities access preventive services at higher rates than male students attending the university.

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

All Students by Gender and Insurance Status



Health insurance coverage appears to have an impact on whether UMTC students obtained routine medical examinations within the past 12 months. Uninsured male and female students had slightly lower rates of obtaining a routine medical examination than insured students.

Boynton Health Service appears to be the primary location for University of Minnesota–Twin Cities students to obtain many health care services. It should be noted that of students who report receiving mental health services, **28.9%** obtained the service from Boynton Health Service and **19.2%** obtained the service from the UMTC student counseling service.

### Health Care Utilization by Location

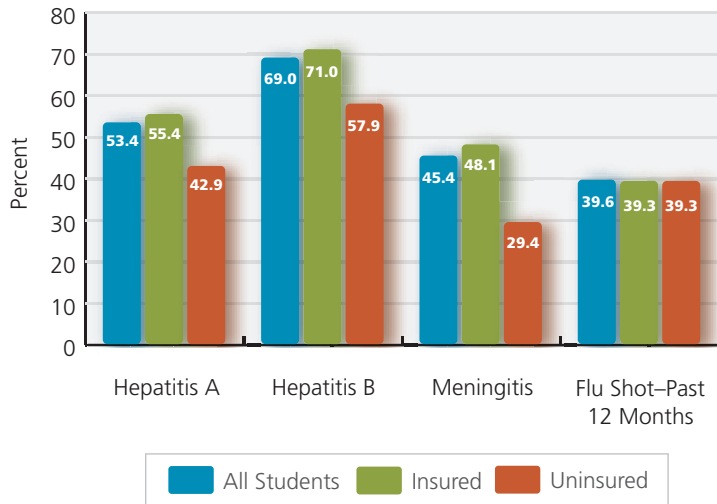
All Students (Includes Only Those Students Who Report Obtaining a Service)

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

Health Care Service	Percent					
	School Service	Student Counseling Service	Hospital	Community Clinic	HMO	Private Practice
Routine Doctor's Visit (88.8% Obtained Service)	34.1	0.2	10.4	28.9	7.3	25.6
Dental Care (89.1% Obtained Service)	14.9	0.2	2.2	19.0	4.4	60.4
Mental Health Service (24.6% Obtained Service)	28.9	19.2	4.6	14.6	5.6	30.9
Testing for Sexually Transmitted Infections (35.4% Obtained Service)	44.5	0.7	6.3	28.5	5.4	16.4
Treatment for Sexually Transmitted Infections (17.5% Obtained Service)	43.6	0.0	8.8	27.6	6.5	13.9
Testing for HIV (27.0% Obtained Service)	43.0	0.6	7.6	28.7	5.7	15.5
Emergency Care (76.5% Obtained Service)	17.6	0.1	75.7	8.6	2.6	5.1

## Immunization Status

All Students



Insured students at UMTC obtain immunizations for hepatitis A, hepatitis B, and meningitis at higher rates than uninsured students at the university. However, insured and uninsured students at UMTC receive influenza immunizations at the same rate.

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

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

## Average Number of Days Affected by Illness

All Students by Gender

Illness	Average Number of Days Affected—Past 30 Days	
	Male	Female
Physical Health Not Good	2.8	3.4
Mental Health Not Good	4.2	6.1
Poor Physical and/or Mental Health Affected Daily Activities	2.2	3.0

Compared to male respondents at the University of Minnesota–Twin Cities, female respondents at the university report more days of poor physical and mental health, with these days of illness affecting their daily activities. This is especially true with respect to mental health.

In an effort to provide ongoing surveillance of the general health of the population, a series of acute illnesses prevalent among students was identified. University of Minnesota–Twin Cities students 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 is strep throat, with **46.2%** of UMTC students reporting having this diagnosis. The acute condition diagnosed most frequently within the past 12 months is urinary tract infection, with **7.6%** of UMTC students reporting having this diagnosis. Overall, **56.5%** of students report being diagnosed with at least one acute condition within their lifetime, and **15.5%** report being diagnosed with at least one acute condition within the past 12 months.

### Diagnosed With Acute Condition— Lifetime and Past 12 Months All Students

Acute Condition	Percent Who Report Being Diagnosed	
	Within Lifetime*	Within Past 12 Months*
Chlamydia	2.3	0.8
Gonorrhea	0.6	0.3
Hepatitis A	0.6	0.3
Lyme Disease	0.9	0.4
Mononucleosis	11.9	2.1
Pubic Lice	1.6	0.3
Strep Throat	46.2	6.7
Syphilis	0.1	0.1
Urinary Tract Infection	19.2	7.6
Diagnosed With at Least One of the Above Acute Conditions	56.5	15.5

\*Note: For certain conditions, the disparity in rates between lifetime and past-12-month diagnoses is a result of students reporting a past-12-month diagnosis but not a lifetime diagnosis.

## Diagnosed With Chronic Condition— Lifetime and Past 12 Months All Students

Chronic Condition	Percent Who Report Being Diagnosed	
	Within Lifetime*	Within Past 12 Months*
Alcohol Problem	1.9	1.9
Allergies	38.1	14.7
Asthma	15.9	4.6
Cancer	0.7	0.2
Diabetes Type I	0.8	0.3
Diabetes Type II	0.6	0.4
Genital Herpes	1.1	0.6
Genital Warts/Human Papilloma Virus	4.3	1.9
Hepatitis B	0.6	0.3
Hepatitis C	0.3	0.2
High Blood Pressure	3.7	2.2
High Cholesterol	3.9	1.9
HIV/AIDS	0.2	0.1
Drug Problems (Other Than Alcohol)	1.4	0.5
Obesity	3.6	2.2
Tuberculosis	0.7	0.4
Diagnosed With at Least One of the Above Chronic Conditions	51.9	22.8

\*Note: For certain conditions, the disparity in rates between lifetime and past-12-month diagnoses is a result of students reporting a past-12-month diagnosis but not a lifetime diagnosis.

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

The two most common chronic conditions diagnosed in University of Minnesota–Twin Cities students are allergies (**38.1%** lifetime) and asthma (**15.9%** lifetime). More than one-half (**51.9%**) of all students report being diagnosed with at least one chronic condition within their lifetime, and almost one-quarter (**22.8%**) report being diagnosed with at least one chronic condition within the past 12 months.

Students were asked to report whether they have experienced any of the health or personal issues presented in the table to the right, and if so, whether the issue(s) affected their academic performance. The issues highlighted in red are particularly salient to this report on health insurance and health care utilization. The other issues are more relevant to subsequent reports in this series.

It should be noted that although students report some issues less frequently, these issues may have a greater impact on academic performance. For example, although only **3.5%** of UMTC students report having mononucleosis, of this small percentage of students, **48.5%** say it affected their academic performance.

### Impact of Health and Personal Issues on Academic Performance—Past 12 Months All Students

Health or Personal Issue	Percent	
	Report Having Issue	Report Issue Affected Academics
Alcohol Use	31.0	17.7
<b>Allergies</b>	<b>31.1</b>	<b>6.5</b>
<b>Chronic Conditions</b>	<b>9.8</b>	<b>18.5</b>
Concerns for Troubled Friend/Family Member	39.5	34.9
Drug Use	6.4	28.5
Eating Disorder/Problems	5.3	21.4
Excessive Computer/Internet Use	32.2	41.9
Financial Difficulties	37.0	30.5
<b>Learning Disability/ADD</b>	<b>4.7</b>	<b>65.0</b>
Mental Health Issues	22.7	55.1
<b>Mononucleosis</b>	<b>3.5</b>	<b>48.5</b>
Moved/Changed Residence	24.2	16.9
Pregnancy	3.3	40.6
Relationship Issues	34.3	39.0
Serious Injury	3.8	40.9
Sexual Assault	1.2	44.1
Sexually Transmitted Infection	2.7	14.1
Sleep Difficulties	38.8	44.0
Stress	70.5	42.1
<b>Upper Respiratory Infection</b>	<b>36.7</b>	<b>28.7</b>
<b>Urinary Tract Infection</b>	<b>7.5</b>	<b>12.4</b>

## Participating Two-Year Schools

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Anoka-Ramsey Community College  
Andrea Roberge

Lake Superior College  
Beth Adams

Minnesota State Community and  
Technical College  
Shawn Anderson

North Hennepin Community College  
Kristi Moebeck

Northwest Technical College  
Kari Kantak

## Participating Four-Year Schools

Bemidji State University  
Jay Passa

Concordia College  
Paul Wraalstad

Minnesota State University Moorhead  
Susanne Williams

University of Minnesota–Crookston  
Stacey Grunewald

University of Minnesota–Duluth  
Lauretta Perry

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**BOYNTON**  
HEALTH SERVICE

UNIVERSITY OF MINNESOTA



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# **Mental Health** 2

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Asian/Pacific Islander	12.7%
Latino/Hispanic	2.2%
Middle Eastern	1.0%
Caucasian/White	81.6%
Other	2.3%
<b>Current Residence</b>	
Residence Hall or Fraternity/Sorority	20.0%
Other	80.0%

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# Introduction

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, approximately 30% are minorities, 20% are foreign born or first generation U.S. citizens, 55% are female, and 44% are age 25 or older.<sup>1</sup> This diversity presents a myriad of counseling concerns related to multicultural and gender issues, life transition, stress, career and developmental needs, violence, interpersonal relationships, and serious emotional and psychological problems. This array of mental health problems represents ever-increasing challenges as postsecondary institutions strive to meet the needs of their students.

## National Comparison

This report examines areas related to the mental and emotional status of college and university students. Recent research shows that young adults in the United States have relatively high rates of mental health problems compared to other age groups. Based on the results of the National Comorbidity Survey Replication Study using the American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders-IV criteria, 53.8% of 18- to 29-year-olds have been diagnosed with a mental disorder within their lifetime, and 38.0% of 18- to 29-year-olds have been diagnosed with a mental disorder within the previous year.<sup>2</sup> Among all age groups, 18- to 25-year-olds have the highest lifetime prevalence of serious psychological distress, i.e., mental illness that results in functional impairment (18.6%), and the highest past year prevalence of major depressive episode (9.7%).<sup>3</sup> The lifetime prevalence of major depressive episode for 18- to 25-year-olds is 15.7%.<sup>3</sup> More than one in ten (11.2%) young adults between the ages of 18 and 25 have received treatment for a mental health problem in the previous year.<sup>3</sup>

## References:

- <sup>1</sup> Choy, S. (2002). Access and persistence: Findings from 10 years of longitudinal research on students. Washington, D.C.: American Council on Education.
- <sup>2</sup> Kessler, R. C., Chiu, W. T., Demler, O., Merikangas, K. R., & Walters, E. E. (2005). Prevalence, severity, and comorbidity of twelve-month DSM-IV disorders in the National Comorbidity Survey Replication (NCS-R). *Archives of General Psychiatry*, 62(6), 617–627.
- <sup>3</sup> Substance Abuse and Mental Health Services Administration. (2006). Results from the 2005 National Survey on Drug Use and Health: National findings. Rockville, MD: Office of Applied Studies, NSDUH Series H-30, DHHS Publication No. SMA 06-4194.

## 2007 Mental Health Highlights

Among the individuals from 14 Minnesota colleges and universities who participated in the 2007 College Student Health Survey:

- **27.1%** were diagnosed with a mental health illness within their lifetime.
- **15.7%** were diagnosed with a mental health illness within the past 12 months.
- **18.5%** were diagnosed with depression within their lifetime.
- **9.0%** were diagnosed with depression within the past 12 months.
- **4.6%** of females and **0.8%** of males were diagnosed with anorexia or bulimia within their lifetime.
- **6.2%** of all students report seeing a mental health counselor or therapist.
- **7.4%** report taking medication for depression.
- **4.8%** report taking medication for a mental health problem other than depression.



# Methodology

Students completed the 2007 College Student Health Survey, developed by Boynton Health Service at the University of Minnesota. As an incentive, all students who responded to the survey received a \$5 gift card and entry 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 at eleven schools were e-mailed a link to an online version of the survey, and students at three schools received a paper survey via U.S. Mail.
- Reminder postcards/multiple e-mails were sent to all students to encourage participation.
- All students received a minimum of two invitations to participate in the survey.

## University of Minnesota–Twin Cities Methodology Highlights

- **6,000** students from the University of Minnesota–Twin Cities were randomly selected to participate in this study.
- **2,920** completed and returned the survey.
- **0** surveys were undeliverable.
- **48.7%** was the overall UMTC response rate. (Surveys determined to be undeliverable were removed from the original sample size.)



2007 College Student Health Survey Postcard

# Results

For University of Minnesota–Twin Cities (UMTC) students, depression and anxiety are the two most frequently reported mental health diagnoses for both lifetime and the past 12 months.

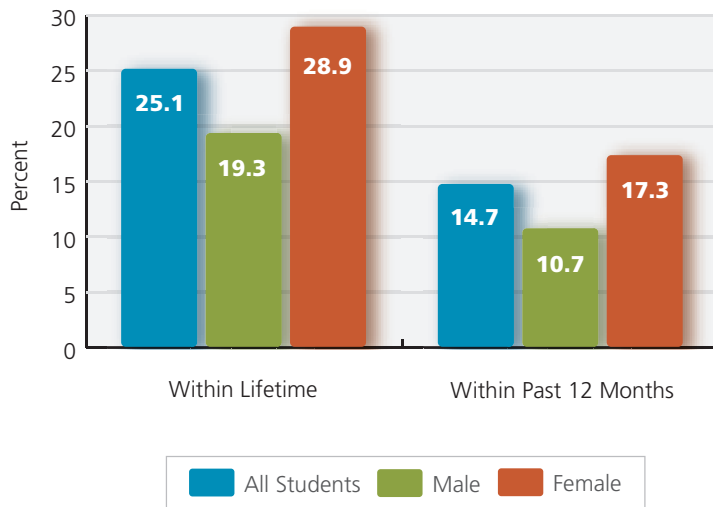
## Diagnosed Mental Health Condition– Lifetime and Past 12 Months All Students

Mental Health Condition	Percent Who Report Being Diagnosed	
	Within Lifetime*	Within Past 12 Months*
Anorexia	2.4	0.7
Anxiety	13.1	9.2
Attention Deficit Disorder	3.1	1.7
Autism	0.2	0.2
Bipolar Disorder	1.1	0.6
Bulimia	1.8	0.5
Depression	16.9	8.2
Obsessive-Compulsive Disorder	2.0	1.1
Panic Attacks	6.3	4.0
Post-Traumatic Stress Disorder	1.5	0.7
Seasonal Affective Disorder	2.8	1.8
Social Phobia/Performance Anxiety	4.2	2.2

\*Note: For certain conditions, the disparity in rates between lifetime and past-12-month diagnoses is a result of students reporting a past-12-month diagnosis but not a lifetime diagnosis.

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

All Students by Gender



Among UMTC students, **25.1%** report being diagnosed with at least one mental health condition within their lifetime. Additional analysis shows that **13.2%** report being diagnosed with two or more mental health conditions 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.

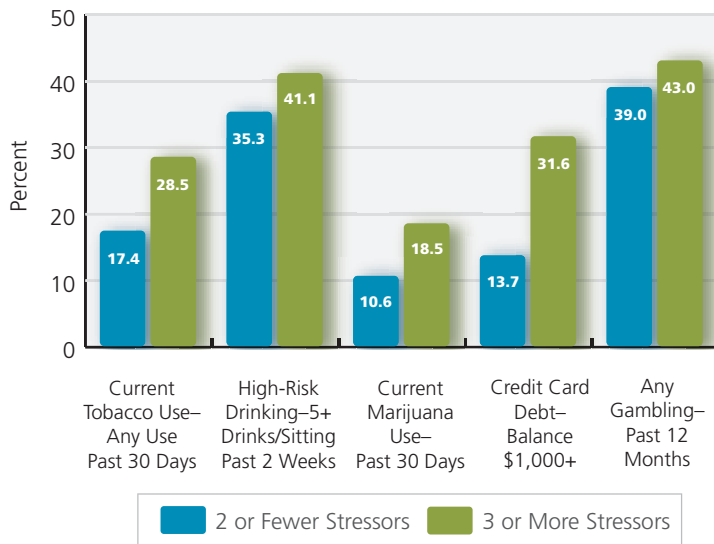
The most commonly experienced stressor among University of Minnesota–Twin Cities students is a roommate/housemate conflict. Other frequently reported stressors include issues related to personal relationships, the death or illness of someone close, and parental conflict. A total of **44.3%** of students report experiencing one or two stressors within the past 12 months, and **20.3%** report experiencing three or more stressors over that same time period.

## Mental Health Stressors

All Students

Stressor	Percent
	Experienced Within Past 12 Months
Getting Married	4.1
Failing a Class	7.7
Serious Physical Illness of Someone Close to You	15.0
Death of Someone Close to You	17.6
Being Diagnosed With a Serious Physical Illness	2.2
Being Diagnosed With a Serious Mental Illness	4.0
Divorce or Separation From Your Spouse	1.0
Termination of Personal Relationship (Not Including Marriage)	19.2
Attempted Suicide	1.0
Being Put on Academic Probation	5.0
Excessive Credit Card Debt	9.1
Excessive Debt Other Than Credit Card	10.0
Being Arrested	0.8
Being Fired or Laid Off From a Job	2.8
Roommate/Housemate Conflict	22.1
Parental Conflict	13.5
Lack of Health Care Coverage	6.1
Issues Related to Sexual Orientation	2.9
Not Applicable (None of the Above Happened to Me)	33.8
Report Experiencing One or Two of the Above Stressors	44.3
Report Experiencing Three or More of the Above Stressors	20.3

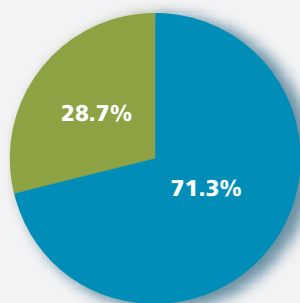
## Mental Health Stressors and Risky Behavior All Students



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

## Ability to Manage Stress—Past 12 Months All Students

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



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

More than one-quarter (**28.7%**) of UMTC students report they are unable to manage their stress level. Additional analysis shows that among these students, **15.8%** also report they were diagnosed with depression within the past 12 months. Close to three-fourths of UMTC students (**71.3%**) report they are able to manage their level of stress. Only **5.1%** of these students report they were diagnosed with depression within the past 12 months.

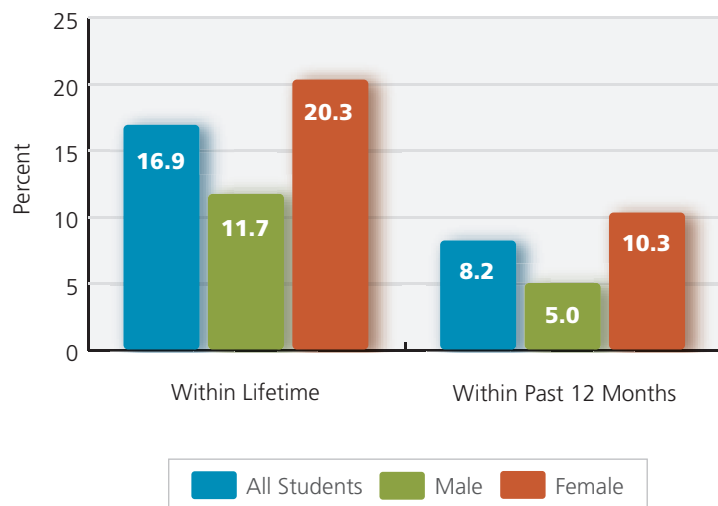
There appears to be an association between unmanaged stress levels and higher rates of diagnosis for acute and chronic conditions as well as various mental health conditions. For example, **18.2%** of UMTC students with unmanaged stress levels report being diagnosed with anxiety within the past year compared to only **5.5%** of students with managed stress levels reporting the same diagnosis.

### Stress and Mental Health—Acute and Chronic Condition Diagnosis All Students

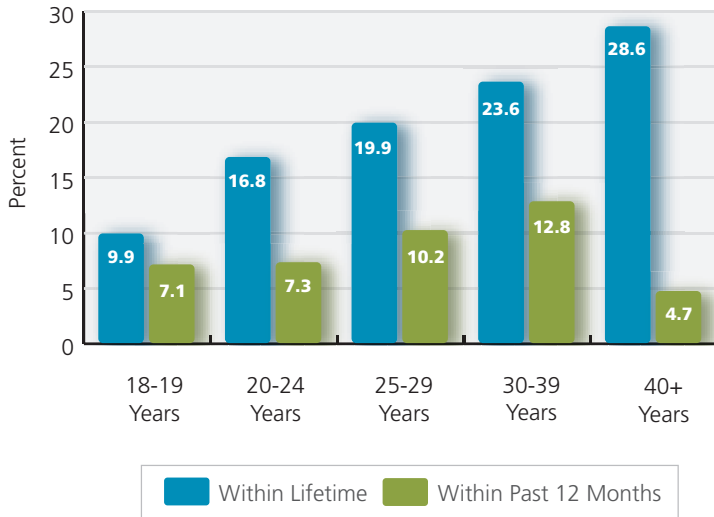
Diagnosed Within the Past 12 Months	Percent	
	Unmanaged Stress (Index >1)	Managed Stress (Index ≤1)
Any Chronic Condition	27.8	20.7
Any Acute Condition	19.8	13.7
Anxiety	18.2	5.5
Depression	15.8	5.1
Obsessive-Compulsive Disorder	2.4	0.5
Panic Attacks	8.3	2.3
Social Phobia/Performance Anxiety	4.5	1.3

Depression is the mental health condition most frequently reported by University of Minnesota—Twin Cities students within their lifetime. Females report being diagnosed with depression at higher rates than males—both for lifetime and the past 12 months.

### Depression Diagnosis—Lifetime and Past 12 Months All Students by Gender

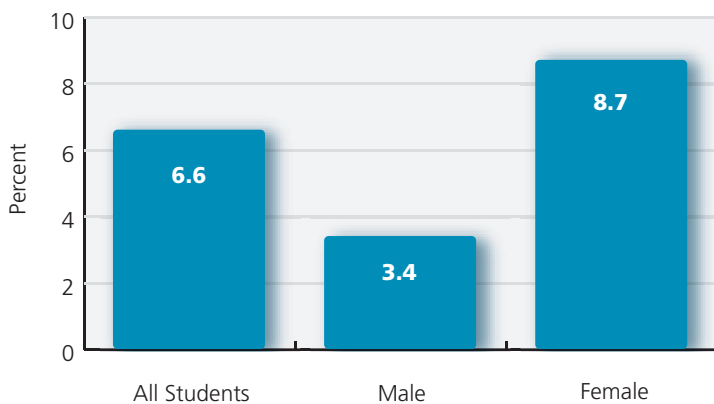


### Depression Diagnosis–Lifetime and Past 12 Months All Students by Age Group



The proportion of University of Minnesota–Twin Cities students reporting being diagnosed with depression within the past 12 months increases with age from **7.1%** among 18- and 19-year-olds to **12.8%** among 30- to 39-year-olds.

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



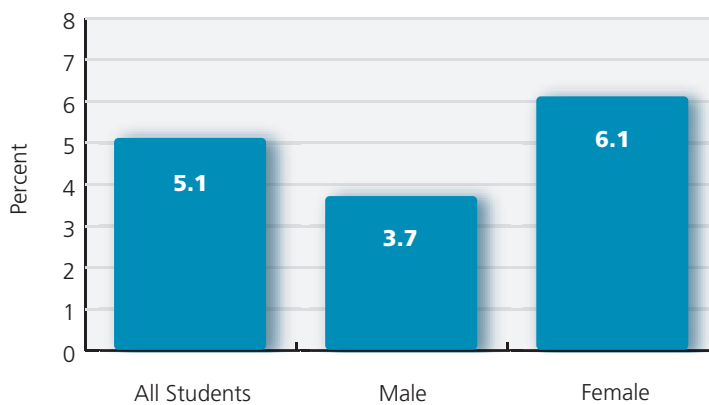
Overall, **6.6%** of University of Minnesota–Twin Cities students report they currently are taking medication for depression. Females report a higher rate of medication use for depression than males, which correlates with the higher diagnosis rates found in females compared to males.

Female University of Minnesota–Twin Cities students also report a higher rate of medication use for mental health problems other than depression than the university’s male population. Overall, **5.1%** of students report being on medication for a mental health problem other than depression.

Among students attending the University of Minnesota–Twin Cities, **3.5%** report being diagnosed with anorexia and/or bulimia within their lifetime. Females attending the university had higher rates of both anorexia and bulimia compared to males attending UMTC.

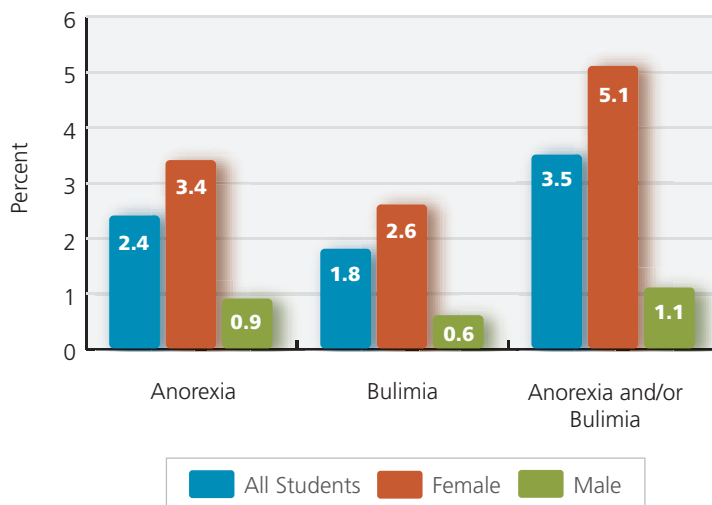
### Currently Taking Medication for Mental Health Problems Other Than Depression

All Students by Gender



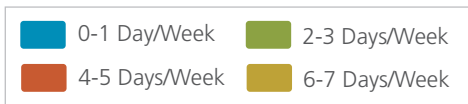
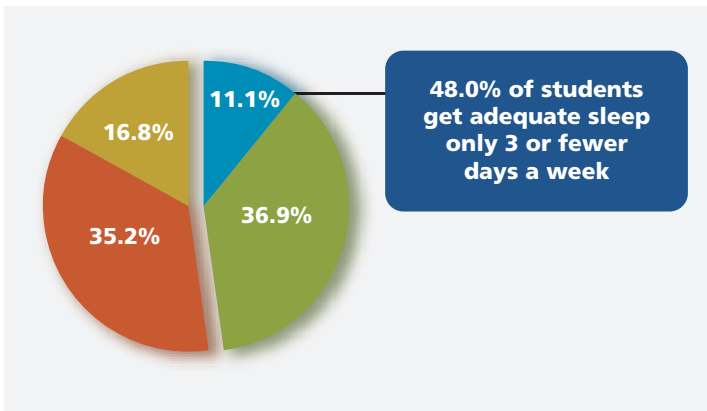
### Eating Disorder Diagnosis–Lifetime

All Students by Gender



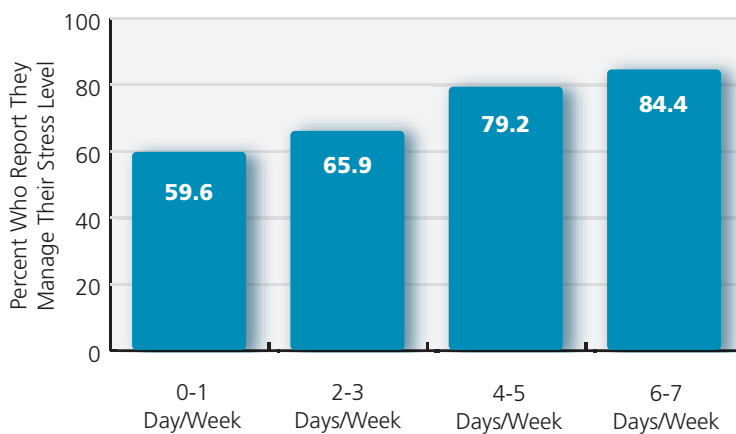


## Number of Days of Adequate Sleep— Past Seven Days All Students



In response to a question regarding how many of the past seven days they got enough sleep so they felt rested when they woke up in the morning, slightly less than one-half (**48.0%**) of UMTC students report they received adequate sleep on only three or fewer days over the previous seven days.

## Adequate Sleep and Stress All Students



Receiving adequate sleep in the past seven days appears to have an impact on students' ability to manage their stress level. Only **59.6%** of UMTC students who report receiving 0-1 day/week of adequate sleep also report the ability to manage their stress, whereas **84.4%** of students who report receiving 6-7 days/week of adequate sleep also report the ability to manage their stress.

Students were asked to report whether they have experienced any of the health or personal issues presented in the table to the right, and if so, whether the issue(s) affected their academic performance. The issues highlighted in red are particularly salient to this report on mental health. The other issues are more relevant to Report 1 and Reports 3-7 in this series.

It should be noted that although students report some issues less frequently, these issues may have a greater impact on academic performance. For example, although only **3.8%** of UMTC students report having a serious injury within the past year, of this small percentage of students, **40.9%** report it affected their academic performance.

### Impact of Health and Personal Issues on Academic Performance—Past 12 Months All Students

Health or Personal Issue	Percent	
	Report Having Issue	Report Issue Affected Academics
<b>Alcohol Use</b>	<b>31.0</b>	<b>17.7</b>
Allergies	31.1	6.5
<b>Chronic Conditions</b>	<b>9.8</b>	<b>18.5</b>
<b>Concerns for Troubled Friend/Family Member</b>	<b>39.5</b>	<b>34.9</b>
<b>Drug Use</b>	<b>6.4</b>	<b>28.5</b>
<b>Eating Disorder/Problems</b>	<b>5.3</b>	<b>21.4</b>
Excessive Computer/Internet Use	32.2	41.9
<b>Financial Difficulties</b>	<b>37.0</b>	<b>30.5</b>
Learning Disability/ADD	4.7	65.0
<b>Mental Health Issues</b>	<b>22.7</b>	<b>55.1</b>
Mononucleosis	3.5	48.5
Moved/Changed Residence	24.2	16.9
<b>Pregnancy</b>	<b>3.3</b>	<b>40.6</b>
<b>Relationship Issues</b>	<b>34.3</b>	<b>39.0</b>
<b>Serious Injury</b>	<b>3.8</b>	<b>40.9</b>
Sexual Assault	1.2	44.1
Sexually Transmitted Infection	2.7	14.1
<b>Sleep Difficulties</b>	<b>38.8</b>	<b>44.0</b>
<b>Stress</b>	<b>70.5</b>	<b>42.1</b>
Upper Respiratory Infection	36.7	28.7
Urinary Tract Infection	7.5	12.4

### **Participating Two-Year Schools**

Alexandria Technical College  
Tam Bukowski

Anoka-Ramsey Community College  
Andrea Roberge

Lake Superior College  
Beth Adams

Minnesota State Community and  
Technical College  
Shawn Anderson

North Hennepin Community College  
Kristi Moebeck

Northwest Technical College  
Kari Kantak

### **Participating Four-Year Schools**

Bemidji State University  
Jay Passa

Concordia College  
Paul Wraalstad

Minnesota State University Moorhead  
Susanne Williams

University of Minnesota–Crookston  
Stacey Grunewald

University of Minnesota–Duluth  
Lauretta Perry

University of Minnesota–Morris  
Sandra Olson-Loy

University of Minnesota–Rochester  
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**BOYNTON**  
HEALTH SERVICE

UNIVERSITY OF MINNESOTA

**Tobacco Use** **3**  
University of Minnesota–Twin Cities

Published October 2007

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# Tobacco Use **3**

University of Minnesota–Twin Cities

## Snapshot: Colleges and Universities Participating in the 2007 College Student Health Survey

Two-Year Schools	Location	Enrollment–Spring 2007*
Alexandria Technical College	Alexandria, MN	3,475
Anoka-Ramsey Community College	Cambridge, MN Coon Rapids, MN	9,724
Lake Superior College	Duluth, MN	8,876
Minnesota State Community and Technical College	Detroit Lakes, MN Fergus Falls, MN Moorhead, MN Wadena, MN	6,874
North Hennepin Community College	Brooklyn Park, MN	9,329
Northwest Technical College	Bemidji, MN	1,224
Four-Year Schools	Location	Enrollment–Spring 2007*
Bemidji State University	Bemidji, MN	6,449
Concordia College	Moorhead, MN	2,698
Minnesota State University Moorhead	Moorhead, MN	9,025
University of Minnesota–Crookston	Crookston, MN	951
University of Minnesota–Duluth	Duluth, MN	9,467
University of Minnesota–Morris	Morris, MN	1,489
University of Minnesota–Rochester	Rochester, MN	306
University of Minnesota–Twin Cities	Minneapolis, MN	43,737

\*Includes full-time and part-time students.



## University of Minnesota–Twin Cities Survey Demographics\*

	All Students
Average Age (Years)	23.4
Age Range (Years)	18-63
18-24 Years	72.6%
25 Years or Older	27.4%
Average GPA	3.38
<b>Class Status</b>	
First-Year Undergraduate	15.4%
Second-Year Undergraduate	14.5%
Third-Year Undergraduate	15.7%
Fourth-Year Undergraduate	15.8%
Fifth-Year Undergraduate	7.6%
Graduate or Professional	31.0%
<b>Gender</b>	
Male	40.1%
Female	59.7%
Transgender/Other	0.2%
Unspecified	0.0%
<b>Ethnic Origin</b>	
African American/Black	2.7%
American Indian/Alaskan Native	1.2%
Asian/Pacific Islander	12.7%
Latino/Hispanic	2.2%
Middle Eastern	1.0%
Caucasian/White	81.6%
Other	2.3%
<b>Current Residence</b>	
Residence Hall or Fraternity/Sorority	20.0%
Other	80.0%

\*Based on student response.



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# Introduction

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

The 1998 Masters Settlement Agreement—an agreement between 11 tobacco companies, 46 states, 5 territories, and the District of Columbia—instituted restrictions on the marketing of tobacco to children. Earlier that same year, the state of Minnesota reached a similar settlement with the tobacco industry. The tobacco companies countered the restrictions instituted by the settlements by increasing their marketing in venues popular among 18- to 24-year-olds, the youngest targets permitted by law.<sup>1,2</sup> Whether the increase in marketing to this age group has resulted in more young adults smoking is speculative, but clearly the current level of tobacco use among college students poses a major health risk. Of the 15 million college students in the United States, an estimated 1.7 million will die prematurely due to smoking-related illnesses.<sup>3</sup>

Recent research shows that current cigarette use by Americans of all ages peaks among young adults ages 21-25 at 41.2%, while 18- to 20-year-olds are not far behind at 35.7%.<sup>4</sup> Approximately one in three (30.6%) full-time college students smoked cigarettes at least one time in the previous year, one in four (23.8%) smoked cigarettes at least one time in the previous 30 days, and one in ten (12.0%) smoke cigarettes daily.<sup>5</sup> No significant gender difference exists in the prevalence of current or daily tobacco smoking among college students.<sup>5</sup> Among young adults ages 18-25, 5.1% used smokeless tobacco in the previous month.<sup>4</sup> Current cigarette smokers are more likely to use other tobacco products, alcohol, or illicit drugs than nonsmokers.<sup>4</sup> Among all current smokers, 42.5% have tried to quit and have stopped smoking for at least one day in the preceding 12 months.<sup>6</sup>

## References:

- 1 Sepe, E. & Glantz, S. A. (2002). Bar and club promotions in the alternative press: Targeting young adults. *American Journal of Public Health*, 92(1), 75-78.
- 2 Sepe, E., Ling, P. M., & Glantz, S. A. (2002). Smooth moves: Bar and night club tobacco promotions that target young adults. *American Journal of Public Health*, 92(3), 414-419.
- 3 Halperin, A. C. (2002, March). State of the union: Smoking on US college campuses. A report for the American Legacy Foundation. Washington, D.C. (unpublished, internal report).
- 4 Substance Abuse and Mental Health Services Administration. (2006). Results from the 2005 National Survey on Drug Use and Health: National findings. Rockville, MD: Office of Applied Studies, NSDUH Series H-30, DHHS Publication No. SMA 06-4194.
- 5 Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2006). Monitoring the Future national survey results on drug use, 1975–2005. Vol. II: College students and adults ages 19-45. Bethesda, MD: National Institute on Drug Abuse, NIH Publication No. 06-5884.
- 6 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.

## 2007 Tobacco Use Highlights

Among the individuals from 14 Minnesota colleges and universities who participated in the 2007 College Student Health Survey:

- **25.0%** report they used tobacco within the past 30 days, including **31.4%** of male students and **21.1%** of female students.
- **10.5%** of males used smokeless tobacco within the past 30 days; the incidence of female use (**1.1%**) is negligible.
- **38.9%** of students who used tobacco within the past 30 days report making at least one attempt to quit over the past 12 months.

# Methodology

Students completed the 2007 College Student Health Survey, developed by Boynton Health Service at the University of Minnesota. As an incentive, all students who responded to the survey received a \$5 gift card and entry 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 at eleven schools were e-mailed a link to an online version of the survey, and students at three schools received a paper survey via U.S. Mail.
- Reminder postcards/multiple e-mails were sent to all students to encourage participation.
- All students received a minimum of two invitations to participate in the survey.

## University of Minnesota–Twin Cities Methodology Highlights

- **6,000** students from the University of Minnesota–Twin Cities were randomly selected to participate in this study.
- **2,920** completed and returned the survey.
- **0** surveys were undeliverable.
- **48.7%** was the overall UMTC response rate. (Surveys determined to be undeliverable were removed from the original sample size.)



2007 College Student Health Survey Postcard

# Results

The current tobacco use rate for students ages 18-24 attending the University of Minnesota–Twin Cities (UMTC) is **20.9%**.

This is the lowest reported use rate among UMTC students since the tobacco data was first collected in 1992. Additional data analysis reveals that the rate of current tobacco use by all UMTC students who responded to the survey is **19.7%**.

## Definition:

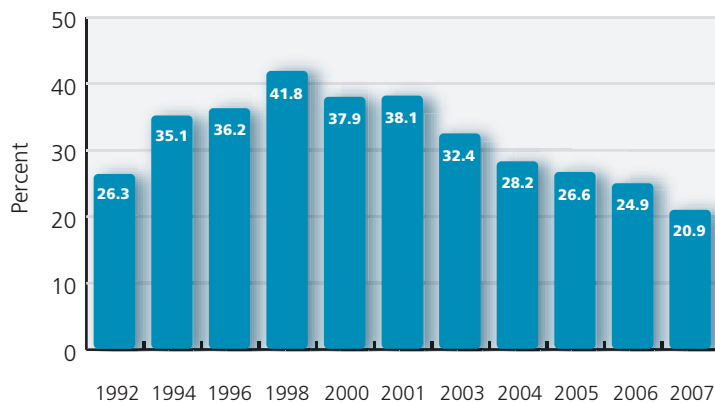
### Current Tobacco Use

Current tobacco use is defined as any use in the past 30 days. Tobacco use includes both smoke and smokeless tobacco.

Comparing the current tobacco use rate of students ages 18-24 by gender over time shows that, in general, UMTC female students use tobacco at a lower rate than male students attending the university. In 2000 and 2001, however, the rate for females is slightly higher than the rate for males.

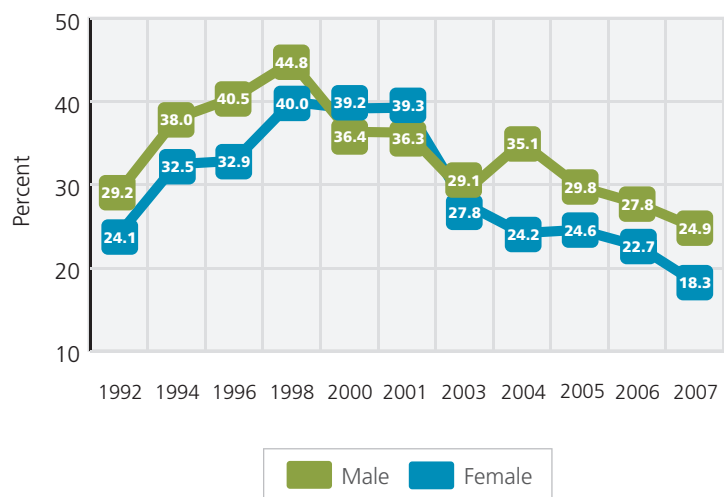
## Current Tobacco Use

18- to 24-Year-Old Students

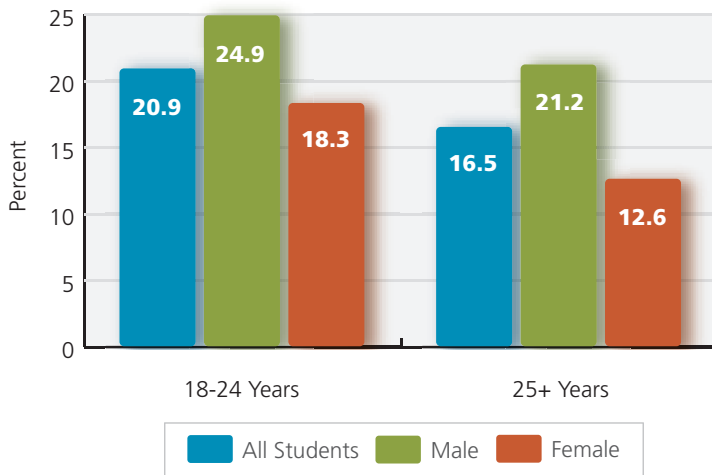


## Current Tobacco Use

18- to 24-Year-Old Students by Gender

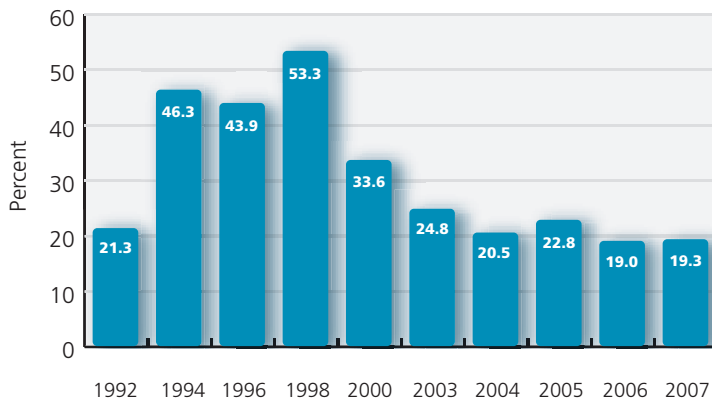


### Current Tobacco Use All Students by Age Group and Gender



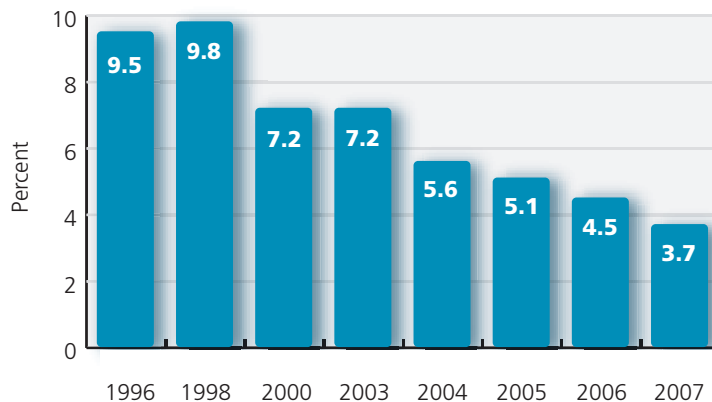
University of Minnesota–Twin Cities students ages 18-24 have a higher rate of tobacco use compared to students age 25 and older (**20.9%** vs. **16.5%**, respectively). Males within each age group report a higher tobacco use rate than females within the same age group. The highest current tobacco use rate (**24.9%**) is among males ages 18-24.

### Current Tobacco Use First-Year Students



The current tobacco use rate for first-year students attending the University of Minnesota–Twin Cities has fluctuated since 1992, ranging from a low of **19.0%** in 2006 to a high of **53.3%** in 1998. The current tobacco use rate for first-year UMTC students is **19.3%**.

### Daily Tobacco Use 18- to 24-Year-Old Students

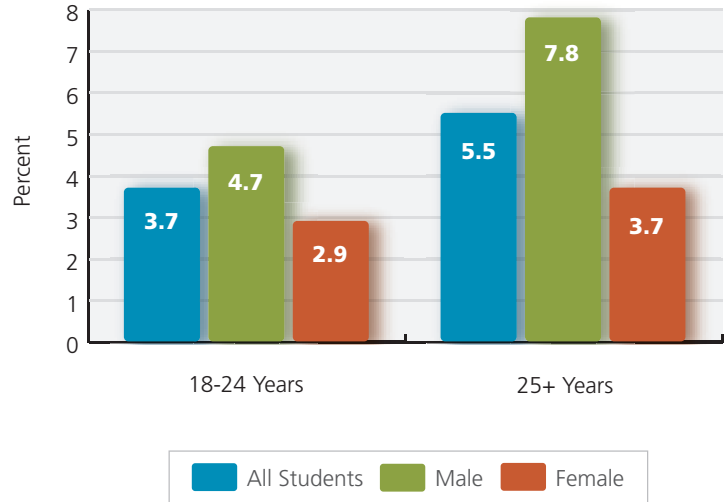


Among students ages 18-24 who attend the University of Minnesota–Twin Cities, the rate of daily tobacco use has declined since 1998. The current rate of daily tobacco use is **3.7%**, which is approximately a **62.0%** decrease in the rate since the highest daily use rate of **9.8%** was reported in 1998.

The daily tobacco use rate for University of Minnesota–Twin Cities students is **3.7%** for 18- to 24-year-olds compared to **5.5%** for students age 25 and older. The highest daily tobacco use rate (**7.8%**) is reported by UMTC males age 25 and older. The lowest daily use rate (**2.9%**) is reported by UMTC females ages 18-24.

### Daily Tobacco Use

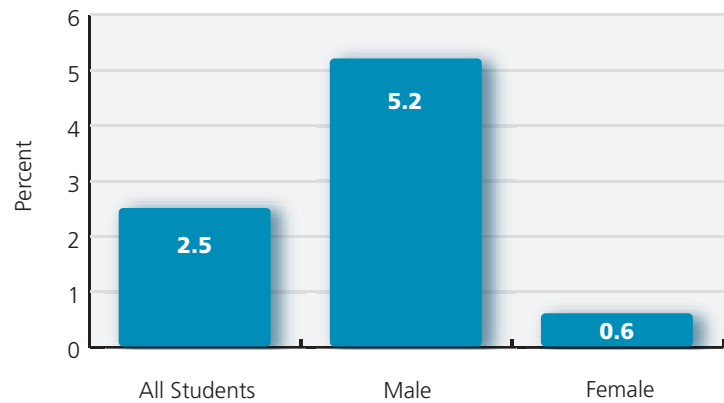
All Students by Age Group and Gender



Males are the predominant users of smokeless tobacco. Overall, **5.2%** of male University of Minnesota–Twin Cities students report using smokeless tobacco during the past 30 days compared to only **0.6%** of female UMTC students.

### Current Smokeless Tobacco Use

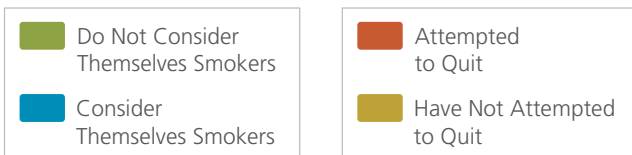
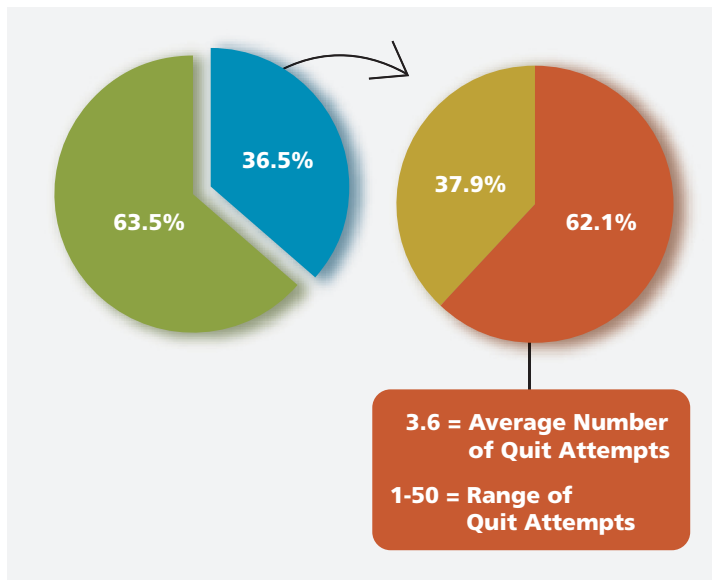
All Students by Gender





## Quit Attempts—Past 12 Months

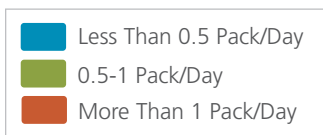
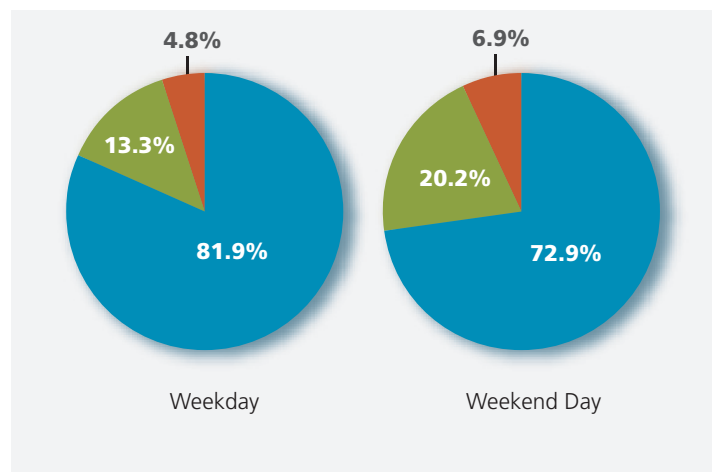
All Students: Current Cigarette Users



Among students at the University of Minnesota—Twin Cities who report using smoking tobacco in the past 30 days, **63.5%** do not consider themselves smokers. Among UMTC students who do consider themselves smokers, **62.1%** made at least one attempt to quit smoking over the past 12 months. These students made an average of **3.6** quit attempts during that same 12-month period.

## Number of Cigarettes Smoked

All Students: Current Tobacco Users

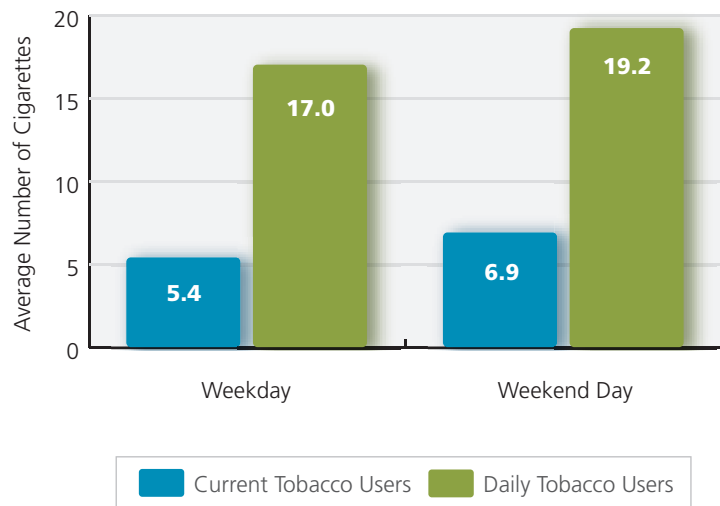


For UMTC students who report using smoking tobacco over the past 30 days, the percentage of those who report they smoke more than one pack of cigarettes per day increases from **4.8%** on a weekday to **6.9%** on a weekend day.

The average number of cigarettes smoked by UMTC students who are current tobacco users increases from **5.4** per weekday to **6.9** per weekend day. For daily tobacco users, the average number increases from **17.0** per weekday to **19.2** per weekend day.

### Average Number of Cigarettes Smoked

All Students: Current vs. Daily Tobacco Users



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

### Location of Tobacco Use

All Students: Current Tobacco Users

Location	Percent Who Indicate Use at Specified Location
Campus Events	16.4
Bars/Restaurants	47.1
In a Car	45.6
Where I Live	48.7
Private Party	54.8
Work Site	23.0
Residence Hall	10.8
Fraternity/Sorority	9.9
Other	23.5

## Exposure to Secondhand Smoke

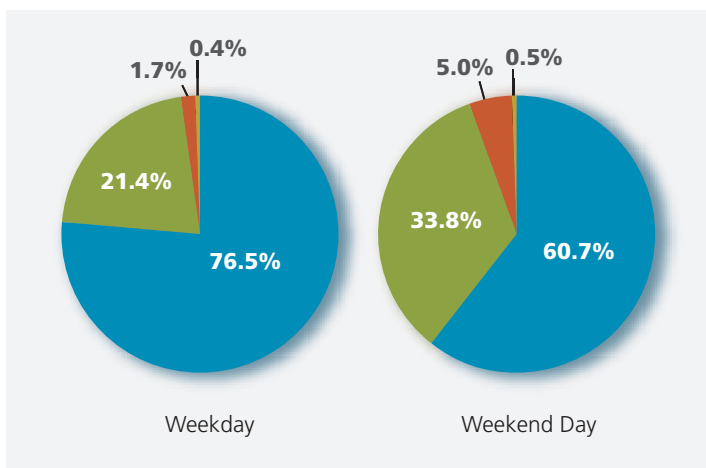
All Students

Location	Percent of Nonsmokers Who Indicate Exposure	Percent of Smokers Who Indicate Exposure	Percent of All Students Who Indicate Exposure
N/A–Never Exposed	38.7	13.6	34.0
Campus Events	7.1	8.5	7.4
Bars/Restaurants	30.3	39.0	31.8
In a Car	5.4	26.8	9.4
Where I Live	5.6	20.4	8.3
Private Party	18.6	44.3	23.3
Work Site	2.2	9.2	3.5
Residence Hall	2.5	5.9	3.1
Fraternity/Sorority	2.7	8.8	3.9
Other	15.9	14.9	15.7

For nonsmokers attending UMTC, the most commonly cited location for exposure to secondhand smoke is bars/restaurants, and the second most frequently reported location is private parties. The most commonly cited location for exposure to secondhand smoke for smokers is private parties, with bars/restaurants being the second most cited location.

## Number of Hours Exposed to Secondhand Smoke

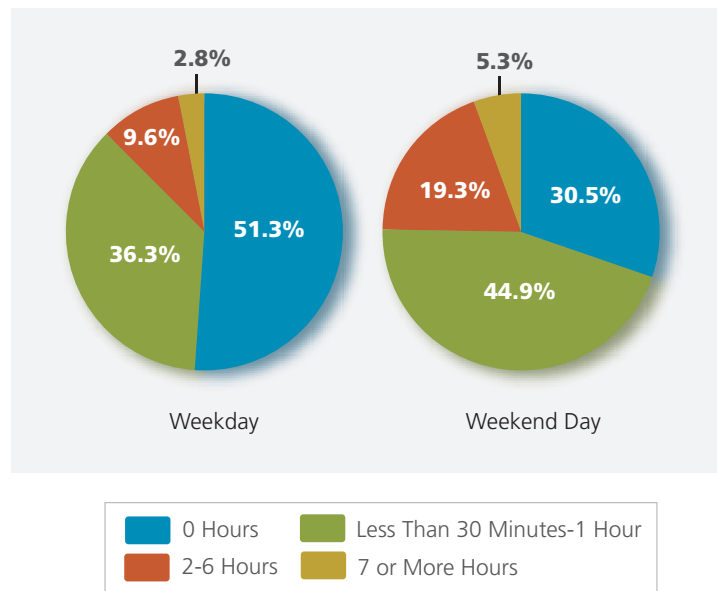
All Students: Nonsmokers



For nonsmokers attending the University of Minnesota–Twin Cities, the hours of exposure to secondhand smoke increase from a weekday to a weekend day. During the week, **23.5%** report being exposed to some level of secondhand smoke per day, whereas during the weekend this exposure rate increases to **39.3%**.

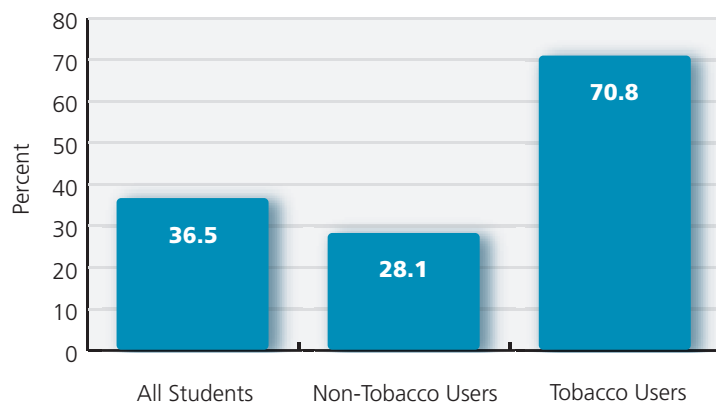
The same trend of increased exposure to secondhand smoke from a weekday to a weekend day is seen in smokers attending UMTC. Any exposure to secondhand smoke grows from **48.7%** on a weekday to **69.5%** on a weekend day. In addition, exposure to two hours or more per day averages **12.4%** on a weekday and **24.6%** on a weekend day.

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



University of Minnesota–Twin Cities students who use tobacco tend to have a higher rate of high-risk drinking compared to UMTC students who are non-tobacco users. There is approximately a 2.5-fold increase in the high-risk drinking rates among tobacco users (**70.8%**) versus non-tobacco users (**28.1%**).

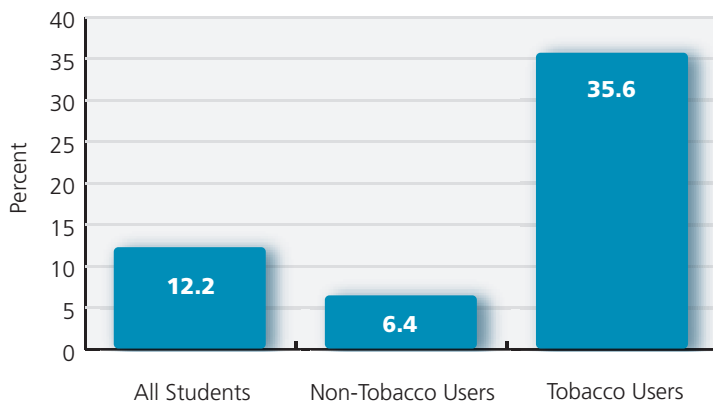
### Smoking Status and High-Risk Drinking All Students



#### Definition: High-Risk Drinking

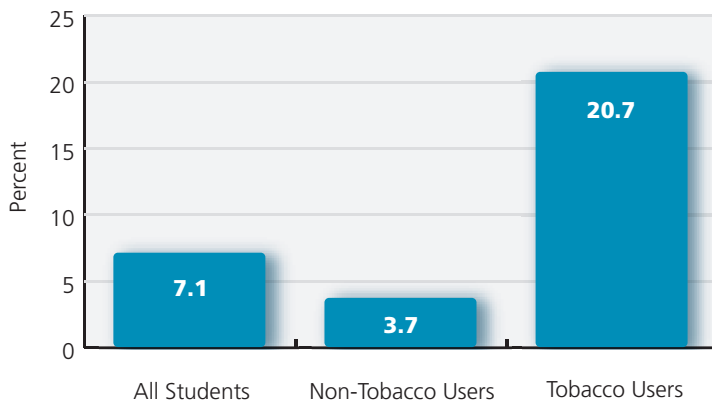
High-risk drinking is defined as consumption of five or more alcohol drinks at one sitting within the past two weeks.

### Smoking Status and Current Marijuana Use All Students



Similar to the relationship between high-risk drinking and tobacco use, the use of marijuana in the past 30 days by UMTC students is considerably higher among tobacco users (**35.6%**) compared to non-tobacco users (**6.4%**). This is a more than 5.5-fold increase in the rate.

### Smoking Status and Other Illegal Drug Use (Not Marijuana)–Past 12 Months All Students



As with high-risk drinking and marijuana use, the use of other illegal drugs is associated with tobacco use. Tobacco users who attend UMTC use illegal drugs other than marijuana at more than 5.5 times the rate of non-tobacco users who attend the university (**20.7%** vs. **3.7%**, respectively).

Students were asked to report whether they have experienced any of the health or personal issues presented in the table to the right, and if so, whether the issue(s) affected their academic performance. The survey question did not directly relate to tobacco use and academics, but the prevalence of the issues highlighted in red is higher among students who use tobacco. The other issues listed in this table are more relevant to Reports 1-2 and 4-7 in this series.

### Impact of Health and Personal Issues on Academic Performance—Past 12 Months All Students

Health or Personal Issue	Percent	
	Report Having Issue	Report Issue Affected Academics
Alcohol Use	31.0	17.7
<b>Allergies</b>	<b>31.1</b>	<b>6.5</b>
<b>Chronic Conditions</b>	<b>9.8</b>	<b>18.5</b>
Concerns for Troubled Friend/Family Member	39.5	34.9
Drug Use	6.4	28.5
Eating Disorder/Problems	5.3	21.4
Excessive Computer/Internet Use	32.2	41.9
Financial Difficulties	37.0	30.5
Learning Disability/ADD	4.7	65.0
Mental Health Issues	22.7	55.1
Mononucleosis	3.5	48.5
Moved/Changed Residence	24.2	16.9
Pregnancy	3.3	40.6
Relationship Issues	34.3	39.0
Serious Injury	3.8	40.9
Sexual Assault	1.2	44.1
Sexually Transmitted Infection	2.7	14.1
Sleep Difficulties	38.8	44.0
Stress	70.5	42.1
<b>Upper Respiratory Infection</b>	<b>36.7</b>	<b>28.7</b>
Urinary Tract Infection	7.5	12.4

## Participating Two-Year Schools

Alexandria Technical College  
Tam Bukowski

Anoka-Ramsey Community College  
Andrea Roberge

Lake Superior College  
Beth Adams

Minnesota State Community and  
Technical College  
Shawn Anderson

North Hennepin Community College  
Kristi Moebeck

Northwest Technical College  
Kari Kantak

## Participating Four-Year Schools

Bemidji State University  
Jay Passa

Concordia College  
Paul Wraalstad

Minnesota State University Moorhead  
Susanne Williams

University of Minnesota–Crookston  
Stacey Grunewald

University of Minnesota–Duluth  
Lauretta Perry

University of Minnesota–Morris  
Sandra Olson-Loy

University of Minnesota–Rochester  
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# 3

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**BOYNTON**  
HEALTH SERVICE

UNIVERSITY OF MINNESOTA



**Alcohol and Other Drug Use**  
University of Minnesota–Twin Cities

**4**

Published October 2007

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# Alcohol and Other Drug Use

University of Minnesota–Twin Cities

4

## Snapshot: Colleges and Universities Participating in the 2007 College Student Health Survey

Two-Year Schools	Location	Enrollment–Spring 2007*
Alexandria Technical College	Alexandria, MN	3,475
Anoka-Ramsey Community College	Cambridge, MN Coon Rapids, MN	9,724
Lake Superior College	Duluth, MN	8,876
Minnesota State Community and Technical College	Detroit Lakes, MN Fergus Falls, MN Moorhead, MN Wadena, MN	6,874
North Hennepin Community College	Brooklyn Park, MN	9,329
Northwest Technical College	Bemidji, MN	1,224
Four-Year Schools	Location	Enrollment–Spring 2007*
Bemidji State University	Bemidji, MN	6,449
Concordia College	Moorhead, MN	2,698
Minnesota State University Moorhead	Moorhead, MN	9,025
University of Minnesota–Crookston	Crookston, MN	951
University of Minnesota–Duluth	Duluth, MN	9,467
University of Minnesota–Morris	Morris, MN	1,489
University of Minnesota–Rochester	Rochester, MN	306
University of Minnesota–Twin Cities	Minneapolis, MN	43,737

\*Includes full-time and part-time students.

## University of Minnesota–Twin Cities Survey Demographics\*

	All Students
Average Age (Years)	23.4
Age Range (Years)	18-63
18-24 Years	72.6%
25 Years or Older	27.4%
Average GPA	3.38
<b>Class Status</b>	
First-Year Undergraduate	15.4%
Second-Year Undergraduate	14.5%
Third-Year Undergraduate	15.7%
Fourth-Year Undergraduate	15.8%
Fifth-Year Undergraduate	7.6%
Graduate or Professional	31.0%
<b>Gender</b>	
Male	40.1%
Female	59.7%
Transgender/Other	0.2%
Unspecified	0.0%
<b>Ethnic Origin</b>	
African American/Black	2.7%
American Indian/Alaskan Native	1.2%
Asian/Pacific Islander	12.7%
Latino/Hispanic	2.2%
Middle Eastern	1.0%
Caucasian/White	81.6%
Other	2.3%
<b>Current Residence</b>	
Residence Hall or Fraternity/Sorority	20.0%
Other	80.0%

\*Based on student response.



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# Introduction

For some young adults, college life includes an introduction to 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. Nearly nine in ten (86.6%) college students have consumed alcohol at least one time, and nearly seven in ten (68.0%) college students consume alcohol monthly.<sup>1</sup> 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 (49.9% at age 21, 46.6% at age 22, and 47.7% at age 23).<sup>2</sup> The rate of binge drinking is 36.1% among 18- to 20-year-olds and 45.7% among 21- to 25-year-olds.<sup>2</sup> Young adults ages 18 to 22 who are enrolled in college full time are more likely than their peers who are not enrolled in college full time to consume alcohol monthly and to binge drink.<sup>2</sup>

More than half (52.0%) of college students have used an illicit drug at least once in their lifetime, nearly two in five (37.0%) college students have used an illicit drug at least once in the past year, and more than one in five (21.2%) college students have used an illicit drug in the last month.<sup>1</sup> Marijuana is the illicit drug of choice for college students, with nearly half (49.1%) of students having used the drug at least once in their lifetime and one-third (33.3%) having used it in the past year.<sup>1</sup> Among college students, 6.7% have used amphetamines, 5.7% have used cocaine, 1.7% have used methamphetamines, and 0.3% have used heroin in the previous year.<sup>1</sup> There is a higher prevalence among male college students (41.0%) in the use of any illicit drug in the previous year than among female college students (34.0%).<sup>2</sup> The rate of past month illicit drug use is 22.3% for all 18- to 20-year-olds and 18.7% for all 21- to 25-year-olds.<sup>2</sup>

## References:

<sup>1</sup> Johnston, L. D., O'Malley, P. M., Bachman, J. G., & Schulenberg, J. E. (2006). Monitoring the Future national survey results on drug use, 1975–2005. Vol. II: College students and adults ages 19–45. Bethesda, MD: National Institute on Drug Abuse, NIH Publication No. 06-5884.

<sup>2</sup> Substance Abuse and Mental Health Services Administration. (2006). Results from the 2005 National Survey on Drug Use and Health: National findings. Rockville, MD: Office of Applied Studies, NSDUH Series H-30, DHHS Publication No. SMA 06-4194.

## 2007 Alcohol and Other Drug Use Highlights

Among the individuals from 14 Minnesota colleges and universities who participated in the 2007 College Student Health Survey:

- **70.5%** report using alcohol within the past 30 days.
- **37.1%** report engaging in high-risk drinking within the past two weeks.
- **6.8%** report using an illicit drug within the past 12 months, with **3.3%** having used sedatives, **2.7%** having used cocaine, **1.9%** having used hallucinogens, and **1.2%** having used amphetamines.
- **11.3%** of students report using marijuana within the past 30 days.



# Methodology

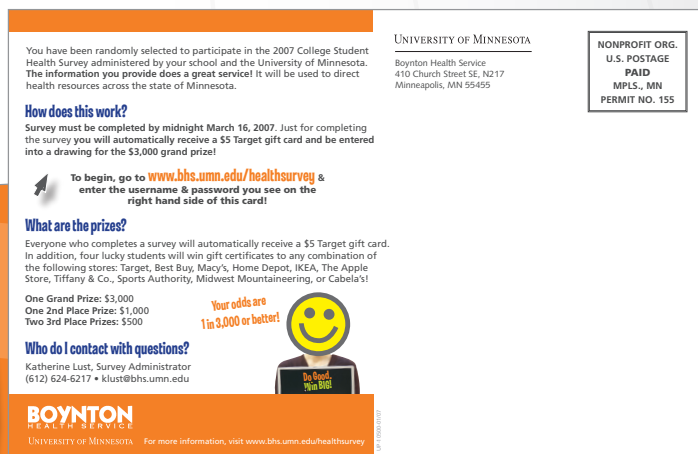
Students completed the 2007 College Student Health Survey, developed by Boynton Health Service at the University of Minnesota. As an incentive, all students who responded to the survey received a \$5 gift card and entry into a drawing for gift certificates valued at \$3,000 (one), \$1,000 (one), and \$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 at eleven schools were e-mailed a link to an online version of the survey, and students at three schools received a paper survey via U.S. Mail.
- Reminder postcards/multiple e-mails were sent to all students to encourage participation.
- All students received a minimum of two invitations to participate in the survey.

## University of Minnesota–Twin Cities Methodology Highlights

- **6,000** students from the University of Minnesota–Twin Cities were randomly selected to participate in this study.
- **2,920** completed and returned the survey.
- **0** surveys were undeliverable.
- **48.7%** was the overall UMTC response rate. (Surveys determined to be undeliverable were removed from the original sample size.)



2007 College Student Health Survey Postcard

# Results

The past-12-month alcohol use rate for all students attending the University of Minnesota–Twin Cities (UMTC) is **84.2%**.

The rates are nearly identical across gender and age group. The past-12-month alcohol use rate for UMTC students ages 18-24 is **83.9%** compared to a rate of **85.0%** for students age 25 and older.

### Definition: 12-Month Alcohol Use

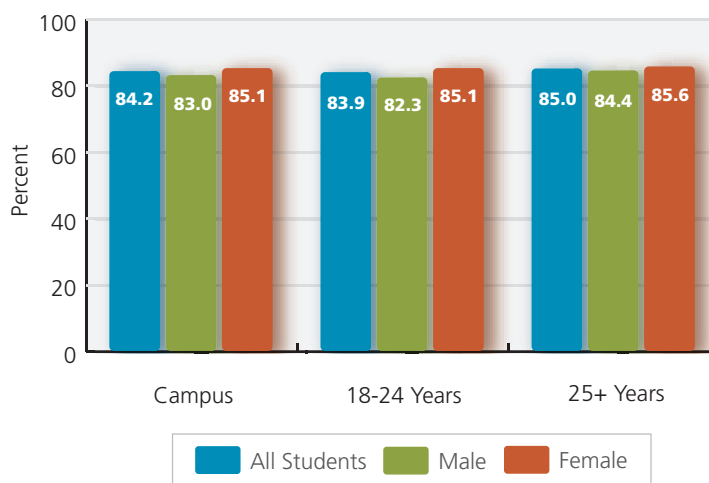
Twelve-month alcohol use is defined as consuming at least one bottle of beer, glass of wine, wine cooler, shot glass of liquor, or mixed drink within the past year.

Nearly three-fourths (**73.7%**) of University of Minnesota–Twin Cities students ages 18-24 report using alcohol within the past 30 days. The current alcohol use rate for UMTC students ages 18-24 has remained fairly constant since 1992, ranging from a low of **71.2%** in 2004 to a high of **78.9%** in 1996.

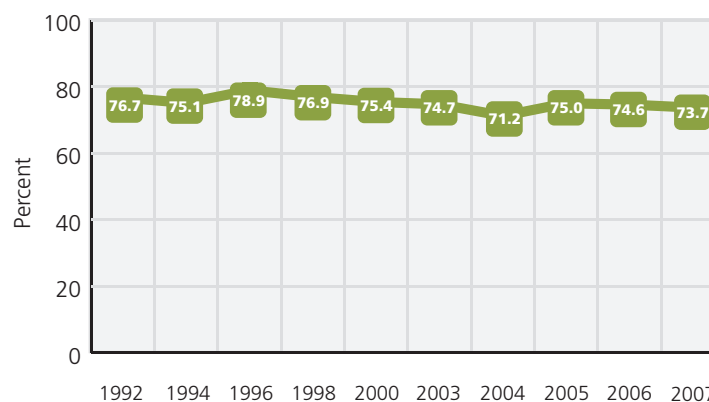
### Definition: Current Alcohol Use

Current alcohol use is defined as consuming at least one bottle of beer, glass of wine, wine cooler, shot glass of liquor, or mixed drink within the past 30 days.

## Alcohol Use—Past 12 Months All Students by Gender

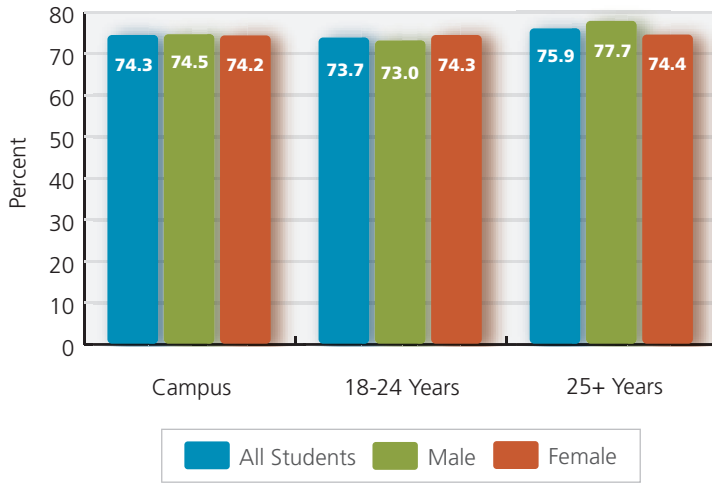


## Current Alcohol Use 18- to 24-Year-Old Students: Longitudinal



### Current Alcohol Use

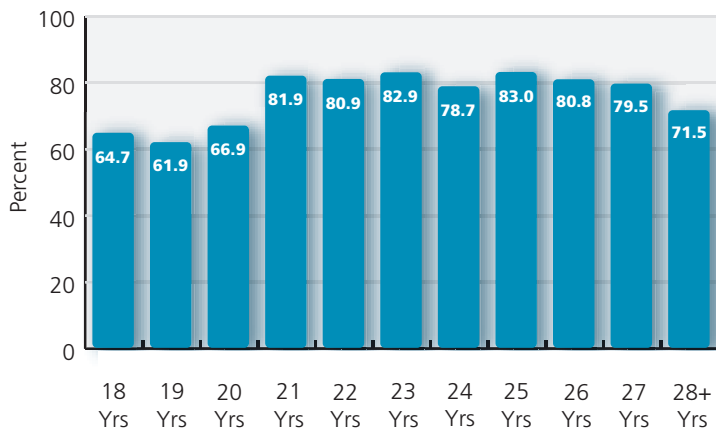
All Students by Age Group and Gender



The current alcohol use rate for all students attending the University of Minnesota–Twin Cities is **74.3%**. As with the past-12-month alcohol use rate, the percentage of UMTC students who consumed alcohol within the past 30 days is similar across both gender and age group. The current use rate for UMTC students ages 18-24 is **73.7%** compared to a rate of **75.9%** for students age 25 and older.

### Current Alcohol Use

All Students by Age

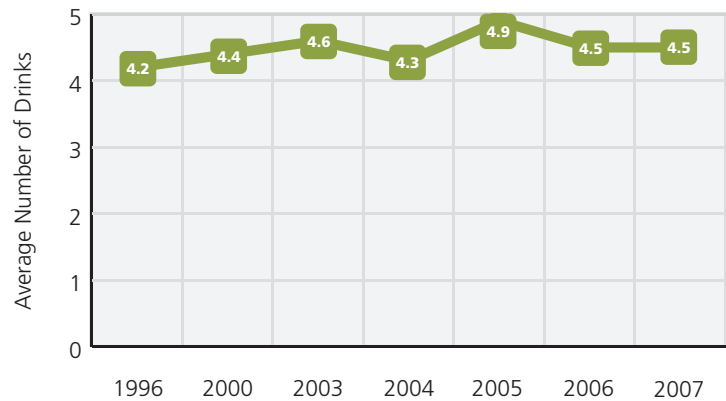


University of Minnesota–Twin Cities students ages 18-20 report a range of current alcohol consumption from **61.9%** to **66.9%**. The rate of current alcohol consumption increases after age 20, with a range from **71.5%** to **83.0%**. The peak years for current alcohol consumption among UMTC students are between the ages of 21 and 27.

The average number of alcoholic drinks consumed per week by University of Minnesota–Twin Cities students ages 18-24 has remained fairly constant since 1996, ranging from a low of **4.2** drinks per week in 1996 to a high of **4.9** drinks per week in 2005. The results from the 2007 survey show that the average number of alcoholic drinks consumed per week by UMTC students is **4.5**.

### Average Number of Drinks per Week

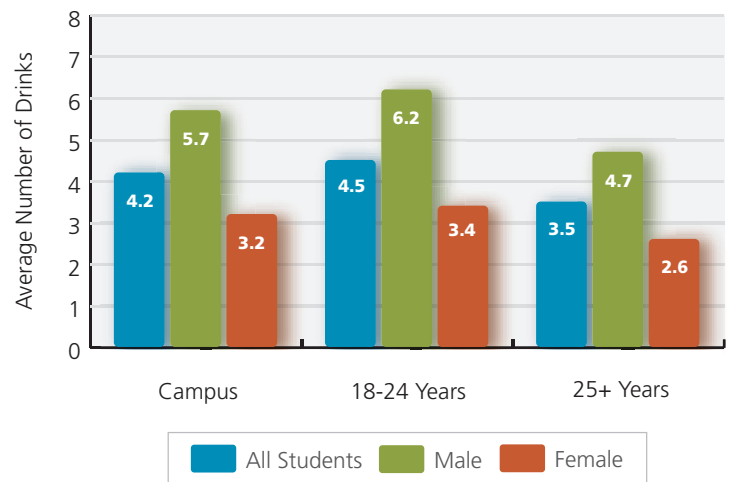
18- to 24-Year-Old Students: Longitudinal



University of Minnesota–Twin Cities students ages 18-24 report a higher average number of alcoholic drinks consumed per week compared to UMTC students age 25 and older (**4.5** drinks per week vs. **3.5** drinks per week, respectively). In both age groups, males report a higher average number of alcoholic drinks consumed per week compared to females.

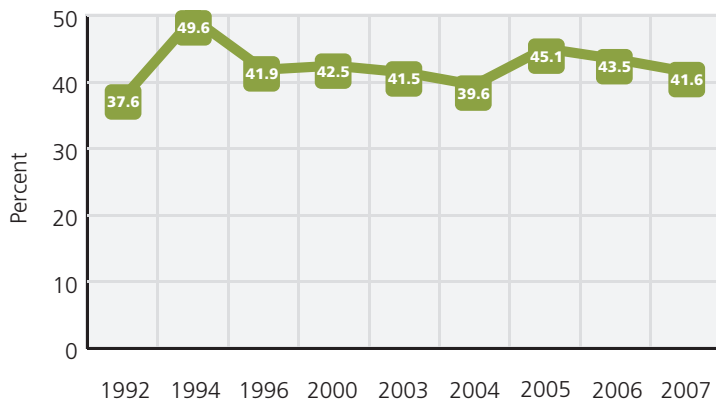
### Average Number of Drinks per Week

All Students by Age Group and Gender



## High-Risk Drinking

18- to 24-Year-Old Students: Longitudinal



The high-risk drinking rate for University of Minnesota–Twin Cities students ages 18-24 has fluctuated from 1992 to 2007. The lowest rates were reported in 1992 and 2004 (**37.6%** and **39.6%**, respectively), and the highest rates were reported in 1994 and 2005 (**49.6%** and **45.1%**, respectively). The current high-risk drinking rate for UMTC students ages 18-24 is **41.6%**.

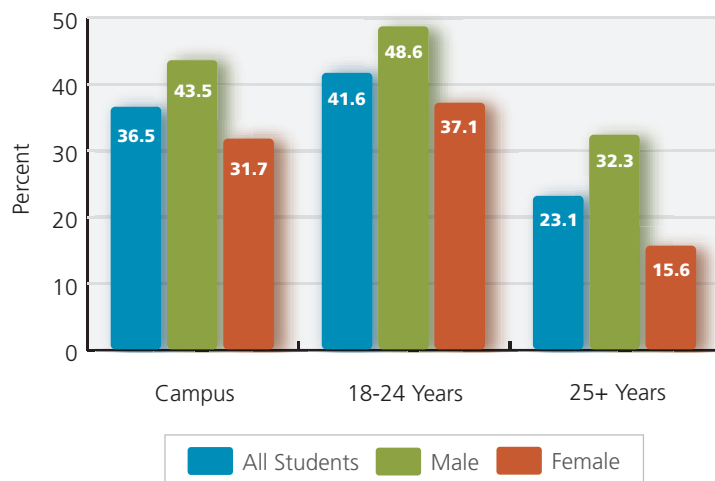
### Definition:

#### High-Risk Drinking

High-risk drinking is defined as consumption of five or more alcohol drinks at one sitting within the past two weeks.

## High-Risk Drinking

All Students by Age Group and Gender

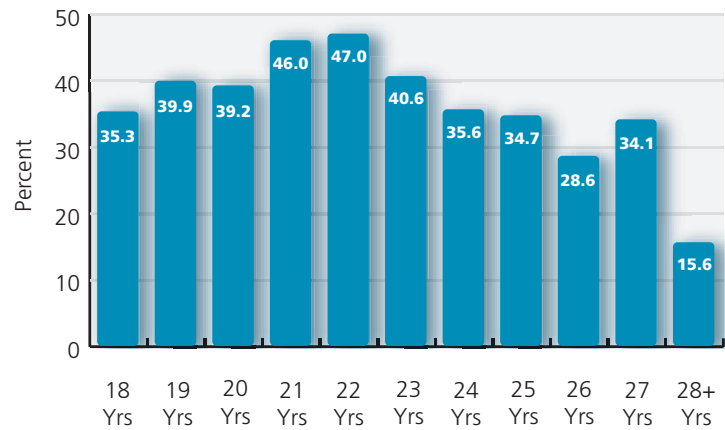


The high-risk drinking rate for all University of Minnesota–Twin Cities survey respondents is **36.5%**. University of Minnesota–Twin Cities students ages 18-24 report a higher high-risk drinking rate compared to UMTC students age 25 and older (**41.6%** vs. **23.1%**, respectively). Within each age group, males report a higher high-risk drinking rate compared to females.

The peak years for engaging in high-risk drinking among University of Minnesota–Twin Cities students are between ages 19 and 23.

### High-Risk Drinking

All Students by Age



Students attending UMTC overestimate the actual high-risk drinking rate on campus. The estimate from all students is **41.8%**, and the actual high-risk drinking rate at the university is **36.5%**. Those who have engaged in high-risk drinking tend to estimate a higher level of this behavior among their peers (**49.7%**), while those who have not engaged in high-risk drinking estimate very accurately at **37.3%**.

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

All Students

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

High-Risk Drinking Status	Students' Perception of High-Risk Drinking by School Peers	Actual High-Risk Drinking Rate
All Students	41.8%	36.5% of All Students
High-Risk Drinkers	49.7%	
Non-High-Risk Drinkers	37.3%	

## Blood Alcohol Content

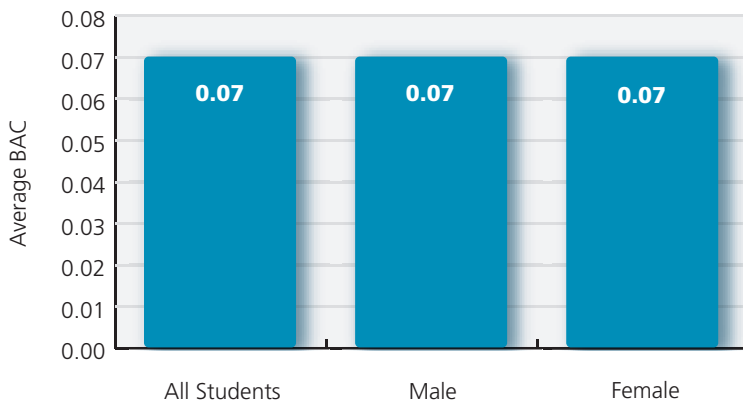
Blood alcohol content (BAC) measures the percentage of alcohol in a person's blood. The calculation of BAC is based on a simple formula that takes into account the following factors:

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

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.

## Average Estimated Blood Alcohol Content

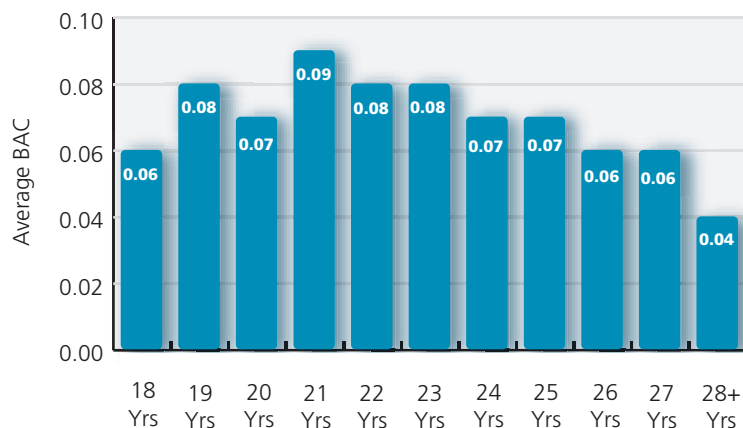
All Students by Gender



For students attending the University of Minnesota–Twin Cities, the average estimated blood alcohol content, based on the last time the students partied/socialized, is **0.07**. The average BAC for both males and females is also **0.07**.

## Average Estimated Blood Alcohol Content

All Students by Age



The estimated BAC levels for University of Minnesota–Twin Cities students range from **0.04** to **0.09**, with the estimated BAC for all survey respondents averaging **0.07**. The highest estimated BAC is reported by students age 21, although students ages 19, 22, and 23 all have estimated BAC levels that meet 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.

More than one in six (**17.6%**) University of Minnesota–Twin Cities students report having driven a car while under the influence of alcohol or drugs. Approximately one-fourth (**24.6%**) of students report missing a class and about one-fifth (**19.1%**) of students report performing poorly on a test or project as a result of alcohol/drug use.

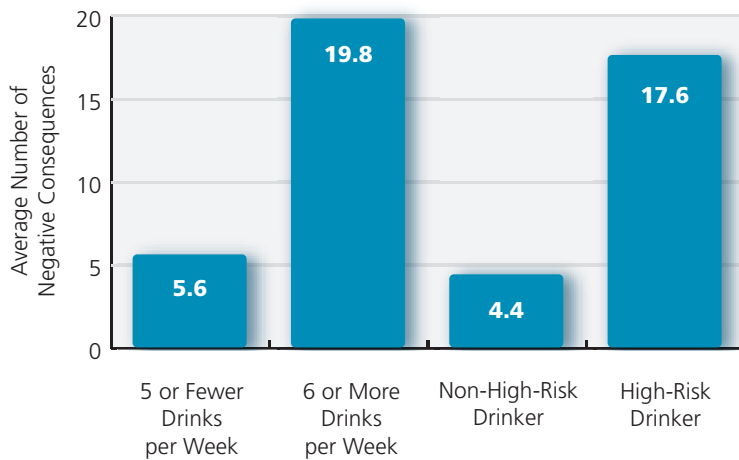
## Negative Consequences of Alcohol/Drug Use

Negative Consequences Due to Alcohol/Drug Use	Percent of Survey Respondents
Had a Hangover	59.1
Performed Poorly on a Test or Important Project	19.1
Been in Trouble with Police, Residence Hall, or Other College Authorities	6.4
Damaged Property, Pulled Fire Alarms, etc.	2.0
Got Into an Argument or Fight	19.9
Got Nauseated or Vomited	42.8
Driven a Car While Under the Influence	17.6
Missed a Class	24.6
Been Criticized by Someone I Know	22.0
Thought I Might Have a Drinking or Other Drug Problem	8.4
Had a Memory Loss	24.9
Done Something I Later Regretted	30.3
Been Arrested for DWI/DUI	0.7
Have Been Taken Advantage of Sexually	3.7
Have Taken Advantage of Another Sexually	0.6
Tried Unsuccessfully to Stop Using	2.7
Seriously Thought About Suicide	2.9
Seriously Tried to Commit Suicide	0.4
Been Hurt or Injured	9.1



### Average Number of Negative Consequences

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



There appears to be a strong association between the average number of drinks UMTC 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.

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

All Students

Response	Percent		
	All Students	Did Not Use Alcohol Within the Past 30 Days	Did Use Alcohol Within the Past 30 Days
Very Likely	54.2	65.2	50.4
Somewhat Likely	26.9	23.8	28.0
Somewhat Unlikely	13.4	7.5	15.5
Very Unlikely	5.5	3.5	6.1

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 an example of a situation in which 911 must be called, only **54.2%** of all University of Minnesota–Twin Cities students report they would be “very likely” to call for emergency assistance.

The rates for the negative consequences identified generally are about two to three times higher among UMTC students who have engaged in high-risk drinking compared to UMTC students who have not engaged in high-risk drinking. Nearly one-third (**32.9%**) of students who have engaged in high-risk drinking have driven while intoxicated one or more times in the past 12 months.

The past-12-month marijuana use rate is **23.7%** for all University of Minnesota–Twin Cities students. The past-12-month use rate is higher for students ages 18-24 compared to students age 25 and older (**26.5%** vs. **15.9%**, respectively). Males within each age group have a higher rate of past-12-month marijuana use compared to females within the same age group.

**Definition:**  
12-Month Marijuana Use

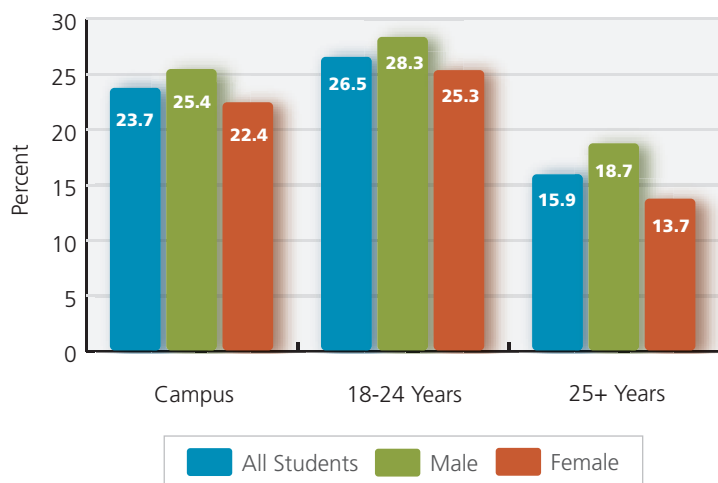
Twelve-month marijuana use is defined as any use within the past 12 months.

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

Negative Consequences	Percent		
	All Students	Non-HRD	HRD
Driven While Intoxicated	17.6	8.8	32.9
Argument	19.9	10.9	35.7
Poor Test/Project	19.1	10.6	33.9
Missed Class	24.6	13.5	44.0
Been Taken Advantage of Sexually (Includes Males and Females)	3.7	2.2	6.2

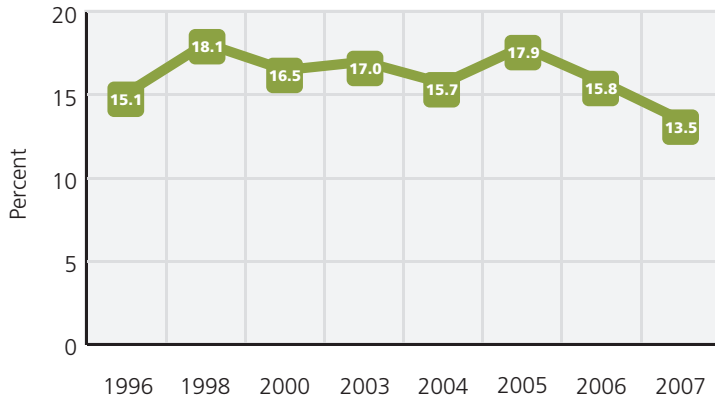
\*Note: The rate for high-risk drinking is based on behavior in the past two weeks while the rate for negative consequences is based on reported experiences within the previous 12-month period.

**Marijuana Use—Past 12 Months**  
All Students by Age Group and Gender



### Current Marijuana Use

18- to 24-Year-Old Students: Longitudinal



The current marijuana use rate for UMTC students ages 18-24 has remained fairly constant since 1996. The highest current marijuana use rate was reported in 1998 (**18.1%**), and the lowest rate was reported in 2007 (**13.5%**).

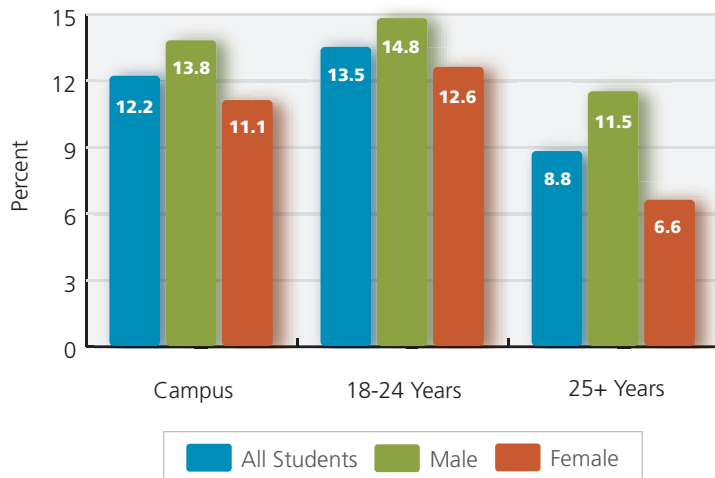
#### Definition:

#### Current Marijuana Use

Current marijuana use is defined as any use within the past 30 days.

### Current Marijuana Use

All Students by Age Group and Gender

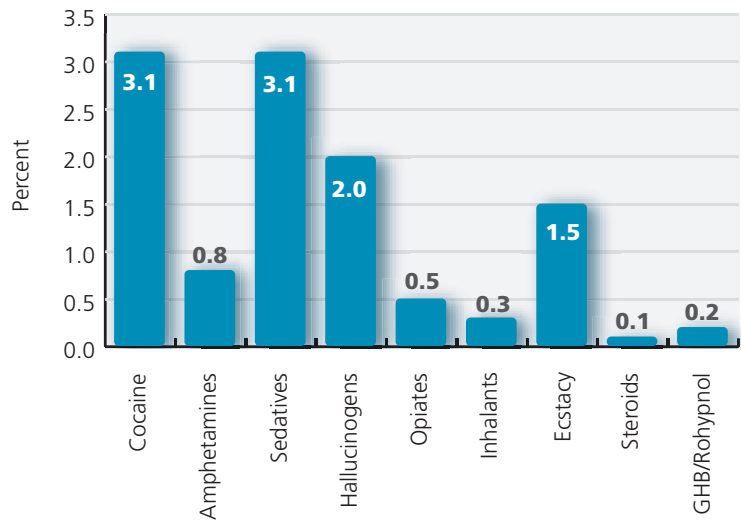


The current marijuana use rate is **12.2%** for all University of Minnesota–Twin Cities students. The rate is higher for students ages 18-24 compared to students age 25 and older (**13.5%** vs. **8.8%**, respectively). Males within each age group have a higher rate of current marijuana use compared to females within the same age group.

The three illicit drugs most commonly used by UMTC students are cocaine (**3.1%**), sedatives (**3.1%**), and hallucinogens (**2.0%**). Further analysis shows that among UMTC students, **7.1%** report having used at least one of the nine listed illicit drugs, with drug use ranging from **0.1%** for steroids to **3.1%** for sedatives and cocaine.

### Selected Drug Use—Past 12 Months

All Students



**Impact of Health and Personal Issues on Academic Performance—Past 12 Months** All Students

Health or Personal Issue	Percent	
	Report Having Issue	Report Issue Affected Academics
<b>Alcohol Use</b>	<b>31.0</b>	<b>17.7</b>
Allergies	31.1	6.5
Chronic Conditions	9.8	18.5
Concerns for Troubled Friend/Family Member	39.5	34.9
<b>Drug Use</b>	<b>6.4</b>	<b>28.5</b>
Eating Disorder/Problems	5.3	21.4
Excessive Computer/Internet Use	32.2	41.9
Financial Difficulties	37.0	30.5
Learning Disability/ADD	4.7	65.0
Mental Health Issues	22.7	55.1
Mononucleosis	3.5	48.5
Moved/Changed Residence	24.2	16.9
Pregnancy	3.3	40.6
Relationship Issues	34.3	39.0
Serious Injury	3.8	40.9
Sexual Assault	1.2	44.1
Sexually Transmitted Infection	2.7	14.1
Sleep Difficulties	38.8	44.0
Stress	70.5	42.1
Upper Respiratory Infection	36.7	28.7
Urinary Tract Infection	7.5	12.4

Students were asked to report whether they have experienced any of the health or personal issues presented in the table to the left, and if so, whether the issue(s) affected their academic performance. The issues highlighted in red are particularly salient to this report on alcohol and other drug use. The other issues are more relevant to Reports 1-3 and 5-7 in this series.

It should be noted that although students report some issues less frequently, these issues may have a greater impact on academic performance. For example, although only **6.4%** of UMTC students report having a drug use issue, of this small percentage of students, **28.5%** report it affected their academic performance. In contrast, a larger number of students (**31.0%**) report alcohol use as an issue, but fewer of these students (**17.7%**) say their alcohol use affected their academic performance.

Further analysis shows that non-marijuana users at the University of Minnesota—Twin Cities have a slightly higher grade point average compared to UMTC students who have used marijuana within the past 30 days (**3.40** vs. **3.29**, respectively).



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Anoka-Ramsey Community College  
Andrea Roberge

Lake Superior College  
Beth Adams

Minnesota State Community and  
Technical College  
Shawn Anderson

North Hennepin Community College  
Kristi Moebeck

Northwest Technical College  
Kari Kantak

### **Participating Four-Year Schools**

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Jay Passa

Concordia College  
Paul Wraalstad

Minnesota State University Moorhead  
Susanne Williams

University of Minnesota–Crookston  
Stacey Grunewald

University of Minnesota–Duluth  
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**BOYNTON**  
HEALTH SERVICE

UNIVERSITY OF MINNESOTA



**Personal Safety and  
Financial Health** **5**  
University of Minnesota–Twin Cities

Published October 2007

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**Personal Safety and  
Financial Health**  
University of Minnesota–Twin Cities

5

## Snapshot: Colleges and Universities Participating in the 2007 College Student Health Survey

Two-Year Schools	Location	Enrollment–Spring 2007*
Alexandria Technical College	Alexandria, MN	3,475
Anoka-Ramsey Community College	Cambridge, MN Coon Rapids, MN	9,724
Lake Superior College	Duluth, MN	8,876
Minnesota State Community and Technical College	Detroit Lakes, MN Fergus Falls, MN Moorhead, MN Wadena, MN	6,874
North Hennepin Community College	Brooklyn Park, MN	9,329
Northwest Technical College	Bemidji, MN	1,224
Four-Year Schools	Location	Enrollment–Spring 2007*
Bemidji State University	Bemidji, MN	6,449
Concordia College	Moorhead, MN	2,698
Minnesota State University Moorhead	Moorhead, MN	9,025
University of Minnesota–Crookston	Crookston, MN	951
University of Minnesota–Duluth	Duluth, MN	9,467
University of Minnesota–Morris	Morris, MN	1,489
University of Minnesota–Rochester	Rochester, MN	306
University of Minnesota–Twin Cities	Minneapolis, MN	43,737

\*Includes full-time and part-time students.

## University of Minnesota–Twin Cities Survey Demographics\*

	All Students
Average Age (Years)	23.4
Age Range (Years)	18-63
18-24 Years	72.6%
25 Years or Older	27.4%
Average GPA	3.38
<b>Class Status</b>	
First-Year Undergraduate	15.4%
Second-Year Undergraduate	14.5%
Third-Year Undergraduate	15.7%
Fourth-Year Undergraduate	15.8%
Fifth-Year Undergraduate	7.6%
Graduate or Professional	31.0%
<b>Gender</b>	
Male	40.1%
Female	59.7%
Transgender/Other	0.2%
Unspecified	0.0%
<b>Ethnic Origin</b>	
African American/Black	2.7%
American Indian/Alaskan Native	1.2%
Asian/Pacific Islander	12.7%
Latino/Hispanic	2.2%
Middle Eastern	1.0%
Caucasian/White	81.6%
Other	2.3%
<b>Current Residence</b>	
Residence Hall or Fraternity/Sorority	20.0%
Other	80.0%

\*Based on student response.



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# Introduction

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 report 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.<sup>1</sup> 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.<sup>2</sup>

Financial health is another area of concern. Nearly two-thirds (64.0%) of college students in the United States have at least one credit card, and one in seven (14.0%) have four or more credit cards.<sup>3</sup> The majority (82.0%) of students with credit cards who know their account balances report average balances of \$1,000 or less.<sup>3</sup> More than two-fifths (41.9%) of college students report that they participated in some type of gambling activity during the previous school year.<sup>4</sup>

## References:

- <sup>1</sup> Tjaden, P. & Thoennes, N. (2006). Extent, nature, and consequences of rape victimization: Findings from the National Violence Against Women Survey. Washington, D.C.: National Institute of Justice, Report NCJ 210346.
- <sup>2</sup> Fischer, B. S., Cullen, F. T., & Turner, M. G. (2000). The sexual victimization of college women. Washington, D.C.: National Institute of Justice, Report NCJ 182369.
- <sup>3</sup> The Education Resources Institute, the Institute for Higher Education Policy. (1998). Credit risk or credit worthy? College students and credit cards. A national survey. Boston, MA: ED 421 069.
- <sup>4</sup> LaBrie, R. A., Shaffer, H. J., LaPlant, D. A., & Wechsler, H. (2003). Correlates of college student gambling in the United States. *Journal of American College Health*, 52(2), 53–62.

## 2007 Personal Safety and Financial Health Highlights

Among the individuals from 14 Minnesota colleges and universities who participated in the 2007 College Student Health Survey:

- **22.4%** of females and **4.9%** of males report having been sexually assaulted within their lifetime.
- **26.7%** of females and **15.0%** of males indicate they have experienced sexual violence within their lifetime.
- **8.0%** of students who have been victims of sexual assault within their lifetime say they reported the assault to the police.
- **39.4%** of students report having been injured in the past 12 months.
- **80.7%** of students state that their credit card debt is less than \$1,000 a month.
- **47.9%** of students report having engaged in some type of gambling activity within the past 12 months.



# Methodology

Students completed the 2007 College Student Health Survey, developed by Boynton Health Service at the University of Minnesota. As an incentive, all students who responded to the survey received a \$5 gift card and entry 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 at eleven schools were e-mailed a link to an online version of the survey, and students at three schools received a paper survey via U.S. Mail.
- Reminder postcards/multiple e-mails were sent to all students to encourage participation.
- All students received a minimum of two invitations to participate in the survey.

## University of Minnesota–Twin Cities Methodology Highlights

- **6,000** students from the University of Minnesota–Twin Cities were randomly selected to participate in this study.
- **2,920** completed and returned the survey.
- **0** surveys were undeliverable.
- **48.7%** was the overall UMTC response rate. (Surveys determined to be undeliverable were removed from the original sample size.)



2007 College Student Health Survey Postcard

# Results

More than one in five (**21.9%**) female students at the University of Minnesota–Twin Cities (UMTC) report experiencing a sexual assault within their lifetime, with **7.2%** reporting having been assaulted within the past 12 months. Male UMTC students have experienced sexual assault at lower rates, with **4.0%** reporting an assault within their lifetime and **1.1%** reporting an assault within the past 12 months.

Approximately one in four (**25.6%**) female University of Minnesota–Twin Cities students report experiencing sexual violence within their lifetime. About one in seven (**13.4%**) male UMTC students report having had the experience. Further examination of data shows that **15.6%** of students at the university report either sexually assaulting or inflicting sexual violence on another person within their lifetime. Of those who report being a perpetrator of sexual assault or violence, **33.1%** indicate they have been a victim of a sexual assault within their lifetime.

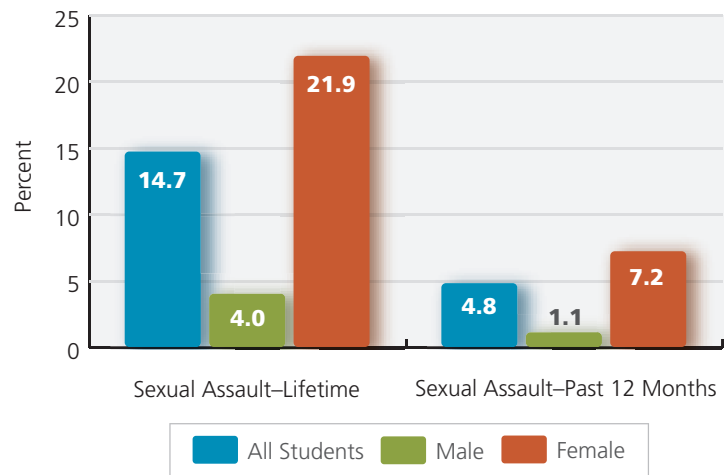
## Sexual Assault–Lifetime and Past 12 Months

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?



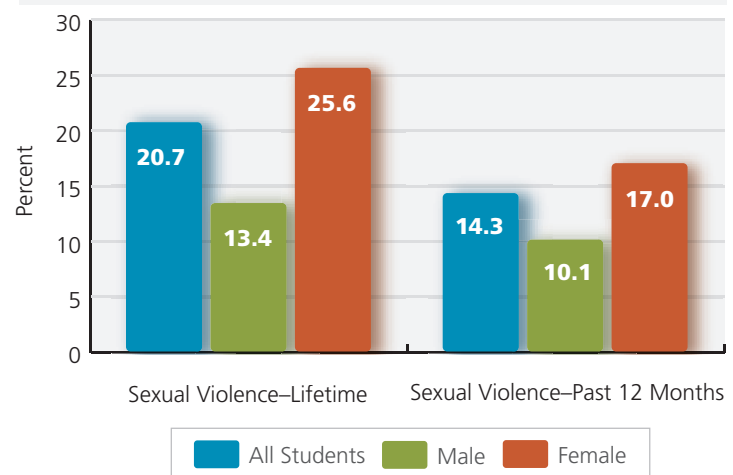
## Sexual Violence–Lifetime and Past 12 Months

All Students by Gender

Students were asked to answer the following two questions:

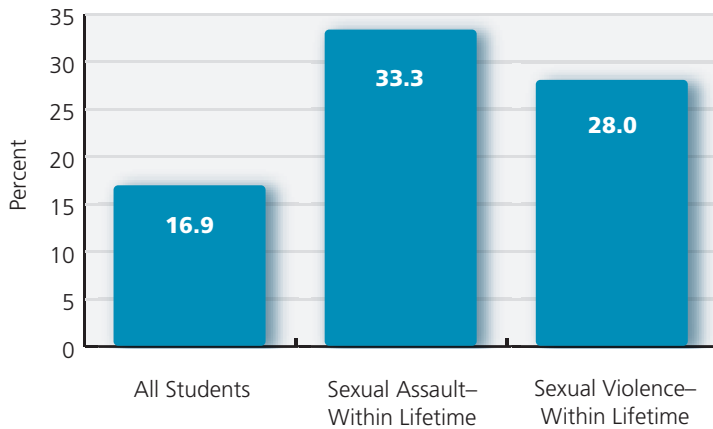
Within your lifetime or during the past 12 months, have you:

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



### Depression Rates–Lifetime

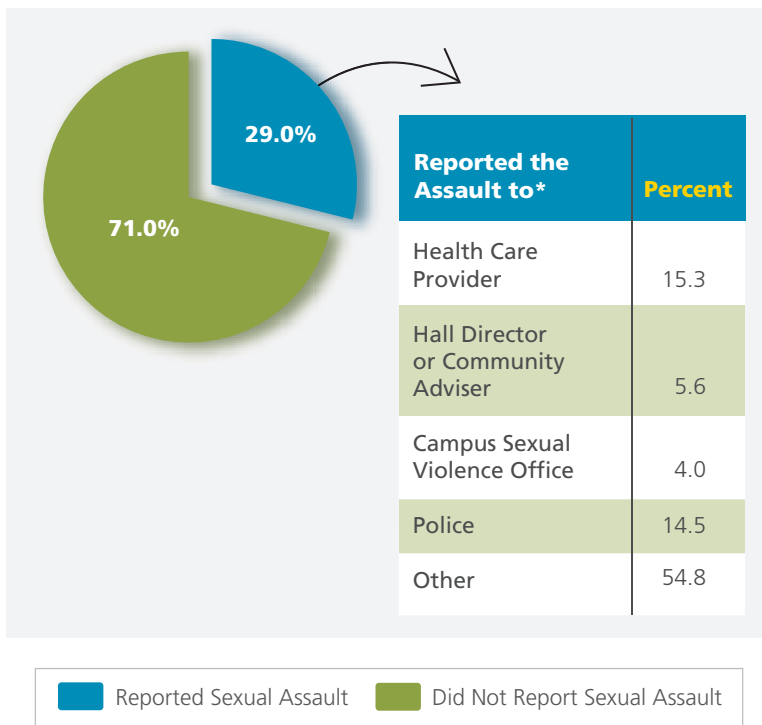
All Students by Sexual Assault/Violence



For students who report being victims of sexual assault, **33.3%** also say they have been diagnosed with depression within their lifetime; **28.0%** of victims of sexual 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 UMTC students.

### Sexual Assault Reporting by Victims–Lifetime



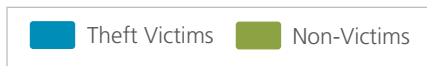
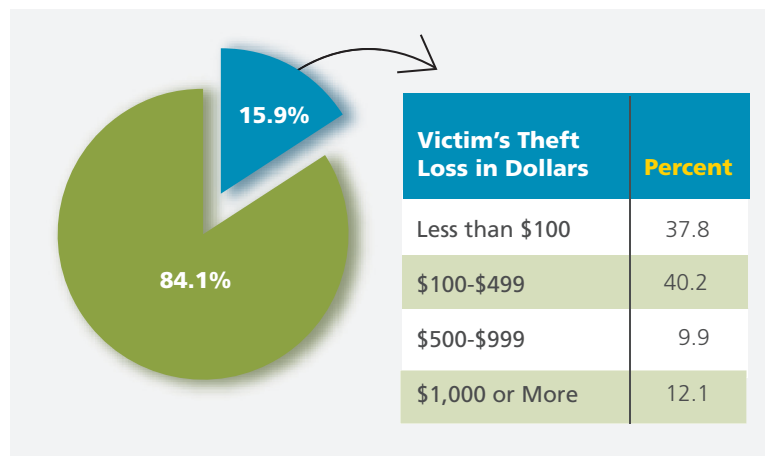
Of the University of Minnesota–Twin Cities students who indicate they have experienced a sexual assault within their lifetime (14.7%), only **29.0%** state they reported the incident. Of the UMTC students who chose to report the incident, **14.5%** reported it to the police and **15.3%** reported it to a health care provider.

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

Slightly less than one-sixth (**15.9%**) of University of Minnesota–Twin Cities students were theft victims within the past 12 months. Of those who report experiencing a theft, **78.0%** say the amount of the theft was \$499 or less.

### Victim of Theft—Past 12 Months

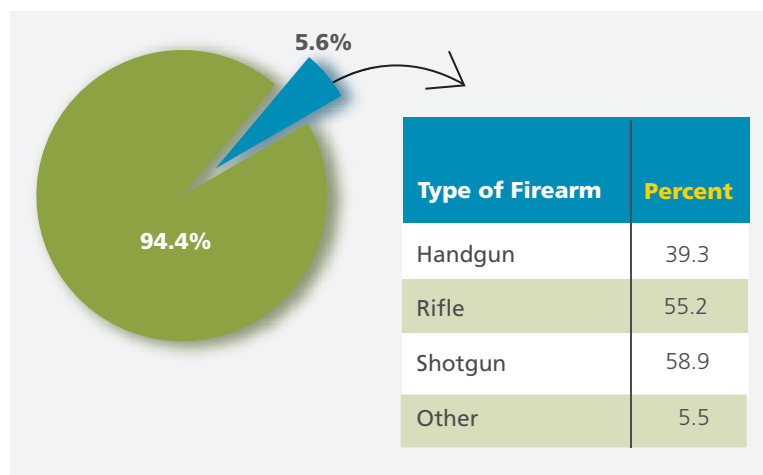
All Students



Approximately one in twenty (**5.6%**) University of Minnesota–Twin Cities students report they have immediate access to a firearm, **8.0%** for males and **3.9%** for females. Of those who have access to a firearm, **39.3%** report they have access to a handgun.

### Access to Firearms

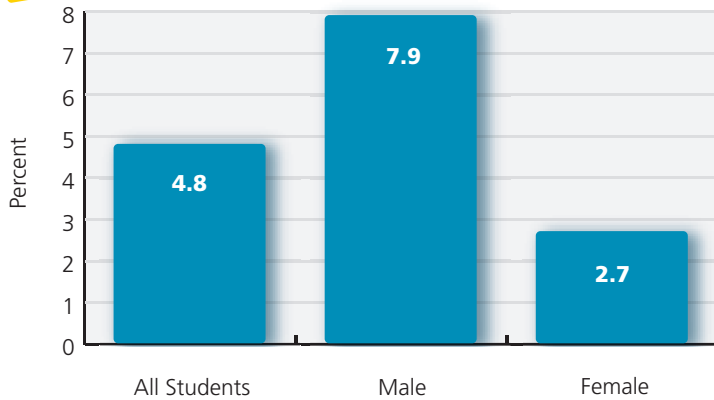
All Students



Further analysis shows that **8.4%** of students attending the University of Minnesota–Twin Cities state they carried a weapon (e.g., gun, knife) within the past 12 months. This does not include carrying a weapon while hunting.

### Physical Fight—Past 12 Months

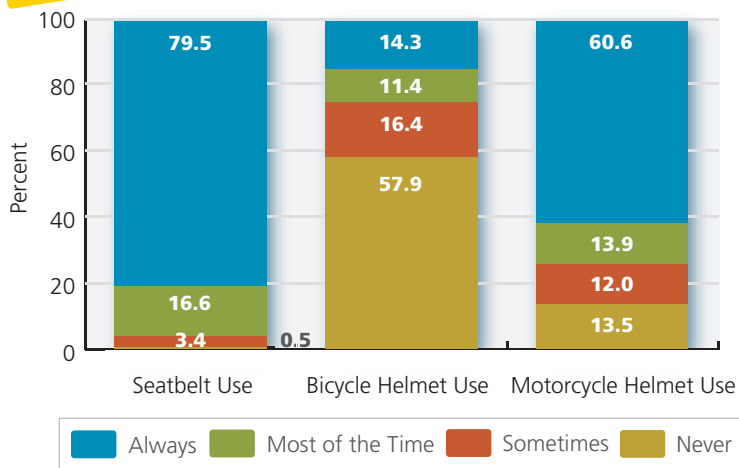
All Students by Gender



Male students at the University of Minnesota—Twin Cities are nearly three times more likely to report having engaged in a physical fight over the past 12 months than female UMTC students (**7.9%** vs. **2.7%**, respectively).

### Helmet and Seatbelt Use—Past 12 Months

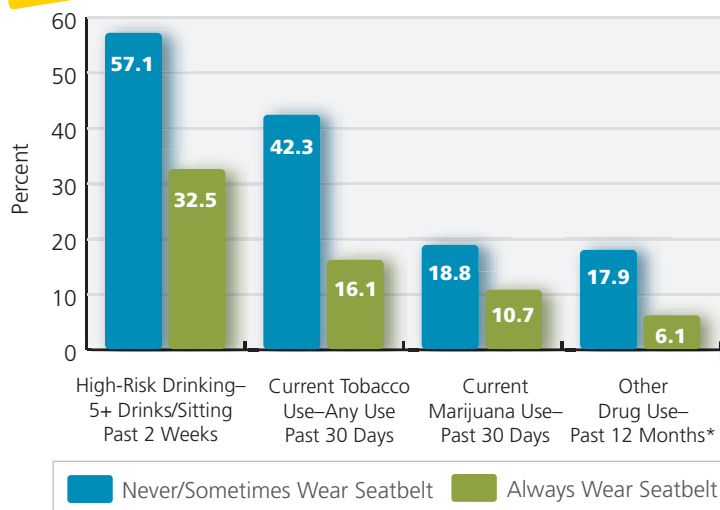
All Students



Among students at UMTC who rode in a car, **96.1%** report wearing a seatbelt always or most of the time while in the car. Only **25.7%** of students who rode a bicycle report wearing a helmet always or most of the time while riding the bicycle. About three-fourths (**74.5%**) of students who rode a motorcycle report they wear a helmet always or most of the time while on the motorcycle.

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

All Students



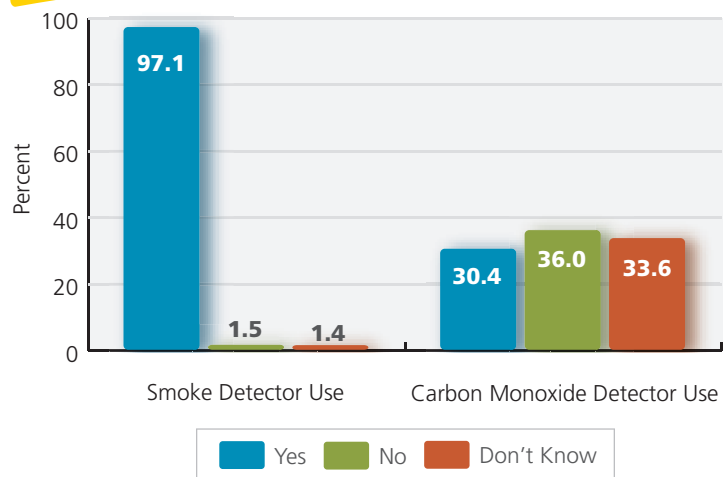
There appears to be an association between seatbelt use and various high-risk behaviors. UMTC students who report they always wear a seatbelt while riding in a car have lower rates of high-risk drinking, current tobacco use, current marijuana use, and other drug use compared to students at the university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

\*Does not include marijuana use.

Nearly all (**97.1%**) students at the University of Minnesota–Twin Cities report having a smoke detector in their place of residence, whereas only **30.4%** of students report having a carbon monoxide detector.

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

All Students



Over one-third (**37.6%**) of UMTC students report experiencing at least one injury over the past 12 months. The injuries most commonly reported during this period are due to falls, participation in team and individual sports, burns by fire or hot substances, and miscellaneous causes.

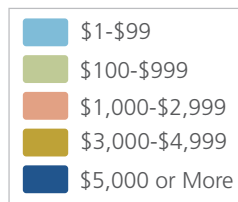
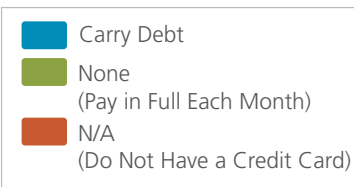
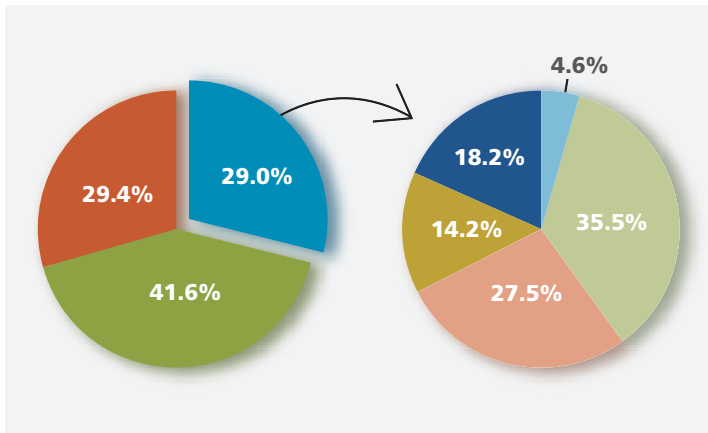
### Injuries Sustained—Past 12 Months

All Students

Type of Injury	Percent
Assaulted by Another Person (Nonsexual)	1.2
Burned by Fire or a Hot Substance	7.0
Motor Vehicle Related	1.6
Team Sports	9.7
Individual Sports	9.1
Bicycle Related	2.8
In-line Skating	0.9
Skate Boarding	0.5
Falls	12.6
Other	10.5
Not Applicable—I Was Not Injured	62.4

## Current Credit Card Debt

All Students



More than one-fourth (**29.0%**) of University of Minnesota–Twin Cities students report carrying some level of credit card debt over the past month. Of those who carry a monthly credit card balance, **59.9%** report the debt as \$1,000 per month or more.

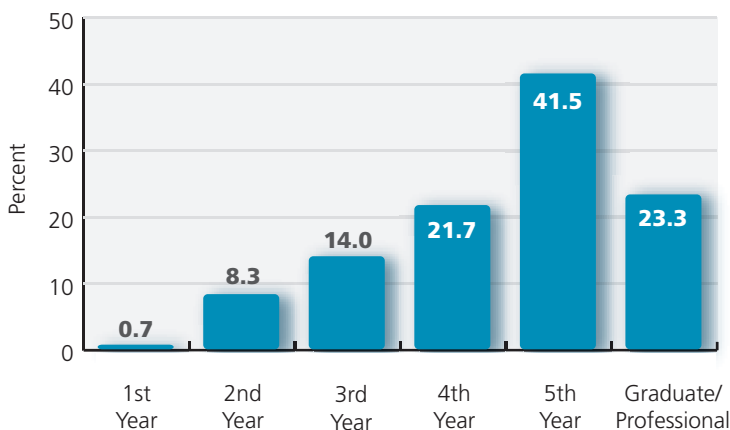
### Definition:

#### Current Credit Card Debt

Current credit card debt is defined as having any unpaid balance at the end of the past month.

## High Credit Card Debt and Class Status

All Students



The rate of high credit card debt increases from **0.7%** among first-year UMTC students to **41.5%** among fifth-year students. Nearly one-fourth (**23.3%**) of graduate/professional students report high credit card debt.

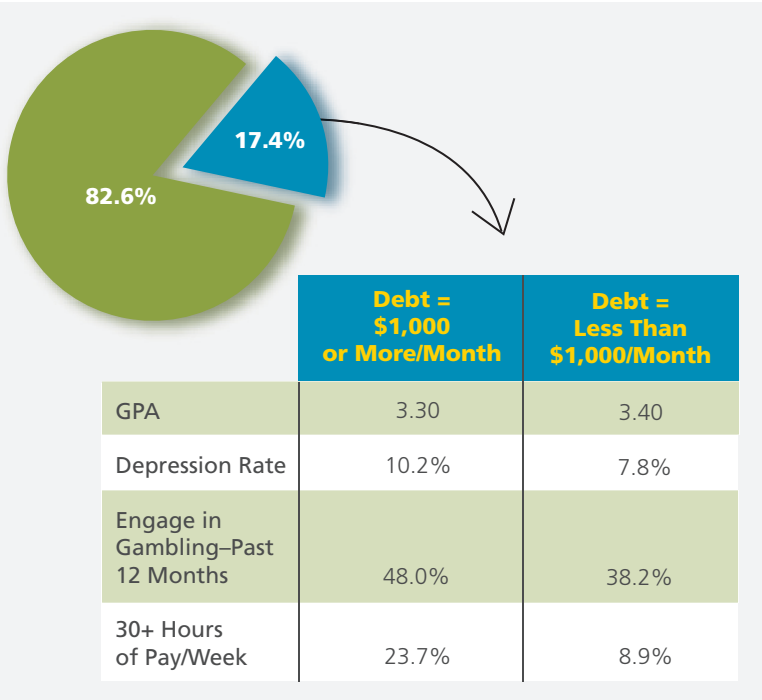
### Definition:

#### High Credit Card Debt

High credit card debt is defined as having a monthly debt of \$1,000 or more.

UMTC students who carry higher levels of credit card debt have a lower GPA, a higher depression rate, a higher rate of engaging in gambling, and also work more hours for pay per week than students at the university who carry lower levels of credit card debt.

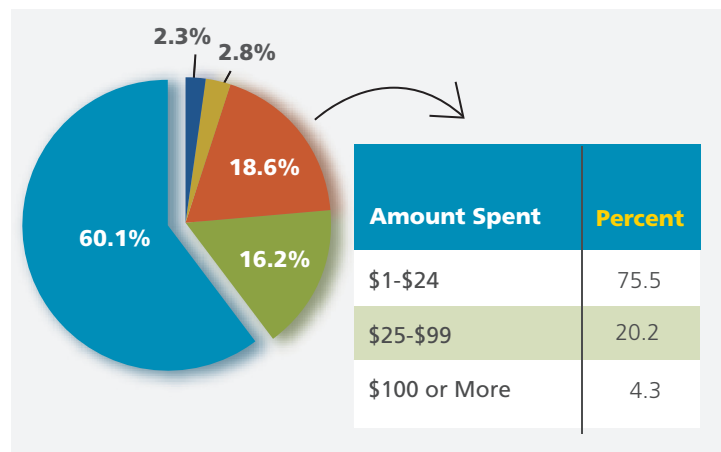
### Impact of Credit Card Debt All Students



High Credit Card Debt Low or No Credit Card Debt

About two out of five students (**39.9%**) at the University of Minnesota–Twin Cities report engaging in gambling over the past 12-month period. About one in twenty (**5.1%**) report gambling at least once a month. Of the **39.9%** who gambled within the past year, only **4.3%** report spending \$100 or more per month.

### Gambling Frequency–Past 12 Months All Students



More Than Once/Month  
Once/Month  
2-6 Times/Year  
Once/Year  
Never



## Impact of Health and Personal Issues on Academic Performance—Past 12 Months All Students

Health or Personal Issue	Percent	
	Report Having Issue	Report Issue Affected Academics
Alcohol Use	31.0	17.7
Allergies	31.1	6.5
Chronic Conditions	9.8	18.5
Concerns for Troubled Friend/Family Member	39.5	34.9
Drug Use	6.4	28.5
Eating Disorder/Problems	5.3	21.4
Excessive Computer/Internet Use	32.2	41.9
<b>Financial Difficulties</b>	<b>37.0</b>	<b>30.5</b>
Learning Disability/ADD	4.7	65.0
Mental Health Issues	22.7	55.1
Mononucleosis	3.5	48.5
Moved/Changed Residence	24.2	16.9
Pregnancy	3.3	40.6
Relationship Issues	34.3	39.0
<b>Serious Injury</b>	<b>3.8</b>	<b>40.9</b>
<b>Sexual Assault</b>	<b>1.2</b>	<b>44.1</b>
Sexually Transmitted Infection	2.7	14.1
Sleep Difficulties	38.8	44.0
Stress	70.5	42.1
Upper Respiratory Infection	36.7	28.7
Urinary Tract Infection	7.5	12.4

Students were asked to report whether they have experienced any of the health or personal issues presented in the table to the left, and if so, whether the issue(s) affected their academic performance.

The issues highlighted in red are particularly salient to this report on personal safety and financial health. The other issues are more relevant to Reports 1-4 and 6-7 in this series.

It should be noted that although students report some issues less frequently, these issues may have a greater impact on academic performance. For example, although only **1.2%** of UMTC students report experiencing a sexual assault, of this small percentage of students, **44.1%** say it affected their academic performance.



## Participating Two-Year Schools

Alexandria Technical College  
Tam Bukowski

Anoka-Ramsey Community College  
Andrea Roberge

Lake Superior College  
Beth Adams

Minnesota State Community and  
Technical College  
Shawn Anderson

North Hennepin Community College  
Kristi Moebeck

Northwest Technical College  
Kari Kantak

## Participating Four-Year Schools

Bemidji State University  
Jay Passa

Concordia College  
Paul Wraalstad

Minnesota State University Moorhead  
Susanne Williams

University of Minnesota–Crookston  
Stacey Grunewald

University of Minnesota–Duluth  
Lauretta Perry

University of Minnesota–Morris  
Sandra Olson-Loy

University of Minnesota–Rochester  
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# 5

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**BOYNTON**  
HEALTH SERVICE

UNIVERSITY OF MINNESOTA

# Nutrition and Physical Activity

# 6

University of Minnesota–Twin Cities

Published October 2007

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# Nutrition and Physical Activity

# 6

University of Minnesota–Twin Cities

## Snapshot: Colleges and Universities Participating in the 2007 College Student Health Survey

Two-Year Schools	Location	Enrollment–Spring 2007*
Alexandria Technical College	Alexandria, MN	3,475
Anoka-Ramsey Community College	Cambridge, MN Coon Rapids, MN	9,724
Lake Superior College	Duluth, MN	8,876
Minnesota State Community and Technical College	Detroit Lakes, MN Fergus Falls, MN Moorhead, MN Wadena, MN	6,874
North Hennepin Community College	Brooklyn Park, MN	9,329
Northwest Technical College	Bemidji, MN	1,224
Four-Year Schools	Location	Enrollment–Spring 2007*
Bemidji State University	Bemidji, MN	6,449
Concordia College	Moorhead, MN	2,698
Minnesota State University Moorhead	Moorhead, MN	9,025
University of Minnesota–Crookston	Crookston, MN	951
University of Minnesota–Duluth	Duluth, MN	9,467
University of Minnesota–Morris	Morris, MN	1,489
University of Minnesota–Rochester	Rochester, MN	306
University of Minnesota–Twin Cities	Minneapolis, MN	43,737

\*Includes full-time and part-time students.



## University of Minnesota–Twin Cities Survey Demographics\*

	All Students
Average Age (Years)	23.4
Age Range (Years)	18-63
18-24 Years	72.6%
25 Years or Older	27.4%
Average GPA	3.38
<b>Class Status</b>	
First-Year Undergraduate	15.4%
Second-Year Undergraduate	14.5%
Third-Year Undergraduate	15.7%
Fourth-Year Undergraduate	15.8%
Fifth-Year Undergraduate	7.6%
Graduate or Professional	31.0%
<b>Gender</b>	
Male	40.1%
Female	59.7%
Transgender/Other	0.2%
Unspecified	0.0%
<b>Ethnic Origin</b>	
African American/Black	2.7%
American Indian/Alaskan Native	1.2%
Asian/Pacific Islander	12.7%
Latino/Hispanic	2.2%
Middle Eastern	1.0%
Caucasian/White	81.6%
Other	2.3%
<b>Current Residence</b>	
Residence Hall or Fraternity/Sorority	20.0%
Other	80.0%

\*Based on student response.



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# Introduction

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.<sup>1,2</sup> Young adults between the ages of 18 and 24 (30.1%) are slightly less likely than all adults (32.6%) to eat fruits two or more times per day. Fewer young adults (20.9%) than all adults (27.2%) eat vegetables three or more times per day.<sup>1</sup> Young adults between the ages of 18 and 27 report consuming breakfast an average of 3.09 days per week and consuming fast food an average of 2.48 days per week.<sup>3</sup> The rate of obesity among young adults ages 18 to 29 is 17.7%.<sup>4</sup> 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%.<sup>2</sup> 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%.<sup>2</sup> Young adults ages 18 to 24 (40.0%) also engage in at least 20 minutes of vigorous physical activity three or more days per week more frequently than all adults (27.4%).<sup>2</sup>

## References:

- <sup>1</sup> Centers for Disease Control and Prevention. (2007, March 16). Fruit and vegetable consumption among adults—United States, 2005. *Morbidity and Mortality Weekly Report*, 56(10), 213-217.
- <sup>2</sup> Centers for Disease Control and Prevention. (2005). Behavioral Risk Factor Surveillance System survey data. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved July 17, 2007, from <http://apps.nccd.cdc.gov/brfss/>.
- <sup>3</sup> Niemeier, H. M., Raynor, H. A., Lloyd-Richardson, E. E., Rogers, M. L., and Wing, R. R. (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.
- <sup>4</sup> Centers for Disease Control and Prevention. (2006, September 15). State-specific prevalence of obesity among adults—United States, 2005. *Morbidity and Mortality Weekly Report*, 55(36), 985-988.

## 2007 Nutrition and Physical Activity Highlights

Among the individuals from 14 Minnesota colleges and universities who participated in the 2007 College Student Health Survey:

- **84.3%** report consuming fruits and vegetables fewer than five times per day, with an average of 3.0 times per day over the past seven days.
- **4.4** is the average number of days over the past seven days that students report consuming breakfast.
- **25.2** is the average BMI among male students, and **24.5** is the average BMI among female students.
- **38.4%** of students are classified as overweight, obese, or extremely obese based on their BMI.
- **40.7%** of students report engaging in 2.5 hours or more of moderate exercise per week.

# Methodology

Students completed the 2007 College Student Health Survey, developed by Boynton Health Service at the University of Minnesota. As an incentive, all students who responded to the survey received a \$5 gift card and entry 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 at eleven schools were e-mailed a link to an online version of the survey, and students at three schools received a paper survey via U.S. Mail.
- Reminder postcards/multiple e-mails were sent to all students to encourage participation.
- All students received a minimum of two invitations to participate in the survey.

## University of Minnesota–Twin Cities Methodology Highlights

- **6,000** students from the University of Minnesota–Twin Cities were randomly selected to participate in this study.
- **2,920** completed and returned the survey.
- **0** surveys were undeliverable.
- **48.7%** was the overall UMTC response rate. (Surveys determined to be undeliverable were removed from the original sample size.)



2007 College Student Health Survey Postcard

# Results

Body mass index (BMI) is a common and reliable indicator of body fatness.<sup>5</sup> BMI is based on a mathematical formula that takes into account both a person's height and weight. BMI equals the weight in kilograms divided by the height in meters squared ( $BMI = kg/m^2$ ). The table to the right presents weight categories based on BMI ranges.

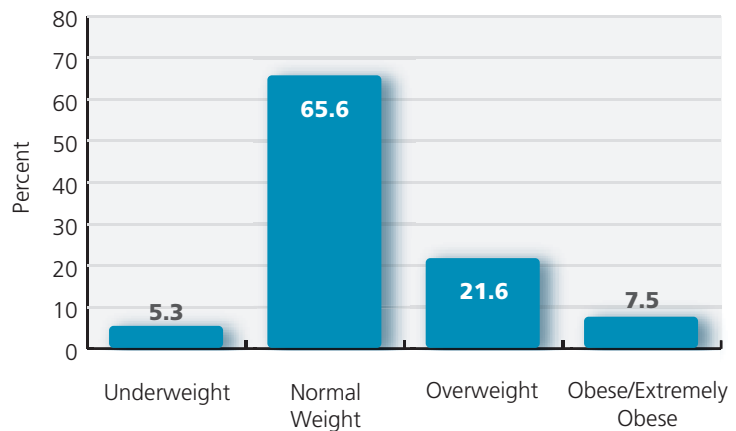
More than one-fourth (**29.1%**) of University of Minnesota–Twin Cities (UMTC) students fall within the overweight or obese/extremely obese categories. This is based on self-reported height and weight.

**Reference:**

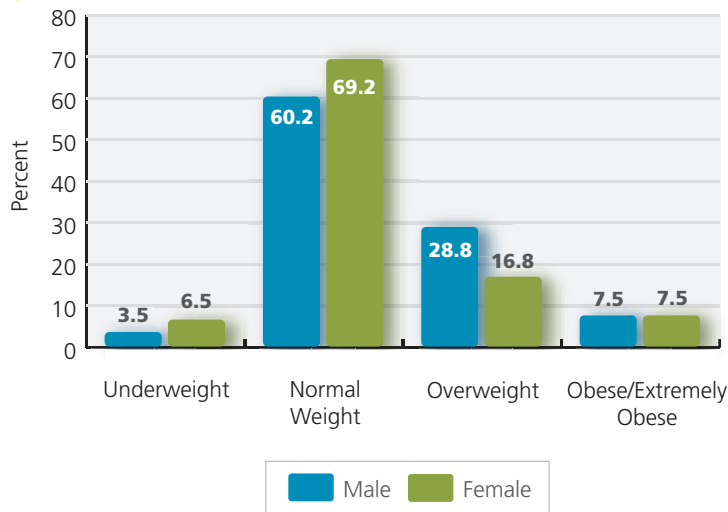
<sup>5</sup> Centers for Disease Control and Prevention. (2007). About BMI for adults. Retrieved May 16, 2007, from [http://www.cdc.gov/nccdphp/dnpa/bmi/adult\\_BMI/about\\_adult\\_BMI.htm#Interpreted](http://www.cdc.gov/nccdphp/dnpa/bmi/adult_BMI/about_adult_BMI.htm#Interpreted).

## BMI Category All Students

BMI Range	Weight Category
Less Than 18.5	Underweight
18.5 to 24.9	Normal Weight
25.0 to 29.9	Overweight
30.0 to 39.9	Obese
40.0 and Greater	Extremely Obese

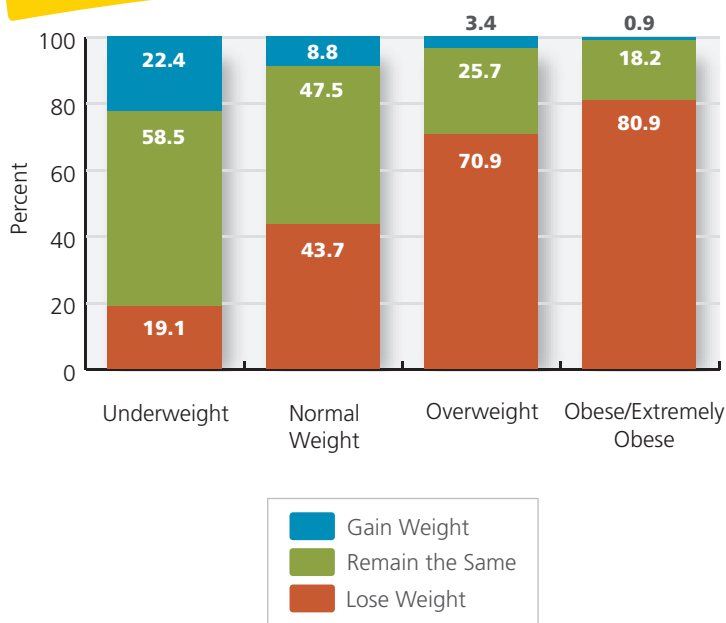


### BMI Category All Students by Gender



Data analysis shows that the average body mass index for male University of Minnesota–Twin Cities survey respondents is **24.3**, and the average BMI for female UMTC survey respondents is **23.3**. Over one-third (**36.3%**) of males and nearly one-fourth (**24.3%**) of females fall within the overweight or obese/extremely obese categories.

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

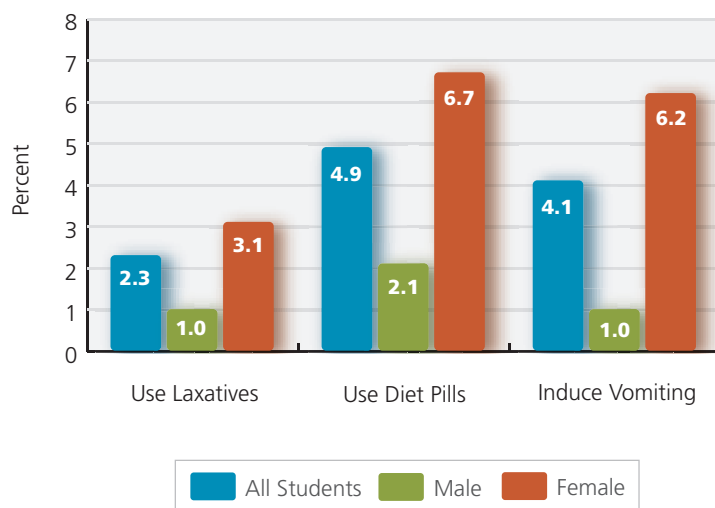


As BMI increases, the proportion of University of Minnesota–Twin Cities students who report they are attempting to lose weight also increases. However, **19.1%** of students whose BMI falls within the underweight category also report they are attempting to lose weight.

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

### Engagement in Weight-Related Behavior

All Students by Gender



UMTC students with BMIs that place them in the underweight category report the highest rates of laxative use and induced vomiting. The highest rate of diet pill use is found among students whose BMI falls within the obese/extremely obese categories.

### Engagement in Weight-Related Behavior

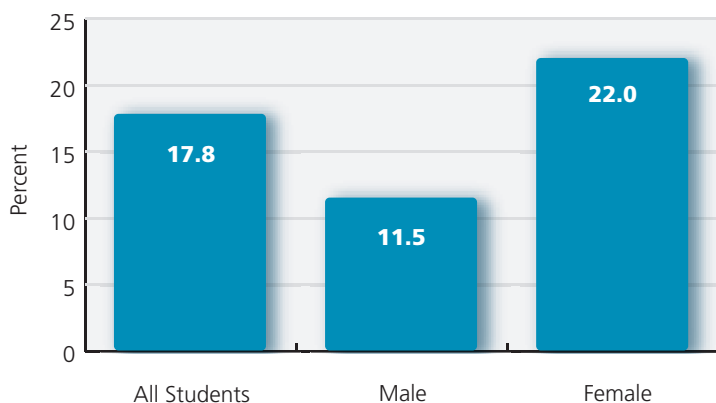
All Students by BMI Category

Behavior	Percent			
	Underweight	Normal Weight	Overweight	Obese/ Extremely Obese
Use Laxatives	5.3	2.1	1.3	4.2
Use Diet Pills	2.6	4.3	5.2	10.2
Induce Vomiting	5.3	3.9	4.0	4.2



### Engagement in Binge Eating Behavior— Past 12 Months

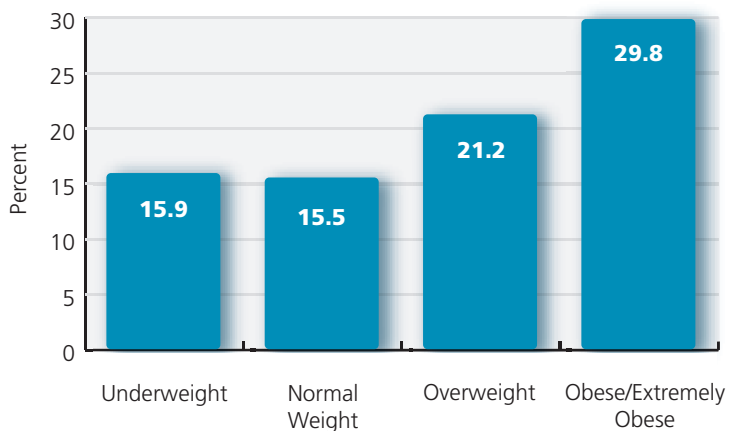
All Students by Gender



As with other weight-related behaviors, females at the University of Minnesota–Twin Cities engage in binge eating at a higher rate than males at the university. More than one out of five (**22.0%**) females report they had engaged in binge eating over the past 12 months.

### Engagement in Binge Eating Behavior— Past 12 Months

All Students by BMI Category



University of Minnesota–Twin Cities students with BMIs that place them in the obese/extremely obese categories report the highest rate of binge eating behavior.

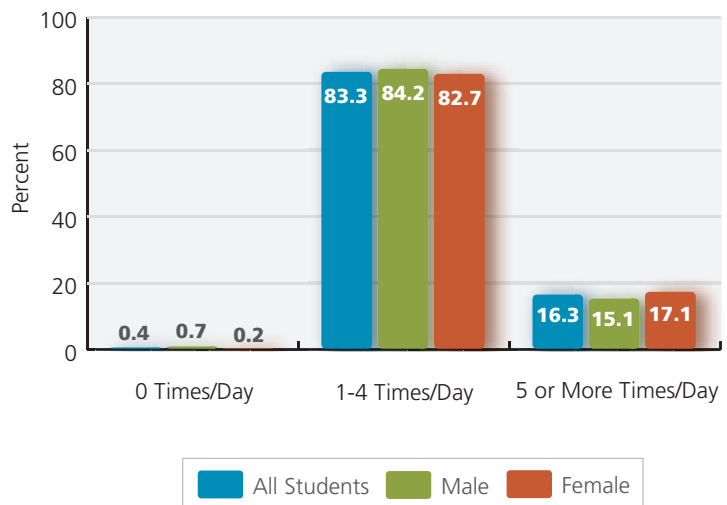
UMTC students whose BMI places them within the underweight or obese/extremely obese categories have the highest rates of never eating breakfast within the past seven days. The highest rate of fast food consumption within the past 12 months is for students classified as obese/extremely obese, whereas the highest rate of eating at a restaurant at least once per week within the past 12 months is for students classified as overweight.

### Meal Patterns All Students by BMI Category

Behavior	Percent			
	Underweight	Normal Weight	Overweight	Obese/ Extremely Obese
<b>Breakfast Consumption (Past 7 Days)</b>				
0 Days/Week	7.9	5.7	6.6	7.9
1-3 Days/Week	24.5	24.4	30.8	35.8
4-7 Days/Week	67.6	69.9	62.6	56.3
<b>Fast Food Consumption (Past 12 Months)</b>				
1-2 Times/Month or Less	66.4	69.6	59.1	48.8
Once/Week or More	33.6	30.4	40.9	51.2
<b>Eat at Restaurant (Past 12 Months)</b>				
1-2 Times/Month or Less	50.7	48.1	44.5	46.3
Once/Week or More	49.3	51.9	55.5	53.7

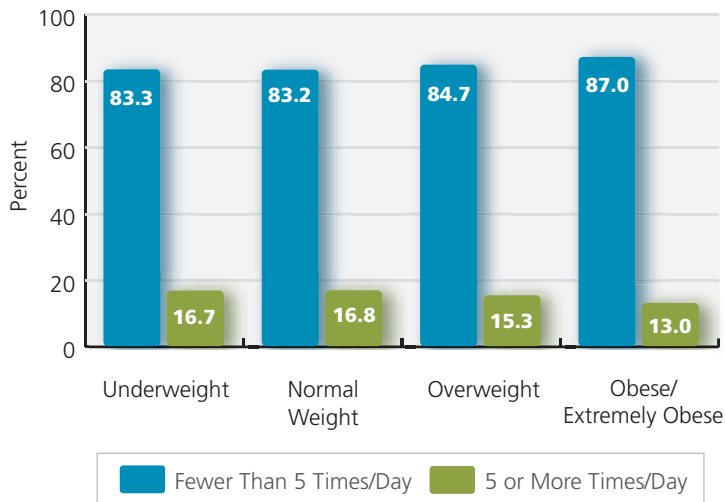
A majority of UMTC students consume fruits and vegetables one to four times per day. Only **16.3%** of all students consume fruits and vegetables five or more times per day. Based on the reported number of times per day fruits and vegetables are consumed, an average number of times per day can be calculated. Males consume fruits and vegetables on average **2.9** times per day, and females consume them on average **3.2** times per day. The average number of times per day fruits and vegetables are consumed by all students is **3.1**.

### Fruit and Vegetable Consumption—Per Day All Students by Gender



### Fruit and Vegetable Consumption—Per Day

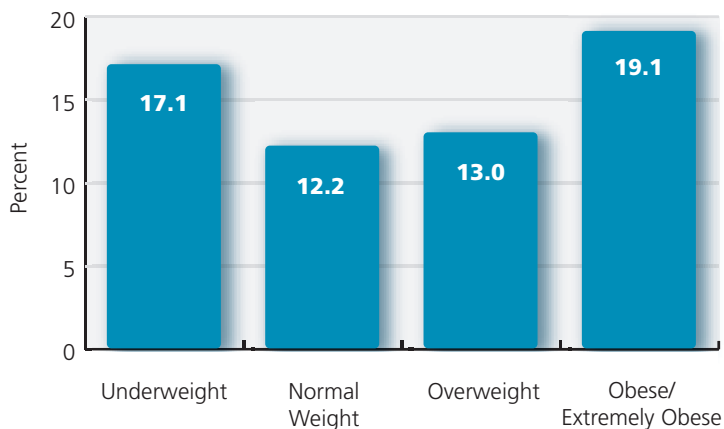
All Students by BMI Category



Across all BMI categories, the majority of UMTC students (ranging from **83.2%** of normal weight students to **87.0%** of obese/extremely obese students) eat fruits and vegetables fewer than five times per day.

### Daily Consumption of Regular Soda

All Students by BMI Category



UMTC students classified within the underweight or obese/extremely obese categories report higher levels of daily consumption of regular soda compared to students classified within the normal weight or overweight category. 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 categories, **27.9%** report daily consumption of diet soda compared to only **11.7%** of those classified within the normal weight 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 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 responses 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.

More than three-fourths (**76.1%**) of UMTC students report levels of physical activity that place them in the moderate or high classification, meeting the CDC's recommendations.

**Reference:**

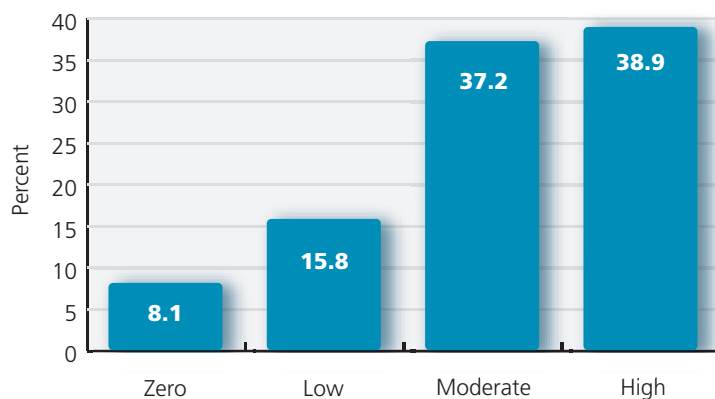
<sup>6</sup> Centers for Disease Control and Prevention. (2007). Physical activity recommendations for adults. Retrieved May 31, 2007, from <http://www.cdc.gov/nccdphp/dnpa/physical/recommendations/index.htm>.

## Physical Activity Level

All Students

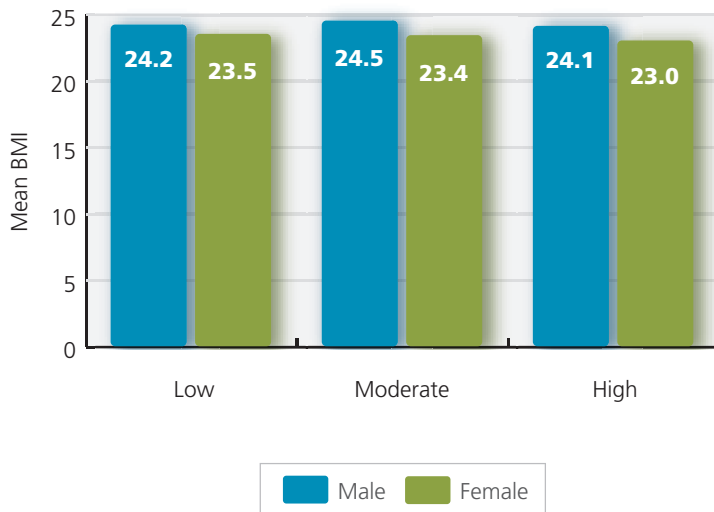
The Centers for Disease Control and Prevention's recommendations for adults are to:

- 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.<sup>6</sup>



## Average BMI

All Students by Physical Activity Level



For male University of Minnesota–Twin Cities students, there appears to be no strong association between the level of physical activity and the average body mass index. For female UMTC students, BMI decreases slightly as physical activity level increases.

## Level of Screen Time

All Students by BMI Category

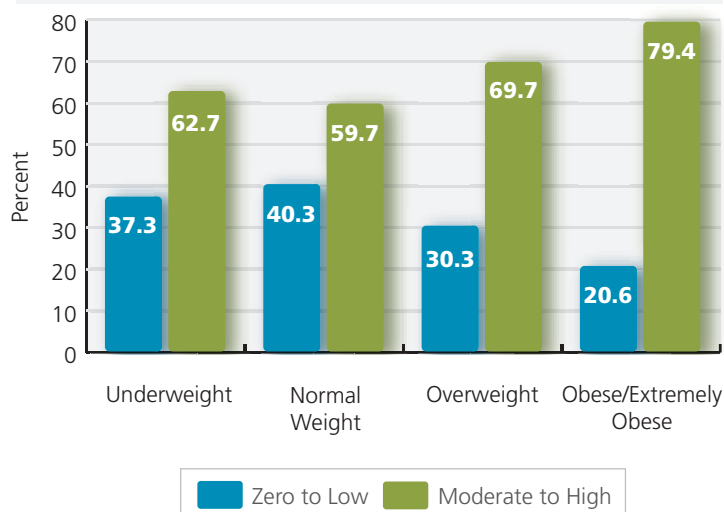
Screen time levels—zero, low, moderate, and high—were determined based on a survey question that asked respondents to report the average number of hours they watch TV or use the computer in the course of a day:

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



University of Minnesota–Twin Cities students classified within the obese/extremely obese categories report the highest level of screen time compared to students classified within the other three BMI categories. Additional data analysis shows that **63.4%** of UMTC students report watching TV or using the computer (not for work or school) two hours or more per day. Among all students, **3.2%** report zero screen time, **33.4%** report a low level of screen time, **37.3%** report a moderate level of screen time, and **26.1%** report a high level of screen time.

Students were asked to report whether they have experienced any of the health and personal issues presented in the table to the right, and if so, whether the issue(s) affected their academic performance. The issues highlighted in red are particularly salient to this report on nutrition and physical activity. The other issues are more relevant to Reports 1-5 and 7 in this series. It should be noted that although students report some issues less frequently, these issues may have a greater impact on academic performance.

Approximately one-third (**32.2%**) of UMTC students report excessive computer/Internet use, and among this group, **41.9%** indicate the activity affected their academic performance.

### Impact of Health and Personal Issues on Academic Performance—Past 12 Months All Students

Health or Personal Issue	Percent	
	Report Having Issue	Report Issue Affected Academics
Alcohol Use	31.0	17.7
Allergies	31.1	6.5
Chronic Conditions	9.8	18.5
Concerns for Troubled Friend/Family Member	39.5	34.9
Drug Use	6.4	28.5
<b>Eating Disorder/Problems</b>	<b>5.3</b>	<b>21.4</b>
<b>Excessive Computer/Internet Use</b>	<b>32.2</b>	<b>41.9</b>
Financial Difficulties	37.0	30.5
Learning Disability/ADD	4.7	65.0
Mental Health Issues	22.7	55.1
Mononucleosis	3.5	48.5
Moved/Changed Residence	24.2	16.9
Pregnancy	3.3	40.6
Relationship Issues	34.3	39.0
Serious Injury	3.8	40.9
Sexual Assault	1.2	44.1
Sexually Transmitted Infection	2.7	14.1
Sleep Difficulties	38.8	44.0
Stress	70.5	42.1
Upper Respiratory Infection	36.7	28.7
Urinary Tract Infection	7.5	12.4

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Jay Passa

Concordia College  
Paul Wraalstad

Minnesota State University Moorhead  
Susanne Williams

University of Minnesota–Crookston  
Stacey Grunewald

University of Minnesota–Duluth  
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**BOYNTON**  
HEALTH SERVICE

UNIVERSITY OF MINNESOTA



**Sexual Health**  
University of Minnesota–Twin Cities



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# Sexual Health

University of Minnesota–Twin Cities



## Snapshot: Colleges and Universities Participating in the 2007 College Student Health Survey

Two-Year Schools	Location	Enrollment–Spring 2007*
Alexandria Technical College	Alexandria, MN	3,475
Anoka-Ramsey Community College	Cambridge, MN Coon Rapids, MN	9,724
Lake Superior College	Duluth, MN	8,876
Minnesota State Community and Technical College	Detroit Lakes, MN Fergus Falls, MN Moorhead, MN Wadena, MN	6,874
North Hennepin Community College	Brooklyn Park, MN	9,329
Northwest Technical College	Bemidji, MN	1,224
Four-Year Schools	Location	Enrollment–Spring 2007*
Bemidji State University	Bemidji, MN	6,449
Concordia College	Moorhead, MN	2,698
Minnesota State University Moorhead	Moorhead, MN	9,025
University of Minnesota–Crookston	Crookston, MN	951
University of Minnesota–Duluth	Duluth, MN	9,467
University of Minnesota–Morris	Morris, MN	1,489
University of Minnesota–Rochester	Rochester, MN	306
University of Minnesota–Twin Cities	Minneapolis, MN	43,737

\*Includes full-time and part-time students.

## University of Minnesota–Twin Cities Survey Demographics\*

	All Students
Average Age (Years)	23.4
Age Range (Years)	18-63
18-24 Years	72.6%
25 Years or Older	27.4%
Average GPA	3.38
<b>Class Status</b>	
First-Year Undergraduate	15.4%
Second-Year Undergraduate	14.5%
Third-Year Undergraduate	15.7%
Fourth-Year Undergraduate	15.8%
Fifth-Year Undergraduate	7.6%
Graduate or Professional	31.0%
<b>Gender</b>	
Male	40.1%
Female	59.7%
Transgender/Other	0.2%
Unspecified	0.0%
<b>Ethnic Origin</b>	
African American/Black	2.7%
American Indian/Alaskan Native	1.2%
Asian/Pacific Islander	12.7%
Latino/Hispanic	2.2%
Middle Eastern	1.0%
Caucasian/White	81.6%
Other	2.3%
<b>Current Residence</b>	
Residence Hall or Fraternity/Sorority	20.0%
Other	80.0%

\*Based on student response.



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# Introduction

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.<sup>1</sup> Among 20- to 24-year-olds, 52.7% of males and 30.9% of females who have had sexual contact in the previous year used a condom during their last sexual contact.<sup>1</sup> Due to a combination of behavioral, biological, and cultural reasons, sexually active young adults are at increased risk for acquiring sexually transmitted infections.<sup>2</sup> The higher prevalence of STIs among young adults reflects multiple barriers to accessing quality STI prevention services, including lack of health insurance or other ability to pay, lack of transportation, and concerns about confidentiality.<sup>2</sup>

Among 20- to 24-year-olds, 7.1% of males and 13.4% of females report having a sexually transmitted infection other than HIV within their lifetime.<sup>1</sup> The prevalence of chlamydia is 2.7% in females and 0.7% in males who are between the ages of 15 and 24.<sup>2</sup> 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.<sup>3</sup>

## 2007 Sexual Health Highlights

Among the individuals from 14 Minnesota colleges and universities who participated in the 2007 College Student Health Survey:

- **77.6%** report having been sexually active within their lifetime.
- **72.1%** report having been sexually active within the past 12 months.
- **47.7%** of females and **56.5%** of males who have been sexually active within the past 12 months report having used a condom at last intercourse.
- **10.9%** of females and **4.4%** of males report a lifetime diagnosis of any sexually transmitted infection.
- **3.4%** of females and **1.1%** of males report a lifetime diagnosis of chlamydia.
- **0.4%** of females and **0.6%** of males report a lifetime diagnosis of gonorrhea.
- **0.2%** of both females and males report a lifetime diagnosis of syphilis.

## References:

- <sup>1</sup> Mosher, W. D., 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.
- <sup>2</sup> Centers for Disease Control and Prevention. (2006, November). Sexually transmitted disease surveillance, 2005. Atlanta, GA: U.S. Department of Health and Human Services. Retrieved July 17, 2007, from <http://www.cdc.gov/std/stats/adol.htm>.
- <sup>3</sup> 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.



# Methodology

Students completed the 2007 College Student Health Survey, developed by Boynton Health Service at the University of Minnesota. As an incentive, all students who responded to the survey received a \$5 gift card and entry 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 at eleven schools were e-mailed a link to an online version of the survey, and students at three schools received a paper survey via U.S. Mail.
- Reminder postcards/multiple e-mails were sent to all students to encourage participation.
- All students received a minimum of two invitations to participate in the survey.

## University of Minnesota–Twin Cities Methodology Highlights

- **6,000** students from the University of Minnesota–Twin Cities were randomly selected to participate in this study.
- **2,920** completed and returned the survey.
- **0** surveys were undeliverable.
- **48.7%** was the overall UMTC response rate. (Surveys determined to be undeliverable were removed from the original sample size.)



2007 College Student Health Survey Postcard

# Results

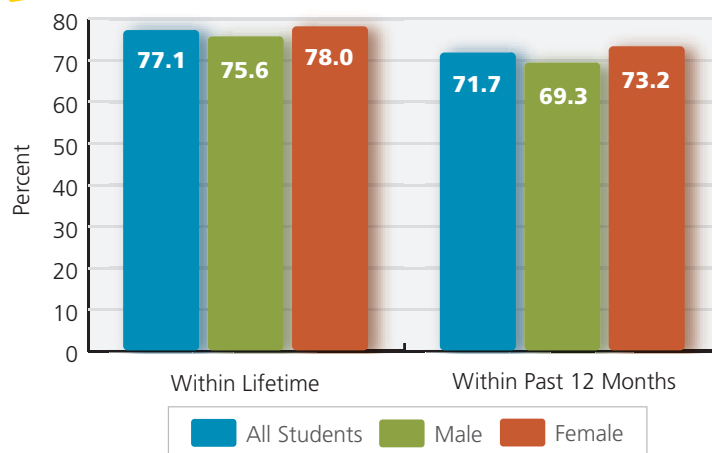
Female students attending the University of Minnesota–Twin Cities (UMTC) report higher rates of sexual activity, both within their lifetime and within the past 12 months, compared to male students attending the university.

On average, UMTC students had **2.0** 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 (**77.8%**) students report that they had 0 or 1 partner within the past 12 months.

Among University of Minnesota–Twin Cities students who were sexually active within the past 12 months, approximately four out of five (**80.6%**) report that their most recent sexual partner was either a fiancé(e)/spouse or an exclusive dating partner.

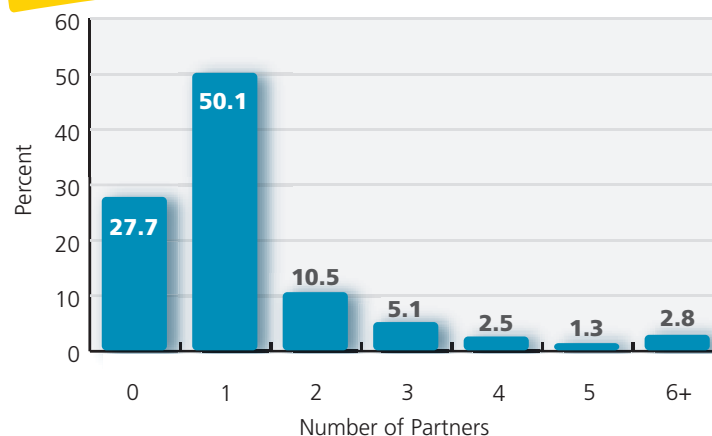
## Sexually Active–Lifetime and Past 12 Months

All Students by Gender



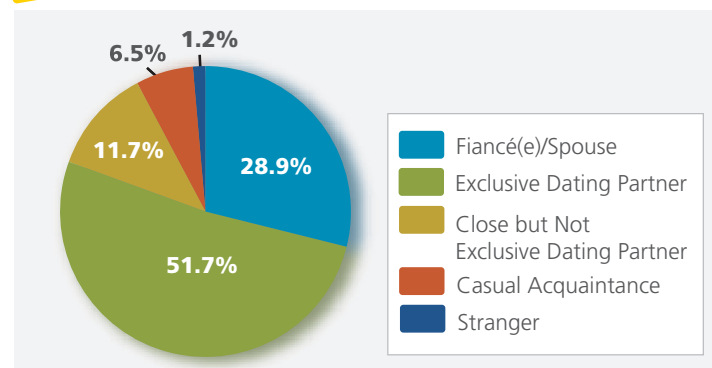
## Number of Sexual Partners–Past 12 Months

All Students



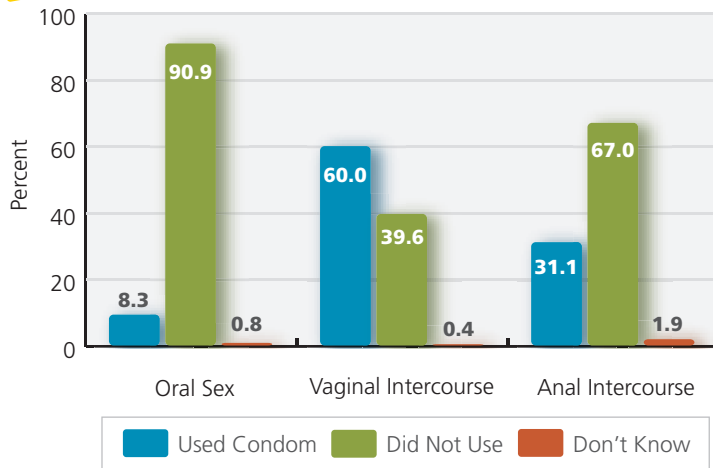
## Most Recent Sexual Partner–Past 12 Months

All Students, Sexually Active



### Condom Use

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

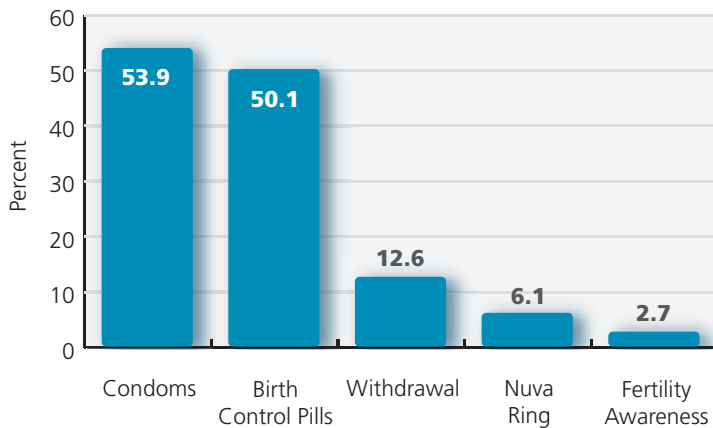


Data analysis shows that of the 77.1% of University of Minnesota–Twin Cities students who report being sexually active within their lifetime, **89.6%** engaged in vaginal intercourse, **70.1%** engaged in oral sex, and **25.9%** engaged in anal intercourse.

Among UMTC students sexually active within their lifetime, **60.0%** used a condom the last time they engaged in vaginal intercourse, **31.1%** used a condom during their last anal intercourse, and **8.3%** used a condom during their last oral sex. Percents are based solely on those who indicated they engaged in the activity.

### Pregnancy Prevention Methods

All Students



The two most common methods that UMTC students report using to prevent pregnancy the last time they engaged in vaginal intercourse are condoms (**53.9%**) and birth control pills (**50.1%**). The withdrawal method is reported by **12.6%** of UMTC students. Other methods of pregnancy prevention reported by students are identified in the table at the lower left.

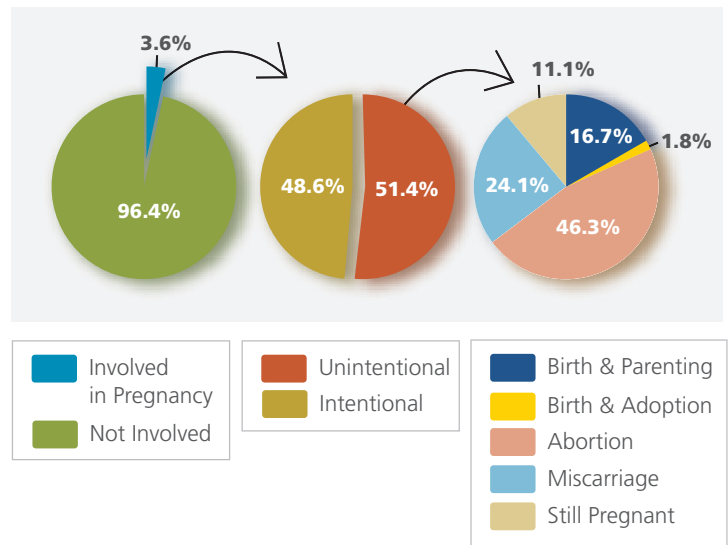
Type of Method	Percent Who Report Using Method
Depo Provera	2.2
Intrauterine Device	1.7
Ortho Evra	1.3
Emergency Contraception	0.9
Diaphragm	0.8
Sponge	0.4
Other	3.1
Don't Know/Can't Remember	1.0

A total of **3.6%** of University of Minnesota–Twin Cities students has been involved in a pregnancy within the past 12 months. Of those involved in a pregnancy, **51.4%** state it was unintentional.

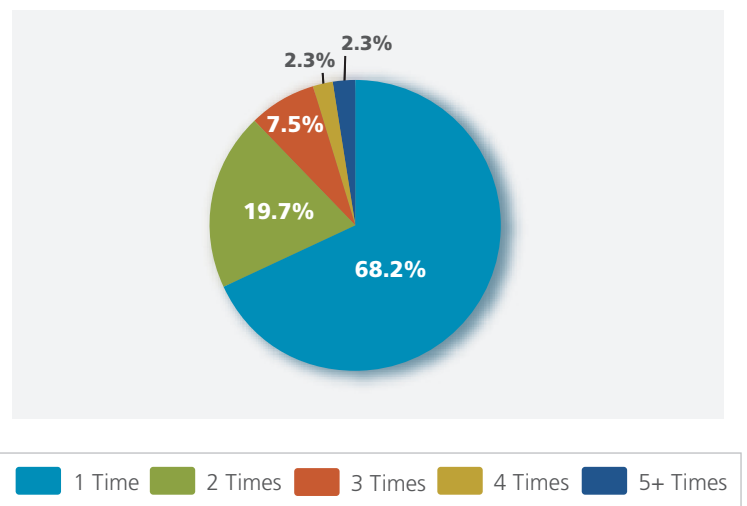
Among the unintentional pregnancies, **46.3%** resulted in abortion, **24.1%** resulted in miscarriage, **16.7%** resulted in birth and parenting, and **1.8%** resulted in birth and adoption.

Analysis shows that within the past 12 months, **12.4%** of sexually active female students at the University of Minnesota–Twin Cities have used emergency contraception. Among those who used emergency contraception, **68.2%** have used it once, **19.7%** have used it twice, and **12.1%** have used it three or more times within the past 12 months.

### Outcome of Unintended Pregnancy— Past 12 Months All Students

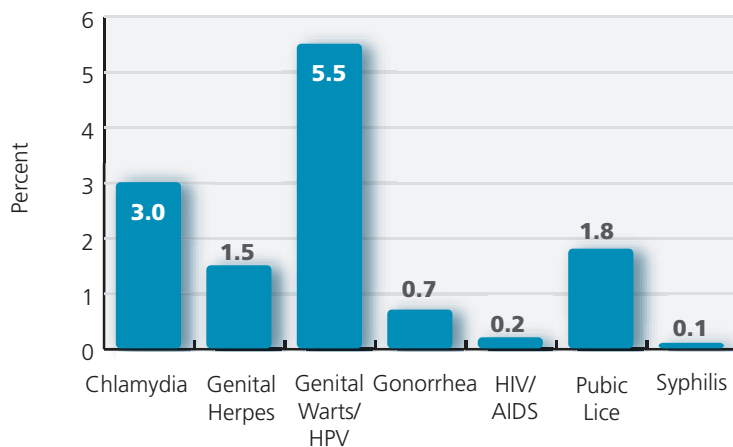


### Emergency Contraception Use— Past 12 Months Female Students, Sexually Active



### Sexually Transmitted Infections—Lifetime

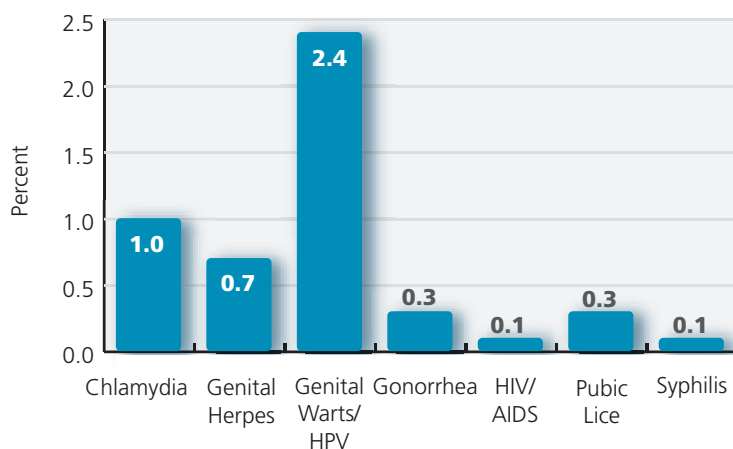
All Students, Sexually Active



About one out of ten (**10.4%**) UMTC students who have been sexually active within their lifetime report being diagnosed with a sexually transmitted infection within their lifetime. Genital warts/human papilloma virus (**5.5%**) and chlamydia (**3.0%**) are the two most commonly diagnosed sexually transmitted infections.

### Sexually Transmitted Infections—Past 12 Months

All Students, Sexually Active



Analysis shows that a total of **4.1%** of students at the University of Minnesota—Twin Cities who report having been sexually active within their lifetime also report having been diagnosed with a sexually transmitted infection within the past 12 months.

Students were asked to report whether they have experienced any of the health or personal issues presented in the table to the right, and if so, whether the issue(s) affected their academic performance. The issues highlighted in red are particularly salient to this report on sexual health. The other issues are more relevant to Reports 1-6 in this series.

It should be noted that although students report some issues less frequently, these issues may have a greater impact on academic performance. For example, although only **3.3%** of University of Minnesota–Twin Cities students report experiencing a pregnancy within the past year, of this small percentage of students, **40.6%** report the pregnancy affected their academic performance.

### Impact of Health and Personal Issues on Academic Performance—Past 12 Months All Students

Health or Personal Issue	Percent	
	Report Having Issue	Report Issue Affected Academics
Alcohol Use	31.0	17.7
Allergies	31.1	6.5
Chronic Conditions	9.8	18.5
Concerns for Troubled Friend/Family Member	39.5	34.9
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Mononucleosis	3.5	48.5
Moved/Changed Residence	24.2	16.9
<b>Pregnancy</b>	<b>3.3</b>	<b>40.6</b>
Relationship Issues	34.3	39.0
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Sexual Assault	1.2	44.1
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